**Final Report:**

# EGYPT: A Review Of Selected Egyptian Organization For Standardization (EOS) Food Standards With Respect To International Norms

Prepared For
**The Government of Egypt**

Submitted To
**USAID**
**Economic Growth/Sector Policy**
**Cairo, Egypt**


Submitted By
**Nathan Associates Inc.**

Under
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**March 1998**

# REVIEW OF SELECTED EGYPTIAN ORGANIZATION FOR STANDARDIZATION (EOS) FOOD STANDARDS WITH RESPECT TO INTERNATIONAL NORMS

## PROJECT REPORT

**Prepared For**
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**Submitted To**
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**Development Economic Policy**
**Reform Analysis (DEPRA) Project**

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# PREFACE

This technical assistance (TA)/study, "*Review of Selected Egyptian Organization for Standardization (EOS) Food Standards with Respect to International Norms,"* was undertaken by Nathan Associates as part of the Development Economic Policy Reform Analysis (DEPRA) Project. It is a continuation of a pilot study initiated in October 1997 that was intended to develop an effective model for the comprehensive review of EOS Standards, separating safety and essential product composition elements from non-essential commercial quality elements. The review was intended to make Egyptian product standards more compatible with international norms and provide consistency with the requirements of the SPS and TBT Agreements.

The DEPRA Project supports the analysis and implementation of economic policy reforms in the Ministries of Economy (MOE) and Trade and Supply (MOTS) and, through them, other ministries as well. This particular study/TA effort, for example, provided direct support to EOS in the Ministry of Industries and Mineral Wealth. The DEPRA Project is supported by the U.S. Agency for International Development.

The content of this report represents the views of the Technical Advisors and are not intended to represent the views of the Government of Egypt, the U.S. Government, including the U.S. Agency for International Development, or the DEPRA project.

As noted in the Table of Contents, six (6) appendices, including copies of all revised EOS Standards, form a part of this report. These appendices, if not attached to the report, can be obtained from the DEPRA project office, Cairo, Egypt. Contact Dr. C. Stuart Callison, Chief of Party, Phone/Fax: 20-2-356-1040, email at <depra@intouch.com>.

## EXECUTIVE SUMMARY

## REVIEW OF SELECTED EGYPTIAN ORGANIZATION FOR STANDARDIZATION (EOS) FOOD STANDARDS WITH RESPECT TO INTERNATIONAL NORMS

In October 1997 the Development Economic Policy Reform Analysis (DEPRA) Project undertook a project to review certain existing Egyptian food and manufactured-durable goods standards. The objective of that project was to undertake a pilot study that would serve as an effective model for the comprehensive review of all EOS Standards, especially those that are mandatory Standards. The review was intended to separate non-essential quality elements from elements relating to safety and essential product composition, make the standards more compatible with existing international norms and provide consistency with the requirements of the SPS and TBT agreements.

For the food sector the 1997 project resulted in the preparation of model draft revised EOS standards for the following products: milk powder, processed cheese food, hard cheese, frozen meat, frozen beef burger, preserved fruit (including canned fruit, fruit juice, jams/jellies), preserved tomato products (including concentrated tomato products, canned tomatoes, and ketchup), and dry pulses. Additionally, a review of the standard for coffee and its products was conducted but no revised standard was prepared due to information and time constraints. However, the unavailability of a Food and Agriculture Organization based consultant and the limitation on available information on both juice and coffee prevented review of several standards including those for, organ meats, rabbit and poultry. Further review was also needed for the both the juice and coffee standards.

Because of the need to complete the unfinished business of the October 1997 review, and to also provide an opportunity for a progress review on EOS continuing effort on standards revision, particularly those standards reviewed in October 1997 a follow-on effort was recommended. Additionally, following completion of the 1997 review, both New Zealand and Australia expressed an interest in assisting in the further review of the dairy and meat product standards. Further, EOS, with the potential existing for a follow-on project, indicated an interest in having additional standards reviewed, including those for certain seafood products and for food packaging material.

The result of these recommendations and interests resulted in the technical assistance described in this report with the following objectives.

1. Determine and evaluate work undertaken by the EOS since the completion of the October 1997 model standards project with respect to the on-going review and updating of existing EOS food standards. This includes a review and redrafting of all standards considered during the October 1997 project based on comments received by EOS from both domestic and

international interested parties.
2. Update the EOS fruit juice standard revised during the 1997 model standards project to incorporate modern juice products, including blended fruit juices and fruit juice drinks.
3. Complete the review of the coffee standard initiated during the 1997 model standards project.
4. Undertake the review of the following additional EOS food product standards, to the extent time permits: canned salmon, smoked fish, canned tuna and bonito, frozen shrimp, frozen fish, frozen fish fillets, packaged anchovies, yogurt, sweetened flavored yogurt, sweetened flavored milk UHT process, concentrated milk (evaporated and condensed milk), minced meat mixed with soya bean protein, canned sausage, frozen sausage and meat balls. Prepare re-drafted standards for those products reviewed.
5. Time permitting, undertake the review of EOS Standards for: a) General Conditions for Disposable Hard and Semi-Hard Plastic Glasses and Packages used for Packing Foodstuffs; and, b) Polyethylene Terephalate Packs Used in Packing Foodstuffs.

For new EOS food product standards or those for which a review was not able to be undertaken in the October, 1997 EOS project, the approach used for this project was essentially the same as that employed in October, 1997. Using as a starting reference point the existing EOS Standard, a model template based on the format and content elements of Codex Alimentarius commodity standards, and, in some cases, a preliminary model re-drafted EOS standard prepared by the technical advisor, the EOS Technical Committee responsible for the commodity area reviewed the existing EOS standard. Each individual element of the existing standard was evaluated as being relevant with respect to the objectives of the project- separating non-essential quality elements from elements relating to safety and essential compositional requirements. The original EOS standard was redrafted based on the Codex model template. As time permitted, the redrafted EOS standard was then re-submitted to the appropriate EOS Technical Committee for final review and revision.

For those EOS Standards for which a redrafted Standard was prepared during the October, 1997 project, the draft Standard was reviewed and revised by the EOS Technical Committee based on comments received on the draft standard from both domestic and international interested parties, and on comments provided by the technical advisors associated with this report. The intent was to achieve a revised draft Standard that could be put forward for approval as a final Standard.

In some cases, such as for the EOS food packaging standards, a written assessment of the Standard was the final work product of the review. In most cases, the EOS Technical Committee will further revise the draft standards prepared during this project.

**Project Results**

The appropriate EOS Technical Committees with the assistance of the Technical Advisors, were able to review 22 of 33 EOS food and food packaging standards pre-selected for review. These included standards previously reviewed in the October 1997 exercise and new standards proposed for review if time permitted. Additionally, two entirely new standards, those for fermented milks and frozen fish fillets, were constructed based on an existing Codex Alimentarius Standard. No EOS Standard exists for these product type.

Thus, 24 of 35 standards were reviewed in this project.

Revised drafts of all 13 EOS Standards reviewed during the October 1997 project were prepared: milk powder, processed cheese food, hard cheese, frozen meat, frozen beef burger, fruit juice, canned fruit, jams/jellies, marmalades, concentrated tomato products, canned tomatoes, ketchup, and dry pulses. Copies of these revised Standards are attached in Appendix 3 of the main report.

Initial drafts were prepared for 6 EOS Standards: canned salmon, smoked fish, tuna/bonito, frozen shrimp, frozen fish, and packaged anchovies. Copies of these initial standards are also attached in Appendix 3 of the main report as are the new Standards for Fermented Milks and Frozen Fish Fillets.

The Standard for Coffee and Its Products was again reviewed but no progress was made (see notes below). Draft standards prepared by the Technical Advisor for Green and Roasted Coffee Beans and for Instant Coffee were not considered by the EOS Technical Committee; copies of these standards are attached in Appendix 4 of the main report.

The two packaging standards (General Conditions for Disposable Hard and Semi-Hard Plastic Glasses and Packages and Packages Polyethylene Terephalate Packs Food Used in Packing Foodstuffs) were reviewed but no revised draft EOS Standards were prepared.

No discussion occurred on 11 EOS Standards due to lack of time: yogurt, sweetened flavored yogurt, concentrated milk, sweetened flavored milks, frozen liver, frozen kidney and hearts, pure minced meat, minced meat with soybean, canned sausage, frozen sausage and meat balls, and frozen poultry and rabbit.

Copies of draft standards prepared by the Technical Advisor for various meat products that were not discussed are attached in Appendix 4 of the main report as are draft standards for concentrated milk, tea and non-carbonated fruit juice beverages that were presented to the appropriate EOS Technical Committees.

**Conclusions and Recommendations**

Substantial Progress Made In Some Areas

Substantial progress in food standards review was achieved in some areas. Based on the work initiated in the October 1997 EOS Standards review project, and on comments received from interested parties on those Standards, final consensus was reached by the EOS Technical Committee (although with some reservations expressed by the Technical Advisors) on several standards including those for milk powder, processed cheese, hard cheese, fruit juices, tomato products, jams/jellies, marmalades, and dry pulses. Additionally, successful initial review was undertaken on various seafood products including canned salmon, canned tuna, smoked fish, frozen shrimp, frozen fish fillets and packaged anchovies.

Operating Policies Continue, However, To Hinder Progress

The 1996 study of Egypt's quality control system [Research Study of the Quality Control System in Egypt- see footnote 1] noted that Egypt utilized its product standards system, including those involving food products, for multiple purposes.

Based on the findings of the 1996 study and additional observations made during the 1997 EOS Standards review project, and during this study, it appears that, for the food sector, in addition to ensuring basic product safety through the use of such provisions as pesticide residue tolerances, good manufacturing practices, permitted uses of food additives, and for specifying essential composition elements, EOS Standards appear to be used for several additional purposes including the following.

- To carry out national health policy.
- To help ensure consumer protection rather than relying on comprehensive fraud and product labeling laws.
- To help ensure consumer protection rather than relying on consumer education programs.
- To assist in ensuring product safety rather than addressing certain infrastructure issues that should be in place to prevent unsafe or spoiled product. Such issues include systems to provide proper temperature control during distribution, transport and retail sale, sanitary transport, and provisions for sanitary control at wholesale and retail establishments.

Additional observations made during this and previous standards project include the following.

- While standards are often needed for a variety of reasons, there appears to be a strong need within the Egyptian regulatory system to have and maintain a standard for each and every product. Often, a regulatory systems approach that controls processes rather than specific products may be a better approach than the widespread use of product standards.

- The maintenance by Egypt of multiple regulatory inspection and control systems for a product rather than to vest the responsibility for a single product type within a single competent authority.

- The differential application of standards to import vs. domestic product. For example, the frozen meat standard appears to apply solely to import product and ignores similar meat products produced domestically.

- The tendency to establish provisions within standards based on weak or incomplete scientific information.

These are important domestic policy areas that ultimately impact on trade and economic policy by setting up comprehensive food product standards that over-regulate products. The end result is increased product cost, lesser product variety for consumers, and importantly, a real potential for a lesser level of food safety since resources are devoted to non-essential quality elements.

While this project, and its predecessor carried out in October 1997 have made real and substantial progress in updating existing EOS food standards and in removing some unnecessary quality elements, it is clear that the operating philosophies noted in the 1996 study still severely limit the success in achieving revised standards that meet international norms and that are compatible with Egypt's obligations under the SPS and TBT Agreements. EOS Technical Committees do not appear, in most cases, to have made a truly meaningful commitment to reform the standards setting process, removing non-essential quality elements from the standards. Indeed, some members of this technical team noted that perhaps the only solution to the standards issues existing in Egypt is resolution through WTO mechanisms. This appears to be particularly true for product areas where no Codex Alimentarius standards exist (e.g., meat and coffee).

Examples of the difficulties associated with these operating policies observed during this project include the following.

- Issue: The requirement for limiting fat levels for frozen carcass and primal cut meat products is related to the prevention of cholesterol related health problems for Egyptians.

  This is using Egyptian Standards to implement national health policy. If such a policy is to survive a TBT challenge, then Egypt must be able to scientifically demonstrate that its higher level of health protection (i.e., specific fat levels that are not maintained by other countries) is justified by a cholesterol related health issue that is unique to its population (as opposed to the populations of other countries).

- Issue: The requirement for limiting fat levels in carcass and primal cut meat products to prevent economic cheat of the consumer.

  This is using Egyptian Standards in lieu of sufficiently strong fraud laws to prosecute offending sellers. Additionally, this is using Egyptian Standards in lieu of appropriate consumer education programs to fully educate and inform consumers as to what is and is not visibly acceptable fat levels in meat.

- Issue: The requirement for limiting fat levels in meat products in order to prevent adverse consumer health effects due to excessive pesticide residues, rancid fat and microbial spoilage and/or illness.

  This is inappropriately using Egyptian Standards in multiple ways. Pesticide residue Maximum Residue Limits ( MRLs) are already set by EOS. These limits should be the mechanism of protection to ensure against excessive pesticide residues, not fat limits; if the MRL's are inadequate, they, not the fat levels, should be modified. Fat rancidity and microbial issues are issues relating to temperature control and (for microbiology) to product handling and sanitation. These are more appropriately handled by adequate inspection programs, educational programs, and improving the distribution and retail infrastructure.

- Issue: The requirement for color control in roasted coffee beans to prevent cancer.

This appears to be an example of establishing a provision on weak or inadequate scientific information. While coffee roasting does create carcinogenic compounds, the issue is not the simple existence of these compounds in coffee. Rather it the concentration of these compounds in extracts of roasted coffee and the dietary intake or exposure to the compounds by the population over a lifetime of consumption that is important. What is needed prior to setting a standard on color in coffee is the documentation through an adequate risk assessment that levels of certain carcinogenic compounds in coffee consumed by Egyptians is sufficiently high to create a substantial risk of cancer.

- Issue: Making the voluntary annexes of dairy, seafood and other food product standards mandatory.

  The current approach employed by the Codex Alimentarius is to place into an annex of a commodity standard those elements that are outside the scope of the SPS and TBT Agreements. The provisions of these Annexes are those elements of a standard that are more properly commercial items to be determined between buyer and seller. The draft EOS Standards developed in this and the October 1997 projects utilized this current Codex approach to standards development. By making the provisions of the annexes mandatory (or by moving certain provisions back into the main body of the Standard, which occurred with some standards, including dairy products and tomato products), Egypt will have in effect made little actual progress in its standards revision process; essentially all that will have been accomplished will be some updating as to technical provisions for a product and the reformatting of the Standard. This situation appears to reflect the strong standards mindset of Egypt.

  One specific example arises from the review of EOS Standards for dairy products. In the standard for milk powder, the Technical Adviser recommended that the specifications for dispersability in water, color, odor and flavor were not essential to the identity of milk powder and should be transferred to the advisory Annex. Instead the EOS Milk and Milk Products Committee decided to retain dispersability, color, odor and flavor in the standard, and in addition to return the requirements for solubility and acidity to the standard from the Annex. It was argued that these specifications were either essential to Egyptian manufacturers (e.g. dispersability) or were essential to the quality of the product (e.g. acidity).

<u>Next Steps</u>

Recognizing that: 1) there are clearly needs of developing countries such as Egypt that require incorporation of certain provisions in product standards that might not occur in either Codex Standards or standards maintained by a developed country; and, 2) the work of this project provides Standards that are in still in the draft stage and subject to further revision by EOS, the Technical Advisors are still concerned that the policies used by Egypt in establishing food product standards do not adequately permit the reconstruction of many Standards in a meaningful manner.

Recommendations

1. Until policy issues, such as those noted above, relating to how standards are to be used in Egypt are clarified at the top Ministerial level, it is the recommendation of this team of Technical Advisors that it would not be productive to carry out further review of EOS Standards. Without this guidance, the team believes that the operating philosophy of the EOS Technical Committee members will make progress difficult to achieve. In this regard, it is important to keep in mind the provisions of the SPS and TBT Agreements and the implications of Egypt's obligations as a signatory to the GATT Uruguay Round Trade Agreements. The issue is not necessary one of completely changing policy (e.g., use of standards to implement national health policy) but rather one of deciding whether such policies can, in their present form, be compatible with Egypt's responsibilities under the GATT. If they cannot, then change is necessary.

2. To implement Recommendation 1 the Technical Advisors recommend that a short (e.g., 2 day) high level conference be held to include the Ministers or their immediate Deputies, and appropriate program heads of the following agencies: Ministry of Industry (including EOS), Ministry of Health, Ministry of Trade and Supply (including the General Organization for Import and Export Control), and Ministry of Agriculture. The focus of this meeting should be on those policies important to standards setting as noted in this report. Preferably, this meeting should be held outside of Cairo in a setting that will be conducive to discussion and will restrict interruptions.

The Technical Advisors for this project believe it would also be helpful for Egypt to consider several activities that could help to establish some guidance and direction for future work on the revision of EOS Standards, and to enhance Egypt's scientific capabilities that will be needed to establish and revise Standards. In this regard, the following additional recommendations are made.

3. Consider the development of guiding principles for the operation of EOS Technical Committees. Such guidance might include, for example, the use of Codex Standards and related texts to the extent possible. The Principles should also include guidance on the relationship of national policy in such areas as health, safety, consumer protection and perhaps economic development to standards setting. The Australia New Zealand National Food Authority (ANZFA) has found such a set of Principles to be helpful in developing food standards as part of their new joint Australia-New Zealand food regulatory control program. The ANZFA Principles include the following four points.

- Reduce the level of prescriptiveness of standards to facilitate innovation by allowing wider permission on the use of ingredients and additives, but with consideration of the possible increased need for consumer information.
- Develop standards which are easier to understand and make amendment more straightforward.
- Replace standards which regulate individual foods with standards that apply across all foods or a range of foods.

- Consider the possibility of industry codes of practice as an alternative to regulation.

  The ANZFA program also promotes consistency between domestic and international food standards where these are at variance.

4. For controversial standards, obtain outside peer review from governments and other organizations on re-drafted standards. The Codex Secretariat should be among the peer reviewers. Such a peer review must include a true willingness by Egypt to consider comments received and to meaningfully (including scientifically where appropriate) justify the retention of provisions that are recommended for deletion or change. This review should be in addition to the normal WTO notification process.

5. Consider requesting the Codex Alimentarius Secretariat to develop new standards where such standards would be helpful to assist Egypt in arriving at Standards where consensus domestically has been difficult. Two such areas might be coffee and coffee products, and meat and meat products including frozen beef. The use of international expertise in a neutral environment is often helpful in resolving complex and difficult issues.

6. Prepare technical working briefs on specific areas of science and health related to standards that currently pose a difficulty in achieving success in revising standards. Two such work areas could be the relationship of meat fat to cholesterol levels in the Egyptian population and the potential for carcinogenic effects resulting from the coffee roasting process. Such briefs must be scientifically sound, complete, unbiased, and use internationally recognized principles of risk analysis.

7. Strengthen Egypt's capability in risk assessment including that related to dietary intake information and exposure assessment. It may be appropriate to also consider the area of relative risk with respect to EOS food standards.

In conclusion, while recognizing that the revised EOS Standards developed under this program are still draft standards subject to further revision, it is disappointing that, after two plus years of work, little progress has been made in correcting the deficiencies noted in the 1996 report *(Research Study of the Quality Control System in Egypt)* with respect to food product standards. Non-essential quality provisions still remain in the Standards at the recommendation of EOS Technical Committees. It would be appropriate to stop what we are doing, at least for the moment, and reassess the situation with respect to the commitment of Egypt to carry out meaningful reform with respect to their food standards. The conference proposed in recommendation 2 above would be, in this Technical Team's judgement, an important next step to determine the future course of work in this area. Again, in the judgement of this Technical Team, it will be important for Egypt to show focus and commitment to regulatory reform with respect to the product standards area.

The Technical Team is aware that several of Egypt's more important trading partners have expressed frustration at the non-tariff barriers to trade arising from Egypt's present policy of making mandatory those innumerable quality standards that are unrelated to scientifically sound

health and safety concerns. As a signatory to the GATT and WTO agreements, Egypt has committed itself to eliminating unnecessary and unjustified barriers to trade. The WTO agreements authorize remedial action against member countries that are alleged not to have met their obligations or commitments, if this results in the nullification or impairment of the rights other member countries have under the agreements. While Egypt's trading partners have shown considerable patience in first allowing it to reform its current standards and quality control regime, there is general consensus that many of that regime's elements are inconsistent with the SPS and TBT agreements of the WTO. To avoid remedial action being taken against it, it is important for Egypt to show focus, commitment and movement toward regulatory reform in the product standards area. Otherwise, some of its trading partners are likely lose patience in the near future and to seek remediation under the WTO dispute settlement understanding.

# REVIEW OF SELECTED EGYPTIAN ORGANIZATION FOR STANDARDIZATION (EOS) FOOD STANDARDS WITH RESPECT TO INTERNATIONAL NORMS

## 1.0 INTRODUCTION

In October 1997 the Development Economic Policy Reform Analysis (DEPRA) Project undertook a technical assistance (TA)/study activity to review certain existing Egyptian food and manufactured-durable goods standards.[1] The objective of that project was to undertake a pilot study that would serve as an effective model for the comprehensive review of all EOS standards, especially those that are mandatory. The review was intended to make the standards more compatible with existing international norms and to provide consistency with the requirements of the SPS and TBT agreements.

The October 1997 project was the result of recommendations made in a 1996 project[2] involving a comprehensive study of the regulatory quality control system in Egypt. Among other things, the 1996 study confirmed that non-essential quality standards are confused with safety standards and that the content and format of existing EOS standards do not meet those of international norms. The logic of the 1997 model pilot project was to emphasize that, while mandatory compliance with some elements of a standard is appropriate (e.g., safety standards relating to pesticide residues, elements related to prevention of fraud), compliance with many other elements are of a commercial nature and best left voluntary (e.g., quality standards for color, flavor and style of a food) between buyer and seller.

For the food sector the 1997 review resulted in the preparation of model draft revised EOS standards for the following products: hard cheese, milk powder, processed cheese food, frozen meat, frozen beef burger, preserved fruit (including canned fruit, fruit juice, jams/jellies and marmalades), preserved tomato products (including concentrated tomato products, canned tomatoes, and ketchup), and dry pulses. Additionally, a review of the standard for coffee and its products was conducted but no revised standard was prepared due to information and time constraints.

However, the unavailability of a Food and Agriculture Organization based consultant and the limitation on available information on both juice and coffee prevented review of several standards, including those for organ meat, rabbit and poultry. Additionally, further review was needed for the both the juice and coffee standard.

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[1] Review of Selected Egyptian Organization for Standardization (EOS) Food and Manufactured –Durable Goods Standards With Respect To International Norms, October, 2, 1997.

[2] Research Study of the Quality Control System in Egypt, Volume 1: Findings, Conclusions and Recommendations. Prepared for the Government of Egypt. Submitted to U.S. AID by Nathan Associates, Inc. (Contract #263-0233-C-00-6001-00), July 1966.

Because of the need to complete this unfinished business, and to also provide an opportunity for a progress review on EOS continuing efforts on standards revision, particularly those standards reviewed in October, 1997, a follow-on TA activity was recommended.

Additionally, following completion of the 1997 project, both New Zealand and Australia expressed an interest in assisting in the further review of the dairy and meat product standards, and possibly extending the number of EOS standards in this area that would be reviewed.

Further, EOS, with the potential existing for a follow-on project, indicated an interest in having additional standards reviewed, including those for certain seafood products and for packaging material.

The TA/study activity described in this report, therefore, is the result of those recommendations and interests.

## 2.0 OBJECTIVES

The objectives of this activity are the following.

1. Determine and evaluate work undertaken by the EOS since the completion of the October 1997 model standards project with respect to the on-going review and updating of existing EOS food standards. This includes a review and redrafting of all standards considered during the October 1997 review based on comments received by EOS on the Standards from both domestic and international interested parties.
2. Update the EOS fruit juice standard revised during the 1997 model standards review to incorporate modern juice products including blended fruit juices and fruit juice drinks.
3. Complete the review of the coffee standard initiated during the 1997 model standards project.
4. To the extent time permits, undertake the review of the following additional EOS food product standards: canned salmon, smoked fish, canned tuna and bonito, frozen shrimp, frozen fish, packaged anchovies, yogurt, sweetened flavored yogurt, sweetened flavored milk UHT process, concentrated milk (evaporated and condensed milk), minced meat mixed with soya bean protein, canned sausage, frozen sausage and meat balls. Prepare re-drafted standards for those products reviewed.
5. Time permitting, undertake the review of EOS Standards for: a) General Conditions for Disposable Hard and Semi-Hard Plastic Glasses and Packages Used for Packing Food Stuffs; and, b) Polyethylene Terephalate Packs Used in Packing Foodstuffs.

## 3.0 APPROACH

For new EOS food product standards, the approach used for this project was essentially the same as that employed for the October 1997 EOS standards review project. Using as a starting reference point the existing EOS Standard, a model template based on the format and content elements of Codex Alimentarius commodity standards (see Appendix 5), and, in some cases, a preliminary model re-drafted EOS standard prepared by the technical advisor, the EOS Technical

Committee responsible for the commodity area reviewed the existing EOS standard. Each individual element of the existing standard was evaluated with respect to the objectives of the project – separating elements relating to safety and essential compositional requirements from those associated with non-essential quality elements. When available, Codex Alimentarius standards were used as the primary reference; otherwise, national norms and standards information of various countries/regions including the United States, New Zealand, Australia and the EU were employed. The original EOS standard was redrafted based on the Codex model template. The Codex model template contains the following sections: Scope, Description, Essential Composition and Quality Factors, Food Additives, Contaminants (pesticide residues, heavy metals, mycotoxins, etc.), Hygiene, Packaging Labeling, Methods of Analysis, and an Annex incorporating voluntary quality factors. The redrafted EOS standard was then re-submitted, as time permitted, to the appropriate EOS Technical Committee for final review and revision.

For those EOS Standards for which a redrafted Standard was prepared during the October 1997 project, the draft Standard was reviewed and revised by the EOS Technical Committee based on comments received on the draft standard from both domestic and international interested parties, and on comments provided by the technical advisors associated with this report. The intent was to achieve a revised draft Standard that could be put forward for approval as a final Standard.

The following EOS Standards re-drafted during the October 1997 project were reviewed and revised.

Hard Cheese
Milk Powder
Processed Cheese Food
Frozen Meat
Frozen Beef Burger
Fruit Juice
Canned Fruit
Jams/Jellies
Marmalades
Concentrated Tomato Products
Canned Tomatoes
Ketchup
Dry Pulses

Additionally:

1. A revised Fruit Juice Standard incorporating fruit juice drinks and blends of fruit juices into the Standard was prepared for review.

2. The following Standards, which were initially a part of the October 1997 Project were brought forward again for the reason specified.

Coffee: no re-drafted standard due to lack of time and technical information.
Frozen Poultry and Rabbits: no re-drafted standard due to lack of time.
Frozen Liver: no-redrafted standard due to lack of time.
Frozen Kidney, Hearts: no-redrafted standard due to lack of time.

3. The following EOS Standards were newly considered during this project.

Canned Salmon Fish
Smoked Fish
Canned Tuna and Bonito
Frozen Shrimp
Packaged Anchovies
Frozen Fish
Yogurt
Sweetened Flavored Yogurt
Sweetened Flavored Milk UHT Process
Concentrated Milk (Evaporated and Condensed Milk)
Minced Meat Mixed with Soya Bean Protein
Canned Sausage
Frozen Sausage and Meat Balls
General Conditions for Disposable Hard or Semi-Hard Plastic Glasses and Packages Used for Packing Food Stuffs
Polyethylene Terephalate Packs Used in Packing Foodstuffs

The EOS Technical Committee and Technical Team Advisor assignments were the following.

| Standard | Technical Committee | Adviser |
|---|---|---|
| Hard Cheese | Milk and Its Products | Fawcet |
| Processed Cheese Food | Milk and Its Products | Fawcet |
| Milk Powder | Milk and Its Products | Fawcet |
| Yogurt | Milk and Its Products | Fawcet |
| Sweetened Flavored Yogurt | Milk and Its Products | Fawcet |
| Sweetened Flavored Milk UHT Process | Milk and Its Products | Fawcet |
| Concentrated Milk (Evaporated and Condensed Milk) | Milk and Its Products | Fawcet |
| Frozen Beef Burger | Meat and Its Products | Armitage |
| Frozen Meat | Meat and Its Products | Armitage |
| Frozen Poultry and Rabbits | Meat and Its Products | Armitage |
| Frozen Liver | Meat and Its Products | Armitage |
| Frozen Kidney, Hearts | Meat and Its Products | Armitage |
| Pure Minced Meat | Meat and Its Products | Armitage |
| Minced Meat Mixed with Soya Bean Protein | Meat and Its Products | Armitage |

| | | |
|---|---|---|
| Canned Sausage | Meat and Its Products | Armitage |
| Frozen Sausage and Meat Balls | Meat and Its Products | Armitage |
| Canned Salmon Fish | Seafood | Dees |
| Smoked Fish | Seafood | Dees |
| Canned Tuna and Bonito | Seafood | Dees |
| Frozen Shrimp | Seafood | Dees |
| Packaged Anchovies | Seafood | Dees |
| Frozen Fish | Seafood | Dees |
| Coffee and Its Products | Seeds and Pulses | Wehr |
| Dry Pulses | Seeds and Pulses | Wehr |
| Fruit Juice | Fruit and Vegetables | Wehr |
| Canned Fruit | Fruit and Vegetables | Wehr |
| Jams/Jellies | Fruit and Vegetables | Wehr |
| Marmalades | Fruit and Vegetables | Wehr |
| Concentrated Tomato Products | Fruit and Vegetables | Wehr |
| Canned Tomatoes | Fruit and Vegetables | Wehr |
| Ketchup | Fruit and Vegetables | Wehr |
| General Conditions for Disposable Hard or Semi-Hard Plastic Glasses and Packages Used for Packing Food Stuffs | Food Packaging | Wehr |
| Polyethylene Terephalate Packs Used in Packing Foodstuffs | Food Packaging | Wehr |

In some cases, such as for the EOS food packaging standards, a written assessment of the Standard was the final work product of the review.

In most cases, the EOS Technical Committee will further revise the draft standards prepared during this project.

Information on the nature of the EOS Standard (e.g., mandatory or voluntary, date of last review) and the nature of each EOS Technical Committee (e.g., Chairman, committee make-up, frequency of meeting, date of last meeting, etc.) was obtained for inclusion in this report.

## 4.0 RESULTS AND DISCUSSION

Twenty-two of 33 EOS food and food packaging standards scheduled for review by the appropriate EOS Technical Committees, with the assistance of the Technical Advisors, were reviewed. These included standards previously reviewed in the October 1997 project and new standards proposed for review.

Additionally, two entirely new standards, for fermented milks and frozen fish fillets, were constructed based on existing Codex Alimentarius Standards. No EOS Standard exists for these product types.

Thus, 24 of 35 standards were reviewed in this project.

English translations of the EOS food and packaging standards selected for review are attached in Appendix 2.

Revised drafts of all 13 EOS Standards reviewed during the October 1997 project were prepared: milk powder, processed cheese food, hard cheese, frozen meat, frozen beef burger, fruit juice, canned fruit, jams/jellies, marmalades, concentrated tomato products, canned tomatoes, ketchup, and dry pulses. Copies of these revised Standards are also included in Appendix 3.

Initial drafts were prepared for 6 EOS Standards: canned salmon, smoked fish, tuna/bonito, frozen shrimp, frozen fish, and packaged anchovies. Copies of these initial standards are also included in Appendix 3.

The new Standards for Fermented Milks and Frozen Fish Fillets are included in Appendix 3.

The Standard for Coffee and Its Products was again reviewed but no progress was made (see notes below). Draft standards prepared by the Technical Advisor for Green and Roasted Coffee Beans and for Instant Coffee were not considered by the EOS Technical Committee; copies of these standards are attached in Appendix 4.

The two packaging standards (General Conditions for Disposable Hard and Semi-Hard Plastic Glasses and Packages and Packages Polyethylene Terephalate Packs Food Used in Used in Packing Foodstuffs) were reviewed but no revised draft EOS Standards were prepared. These Standards are discussed below.

No discussion occurred on 11 EOS Standards due to lack of time: yogurt, sweetened flavored yogurt, concentrated milk, sweetened flavored milks, frozen liver, frozen kidney and hearts, pure minced meat, minced meat with soybean, canned sausage, frozen sausage and meat balls, and frozen poultry and rabbit.

Copies of draft standards prepared by the Technical Advisor for various meat products that were not discussed are included in Appendix 4. Additionally, draft standards for concentrated milk, tea and non-carbonated fruit juice beverages that were presented to the EOS Fruit and Vegetables Technical Committee but not discussed are also included in Appendix 4.

The discussions that took place in the various EOS Committee meetings are summarized below.

**FRUIT JUICE**

**EOS Standard and Technical Committee Information**

NAME OF STANDARD: Fruit Juices Preserved Exclusively by Physical Means.
EXISTING EOS STANDARD NUMBER: ES-129-1986 (Fruit Preserves).
PRODUCTS INCLUDED IN EXISTING STANDARD: Fruit Juices.

Note: Fruit Juices were originally contained in the EOS Standard for Fruit Preserves. The result of the October 1997 Standards Review Project was to construct a new and separate standard for fruit juices.

DATE OF LAST REVIEW: October 1997.
IS THE EXISTING STANDARD MANDATORY OR VOLUNTARY: Mandatory.
IS THE STANDARD MODELED AFTER AN INTERNATIONAL NORM: Yes- Codex Alimentarius.
IS/ARE PRODUCTS COVERED UNDER THIS STANDARD MANUFACTURED IN EGYPT: Yes.

NAME OF EOS TECHNICAL COMMITTEE: Processed Fruits and Vegetables.
EOS LIAISON TO THE TECHNICAL COMMITTEE: Ehsan Ahmed Aly
EOS TECHNICAL COMMITTEE CHAIRMAN:
EOS TECHNICAL COMMITTEE MEMBERS:

Dr. Zeinab A. El Haleem, Ministry of Health
Mostafa El Attar, Chemistry Dept., Ministry of Industry and Mineral Wealth
Lidy Michail Sahb, General Organization of Import and Export Control
Nagia Abend El Mohsen, Food Standard Specialist, EOS
Ahmed Mohamed Hassan Shaker, Nutrition Institute
Ahmed Gaballa, The Coca Cola Company
Zeinab El Kashe, EdFiner Company
Mohamed Mahmoud Ibrahim, Kaha Company for Preserved Foods
Michel Botros, independent consultant

TECHNICAL ADVISOR: H. Michael Wehr

**Results of Discussion**

The draft proposed standard resulting from the October 1997 Standards Review Project was submitted to interested parties for review. The comments received were reviewed at this meeting of the EOS Technical Committee. The essence of the comments and the response/decision of the Technical Committee are noted below.

The result of this review was that no changes were made to the draft standard prepared in October 1997. The final draft standard obtained from this meeting of the EOS Committee is included in Appendix 3.

Submitted comments and the main points discussed were the following;

1. Suggested was the incorporation of juice products containing less than 100% fruit juice into the standard. It was noted that the technical advisor had prepared a draft standard for fruit juice beverages that would cover this product type (see below). The Committee decided that it would be preferable to have a separate standard for this product type as recommended by the Technical Advisor and did not accept this comment.

2. Suggested was the inclusion of maximum limits for soluble solids content of common fruit juices. This would consist of a listing of maximum soluble solids content for various fruit juices recognized by EOS appearing in the Standard as a Table or as an attachment. The Technical Advisor saw no particular difficulty with this recommendation so long as great care was taken to ensure that the values were truly representative of all commercial varieties of the specific fruit species selected for incorporation for products traded internationally. The Technical Advisor also noted the if the values were used were not truly representative, then any values placed into the Standard must be used only on a Guideline basis. After lengthy discussion, the Committee agreed to leave the standard as it was (that is, a general statement that soluble solids should correspond to that for the named ripe fruit) and not to accept the comment.

3. Suggested was the specific naming in the Standard of all approved sugars that could be added to fruit juices to obtain the correct sugar/acid balance. The Committee indicated the specific concern with this comment was associated with the potential for use of non-nutritive sweeteners (such as saccharin or aspartame) in natural fruit juices. The Committee decided that the existing wording in the Standard was sufficiently clear and did not accept the comment.

4. Suggested was the inclusion in the Standard of a microbiological criterion for yeast and mold. The Committee decided that, because this was a general standard, it would not be appropriate to incorporate specific yeast and mold criteria since the value would likely vary from product to product. The Technical Advisor noted, in this context, that microbiological criteria, if used, should at a minimum follow the approach used by the International Commission for Microbiological Criteria for Foods (ICMSF). This approach was unfamiliar to the Committee and was reviewed by the Technical Advisor. Information on ICMSF was requested by the Committee; the Technical Advisor agreed to obtain and forward the information to EOS/MOH.

5. The Technical Advisor brought forward the question as to whether the Hygiene Section should remain as it is written or be modified to reflect changes in the wording of hygiene sections of Codex Commodity Standards recommended by the Codex Committee on Food Hygiene at its 30$^{th}$ Session held in Washington, D.C. in October 1997. The Technical Advisor noted that the Recommendations were scheduled for final review and adoption by the Codex Commission at its meeting scheduled for June 1999. The EOS Technical Committee decided to retain the existing wording until the Codex Commission had made its final decision.

At the meeting of the Technical Committee in October 1997 the need for a new standard covering fruit juice products made from one or more fruit juice species (either from fresh run or concentrated juice) and fruit juice beverage products containing less than 100% fruit juice. The Technical Advisor brought forward for discussion a *Proposed Draft General Standard for Non-Carbonated Fruit Juices and Fruit Juice Beverages Preserved Exclusively by Physical Means* for consideration. The Technical Advisor also provided the Committee with reference information from the U.S. Food and Drug Administration covering regulations relating to these products. A brief discussion followed, although there was insufficient time to review the draft proposed standard in detail. The Technical Advisor encouraged the EOS Technical Committee to seriously consider establishing a standard for products of this type since such products are widely traded internationally, would be a source of new juice product production in Egypt and provide the Egyptian consumer with new healthy and flavorful beverage products. It was suggested that EOS obtain expert technical guidance and assistance from international recognized fruit juice technologists in the preparation of the Standard.

The Proposed Draft Standard is attached in Appendix 3.

**FOOD PACKAGING MATERIALS**

NAME OF STANDARDS: 1. Polyethylene Terephalate Packs.
2. General Conditions for Disposable Hard and Semi-Hard Plastic Glasses and Packages Used for Packing Food Stuffs.

EOS STANDARD NUMBER: 2855-1995 (Polyethylene Terephalate Packs).
3019-1996 (General Conditions for Plastic Disposable Glasses and Packages).

PRODUCTS INCLUDED IN EXISTING STANDARD:

2855-1995- Plastic packs for use in packaging foodstuffs.

3019-1996- Glasses and packs used for packaging foodstuffs.

DATE OF LAST REVIEW: 2855- 1995; 3019- 1996.

IS THE EXISTING STANDARD MANDATORY OR VOLUNTARY: Voluntary.

Note: While these EOS standards are voluntary, there is mandatory decree that covers certain safety aspects of all packaging materials (see below).

IS THE STANDARD MODELED AFTER AN INTERNATIONAL NORM: No.

IS/ARE PRODUCTS COVERED UNDER THIS STANDARD MANUFACTURED IN EGYPT: Yes.

NAME OF EOS TECHNICAL COMMITTEE: Food Packaging and Labeling.

EOS LIAISON TO THE TECHNICAL COMMITTEE: Ehsan Ahmed Aly

EOS TECHNICAL COMMITTEE CHAIRMAN: Ahmed Gaballa, The Coca Cola Company

EOS TECHNICAL COMMITTEE MEMBERS:

Dr. Zeinab A. El Haleem, Ministry of Health

Ahmed Mohamed Hassan Shaker, Nutrition Institute

Michel Botros, independent consultant

Nagia Abend El Mohsen, Food Standard Specialist, EOS

Faiza El Baha, General Organization for Import and Export Control

TECHNICAL ADVISOR: H. Michael Wehr

**Results of Discussion**

The objective of the review of the two EOS food packaging standards was not to carry out a revision of the standards but rather to assess the strengths and weaknesses of the existing EOS food packaging standards and provide recommendations for improving the current approach to regulating food packaging materials.

Reviewed initially was the current manner in which regulatory control of food packaging material is handled in Egypt.

Currently, EOS maintains several voluntary standards for various food packaging materials, including those noted above and those for aluminum and tin cans and various other glass and plastic containers. It was noted that, while these are voluntary standards, they are used as "guidelines" for the appropriateness of food containers generally.

Egypt also maintains specific food safety packaging requirements under Decree No. 798/1957. This Decree covers containers for foodstuffs, cosmetics, pharmaceuticals, eating utensils, food contact materials used in such areas as water piping and food processing equipment, and toys. The Decree contains definitions for various container types, requirements for maximum levels of heavy metals, and other general safety related specifications (e.g., materials must be clean, free from corrosion and foreign materials; prohibits use of newspaper or food packaging, etc.). Although the Decree was not reviewed in detail, by its date (1957) and its general nature, it does not appear to be current in relation to materials used for food packaging, nor does it speak in depth to the safety assessment/safety requirements for food packaging materials.

The Technical Advisor reviewed the general approach employed by developed countries to ensure the safety of food packaging materials. In this regard, it was noted that food packaging material and their components are often treated as food additives. Thus, the manufacturer of a food packaging material must show that the packaging material (including the material itself and all manufacturing contaminants such as residual plasticizers) either do not migrate into the product or that the concentration of migrated substance(s) does not present a health hazard. Copies of the U.S. Food and Drug Administration Code of Federal Regulations relating to safety assessment and approval of food additives was provided to the Committee as a technical reference (21CFR Part 170-Food Additives).

The Technical Advisor also noted that a country's general food law and regulations pertaining to such areas as good manufacturing practices (GMPs), ensure that packaging material provides sufficient functionality to protect the foodstuff. For example, a general food law and GMPs would ensure that material contaminated from broken, cracked, or unsealed containers would not be sold as food for human consumption. Such food law provisions indirectly, therefore, ensure that

containers are of sufficient thickness, that can seams maintain their integrity, etc. Hence, specifications for such items are unnecessary in food packaging standards.

The Technical advisor pointed out examples of inappropriate provisions in the two EOS standards under review. Specific examples include the following:

> Polyethylene Terephalate Packs Used in Packing Foodstuffs.
>
> Section 3.6. [The container must keep a vertical position on a horizontal surface.] The actual rigidity of a container is a factor to be determined by the packaging material manufacturer and the food processor, as long as the integrity of the container is not impaired.
>
> Section 3.10. [The container should not show any change in color and appearance during storage under normal conditions.] Color changes are the responsibility of the manufacturer and user as long as the color change does not result in an unsafe food product.
>
> Section 4.1. [Provisions requiring specific values for moisture content, absorption capacity, specific weight, melting point, elongation, softening, etc.]. Providing specific requirements for these functional attributes is too limiting. These types of details are normally determined by the manufacturer/user to meet specific requirements of the product. As long as safety of the product for human consumption is ensured, such detail should not be placed in a standard.
>
> General Conditions for Disposable Hard and Semi-Hard Plastic Glasses and Packages Used for Packing Food Stuffs.
>
> Section 3.10. [Glasses and packs must be placed above each other in a manner that facilitates their manipulation.] This provision has no bearing whatsoever on product safety or essential composition/fraud issues.
>
> Section 4. [Section on measurement specifying four container sizes and required weights and thickness for each size.] Such provisions unnecessarily limit the variety of glass and plastic containers available in the marketplace. Size of containers is a marketing issue to be determined by the manufacturer/processor.

The Technical Advisor noted that the current Decree and Standards do not provide adequate regulatory control to ensure the safety of materials currently used in food packaging while being overly proscriptive in regulating packaging functionality.

The Technical Committee agreed that revision both to the Standards and to the 1957 Degree were appropriate.

While no specific approach was specified, it was the general thinking of the Technical Committee that perhaps a single packaging standard could be developed that would provide the basic requirements to ensure that essential functionality of packaging material is maintained. Further, that Decree No. 798/1957 needs to be revised to contain appropriate regulatory provisions to ensure the safety of contemporary packaging material.

The Technical Advisor concurred with this conclusion. In noting that it would be difficult for Egypt to implement a comprehensive food safety assessment program for packaging material (similar, for example to the U.S. FDA approach encompassed in the food additive regulations noted above), the Advisor suggested that an approach to consider would encompasses the following.

- Redraft the existing Decree and Standards to provide for basic safety and functionality protection, including maximum residue levels of important (from a safety standpoint) diffusible packaging components.
- Recognize the lists of approved packaging materials of countries in which Egypt has confidence of the country's food safety assessment systems. Such countries could include the United States, certain countries of the EU or regulations of the EC, Canada, Australia, New Zealand, and Japan.
- Implement a product testing program that would focus on detecting important (from a safety standpoint) diffusable packaging components.

It is recommended that EOS actively pursue the revision of Decree 798/1957 relating to food packaging material. It is also recommended that EOS actively pursue the revision of existing voluntary packaging standards, including the concept of combining all packaging standards into a single standard focusing on minimum functionality requirements and, by reference to a revised Decree 798/1957, to minimum safety requirements.

## COFFEE BEANS AND INSTANT COFFEE

### EOS Standard and Technical Committee Information

NAME OF STANDARD: Coffee and Its Products.
EXISTING EOS STANDARD NUMBER: 517-1474/1987.
PRODUCTS INCLUDED IN EXISTING STANDARD: Green Coffee Beans, Roasted Coffee Beans, Crushed and Ground Coffee, Instant and Decaffeinated Instant Coffee.
DATE OF LAST REVIEW: October 1997.
IS THE EXISTING STANDARD MANDATORY OR VOLUNTARY: Mandatory.
IS THE STANDARD MODELED AFTER AN INTERNATIONAL NORM: Yes.
IS/ARE PRODUCTS COVERED UNDER THIS STANDARD MANUFACTURED IN EGYPT: Yes.

NAME OF EOS TECHNICAL COMMITTEE: Seeds and Pulses.
EOS LIAISON TO THE TECHNICAL COMMITTEE: Fayza Al Said Esmail.

EOS TECHNICAL COMMITTEE CHAIRMAN: Dr. Raouf El Saadary
EOS TECHNICAL COMMITTEE MEMBERS:

Dr. Zeinab A. El Haleem, Ministry of Health
Dr. Magda Aly Rakha, Ministry of Health
Mostafa El Attar, Chemistry Dept., Ministry of Industry and Mineral Wealth
Hoda Karam, Ministry of Trade and Supply
NadiaMaklut, General Organization for Import and Export Control, Ministry of Trade and Supply.
Amina Ibrahim Wanas, Ministry of Health
Amin Amer (no English organization designation)
Dr. Mounir Abdel Magiale, Misr Coffee Co.
Samir Rhourrhid, Misr Coffee Co.

TECHNICAL ADVISOR: H. Michael Wehr

**Results of Discussion**

No progress was made on this standard.

During the October, 1997 EOS standards project, the technical advisor noted the various sections of this standard that should be deleted. Approximately 50 percent of the standard's provision fell into this category. These were again brought to the attention of the Technical Committee at this meeting.

Additionally, at the 1997 EOS standards project, the technical advisor was asked to return with additional information on areas of regulatory control exercised by countries on coffee products. The technical advisor noted that his contact with U.S. regulatory control authorities and U.S. Coffee trade associations (National Coffee Association of the United States; Green Coffee Association of New York) indicated that regulatory control primarily involved the areas of assessment of insect damage and mold levels and a minimal requirement for quality (e.g., Grade 8 of the Green Coffee Association of New York). Information from the U.S. Food and Drug Administration's Compliance Policy Handbook was brought forward and provided as reference to the Technical Committee. The Technical Advisor was not able to obtain any information from the EU or other geographic areas.

The Technical Advisor had prepared two model draft standards for consideration by the Technical Committee. These were standards for Green and Roasted Coffee and for Instant Coffee. Copies are provided in Appendix 4. The Technical Committee decided not to consider these proposed standards.

Instead, the Committee decided to review the existing standard item by item. As this discussion began, it became clear to the Technical Advisor that the EOS Technical Committee had solidified its thinking that the existing standard reflected its position regarding product safety and consumer protection. For example, the Technical Committee indicated that provision 3-2 requiring a homogeneous color was a related to health; the argument put forward was that color was related

to roast level which in turn related to the presence of cancer-causing agents. Existing Sections 3-4 and 3-5 relating to homogeneity of size and smoothness (of the ground coffee) was indicated by the Technical Committee to be needed for consumer protection. Similarly, the EOS Technical Committee was strongly supportive of continuing grade requirements in the existing standard for consumer protection purposes. Discussion by the Technical Advisor relative to the need for consumer education (instead of mandatory standards to handle this need) and relative to Egypt's responsibilities under the TBT Agreement on quality related matters (that is, the need to be no more trade restrictive than necessary) was not accepted by the Technical Committee.

It became very clear to the Technical Advisor that further discussion on this standard would not be fruitful.

As an alternative, the Technical Advisor recommended that EOS consider holding a special technical conference on the coffee matter. Attendees to the conference, in addition to the EOS Technical Committee, would include foreign technical experts in coffee production and processing. Such experts should be obtained from foreign governmental agencies, Institutes, Trade Associations and public and private coffee research organizations including universities. Since it is clear that substantial technical and scientific information needs to be present during the discussion and revision of this EOS Standard, it would appear that this approach may be the only effective means of accomplishing change.

The Technical Advisor recommends that no further work be done on this Standard until the specific technical and consumer protection issues are resolved by the above noted technical conference or other means.

**DRY PULSES**

**EOS Standard and Technical Committee Information**

NAME OF STANDARD: Dry Pulses.
EXISTING EOS STANDARD NUMBER: 2728-1994.
PRODUCTS INCLUDED IN EXISTING STANDARD: Dry Pulses-Various
DATE OF LAST REVIEW: October 1997.
IS THE EXISTING STANDARD MANDATORY OR VOLUNTARY: Voluntary.
IS THE STANDARD MODELED AFTER AN INTERNATIONAL NORM: Yes, Codex Alimentarius.
IS/ARE PRODUCTS COVERED UNDER THIS STANDARD MANUFACTURED IN EGYPT: Yes.

NAME OF EOS TECHNICAL COMMITTEE: Seeds and Pulses.
EOS LIAISON TO THE TECHNICAL COMMITTEE: Fayza Al Said Esmail.
EOS TECHNICAL COMMITTEE CHAIRMAN: Dr. Raouf El Saadary
EOS TECHNICAL COMMITTEE MEMBERS:
Dr. Zeinab A. El Haleem, Ministry of Health

Dr. Magda Aly Rakha, Ministry of Health
Mostafa El Attar, Chemistry Dept., Ministry of Industry and Mineral Wealth
Hoda Karam, Ministry of Trade and Supply
Nadia Maklut, General Organization for Import and Export Control, Ministry of Trade and Supply.
Amina Ibrahim Wanas, Ministry of Health
Amin Amer (no English organization designation)
Dr. Mounir Abdel Magiale, Misr Coffee Co.
Samir Rhourrhid, Misr Coffee Co.

TECHNICAL ADVISOR: H. Michael Wehr

**Results of Discussion**

This was a standard prepared during the October 1997 project and forwarded by EOS to interested parties for comment.

No comments were received. The Standard is satisfactory as written.

A copy of the Standard is attached in Appendix 3.

## C0NCENTRATED TOMATO PRODUCTS

**EOS Standard and Technical Committee Information**

NAME OF STANDARD: Processed Tomato Concentrates.
EXISTING EOS STANDARD NUMBER: 132-1990 (Tomato Concentrate Section only).
PRODUCTS INCLUDED IN EXISTING STANDARD: Tomato Sauce, Tomato Paste, Tomato Puree, Tomato Salsa
DATE OF LAST REVIEW: October 1997.
IS THE EXISTING STANDARD MANDATORY OR VOLUNTARY: Mandatory.
IS THE STANDARD MODELED AFTER AN INTERNATIONAL NORM: Yes, Codex Alimentarius.
IS/ARE PRODUCTS COVERED UNDER THIS STANDARD MANUFACTURED IN EGYPT: Yes.

NAME OF EOS TECHNICAL COMMITTEE: Fruits and Vegetables.
EOS LIAISON TO THE TECHNICAL COMMITTEE: Ehsan Ahmed Aly .
EOS TECHNICAL COMMITTEE CHAIRMAN: Dr. M. Amin Abdallah, Ain Shams University.
EOS TECHNICAL COMMITTEE MEMBERS:
Dr. Zeinab A. El Haleem, Ministry of Health
Mostafa El Attar, Chemistry Dept., Ministry of Industry and Mineral Wealth
Hidy Michaul Salib, General Organization for Import and Export Control,
George Antoun, Ministry of Health

Ahmed Mohamed Hassan Shaker, Nutrition Institute
Zenabs H. Ahmed, Food Development Center
Michel Botros, Consultant
Zeinab El Kashef, Edfina Company

TECHNICAL ADVISOR: H. Michael Wehr

**Results of Discussion**

No major changes were made to this Standard. Based on submitted comments and comments from the Technical Committee, non-substantive changes were made to the wording of the product definition section. Additionally, the minimum solids content of tomato sauce was changed from 5.0% to 4.0%, a minimum pH value for all products was added to section 3.2 (related factors) and a maximum yeast and mold value was added to the food hygiene section. The Technical Advisor noted that that yeast and mold values were quality related except for pathogenic mold toxins (such as aflatoxin) that are handled by other provisions of the standards; nevertheless, the committee decided to add this provision.

The revised Standard is attached in Appendix 3.

**CANNED TOMATOES**

**EOS Standard and Technical Committee Information**

NAME OF STANDARD: Canned Tomatoes.
EXISTING EOS STANDARD NUMBER: 132-1990 (Canned Tomato Section only).
PRODUCTS INCLUDED IN EXISTING STANDARD: Canned Tomatoes.
DATE OF LAST REVIEW: October 1997.
IS THE EXISTING STANDARD MANDATORY OR VOLUNTARY: Mandatory.
IS THE STANDARD MODELED AFTER AN INTERNATIONAL NORM: Yes, Codex Alimentarius.
IS/ARE PRODUCTS COVERED UNDER THIS STANDARD MANUFACTURED IN EGYPT: Yes.

NAME OF EOS TECHNICAL COMMITTEE: Fruits and Vegetables.
EOS LIAISON TO THE TECHNICAL COMMITTEE: Ehsan Ahmed Aly .
EOS TECHNICAL COMMITTEE CHAIRMAN: Dr. M. Amin Abdallah, Ain Shams University.
EOS TECHNICAL COMMITTEE MEMBERS:
Dr. Zeinab A. El Haleem, Ministry of Health
Mostafa El Attar, Chemistry Dept., Ministry of Industry and Mineral Wealth
Hidy Michaul Salib, General Organization for Import and Export Control,
George Antoun, Ministry of Health
Ahmed Mohamed Hassan Shaker, Nutrition Institute
Zenabs H. Ahmed, Food Development Center

Michel Botros, Consultant
Zeinab El Kashef, Edfina Company

TECHNICAL ADVISOR: H. Michael Wehr

**Results of Discussion**

Several changes were made to this Standard.

The Scope section was modified to include seedless tomato varieties or tomato products in which the seeds have been removed.

The Essential Composition/Related Factors section was modified to include several elements previously placed into the voluntary standards section. This includes, but may not be limited to requirements for defects/blemishes, net and drained weights, and pH. The Technical Committee will further review the Standard to determine what additional elements will be moved. The Technical Advisor noted that the incorporation of these elements into the mandatory standard was inappropriate, retained commercial quality attributes as mandatory and, in large part, returned the standard to its original content. However, the Committee wished this change to be made. The Technical Advisor also noted that the current Annex presented basic information only and that the section would have to be completed using the existing Codex Standard or other product grade standards (such as those produced by the U.S. Department of Agriculture Marketing Service) as guidelines. The Technical Advisor additionally noted that the Codex Committee on Processed Fruits and Vegetables was in the processes of revising standards in this area.

Additionally under this section, the Committee included certain firming and acidifying agents that were in the original standard, are required for acceptable products, and are not considered as food additives in Egypt. This change is appropriate.

The revised Standard is attached in Appendix 3.

## TOMATO KETCHUP

**EOS Standard and Technical Committee Information**

NAME OF STANDARD: Tomato Ketchup.
EXISTING EOS STANDARD NUMBER: 132-1990 (Tomato Ketchup Section only).
PRODUCTS INCLUDED IN EXISTING STANDARD: Tomato Ketchup.
DATE OF LAST REVIEW: October 1997.
IS THE EXISTING STANDARD MANDATORY OR VOLUNTARY: Mandatory.
IS THE STANDARD MODELED AFTER AN INTERNATIONAL NORM: Yes, Codex Alimentarius.
IS/ARE PRODUCTS COVERED UNDER THIS STANDARD MANUFACTURED IN EGYPT: Yes.

NAME OF EOS TECHNICAL COMMITTEE: Fruits and Vegetables.
EOS LIAISON TO THE TECHNICAL COMMITTEE: Ehsan Ahmed Aly .
EOS TECHNICAL COMMITTEE CHAIRMAN: Dr. M. Amin Abdallah, Ain Shams University.
EOS TECHNICAL COMMITTEE MEMBERS:

Dr. Zeinab A. El Haleem, Ministry of Health
Mostafa El Attar, Chemistry Dept., Ministry of Industry and Mineral Wealth
Hidy Michaul Salib, General Organization for Import and Export Control,
George Antoun, Ministry of Health
Ahmed Mohamed Hassan Shaker, Nutrition Institute
Zenabs H. Ahmed, Food Development Center
Michel Botros, Consultant
Zeinab El Kashef, Edfina Company

TECHNICAL ADVISOR: H. Michael Wehr

**Results of Discussion**

No significant changes were made to this section.

One comment received from a private company requested the standard to include Chili Sauce. The Committee discussed the item, recognizing that either inclusion in this Standard or the preparation of a new Standard was possible. Their decision was to create a new Standard.

The Committee also decided to permit the inclusion of flavorants and such additives as acidifying agents in the Standard.

The revised Standard is attached in Appendix 3.

**CANNED FRUIT**

**EOS Standard and Technical Committee Information**

NAME OF STANDARD: Canned Fruit.
EXISTING EOS STANDARD NUMBER: 129-1986 (Canned Fruit Section only).
PRODUCTS INCLUDED IN EXISTING STANDARD: Canned Fruit Products.
DATE OF LAST REVIEW: October 1997.
IS THE EXISTING STANDARD MANDATORY OR VOLUNTARY: Mandatory.
IS THE STANDARD MODELED AFTER AN INTERNATIONAL NORM: Yes, Codex Alimentarius.
IS/ARE PRODUCTS COVERED UNDER THIS STANDARD MANUFACTURED IN EGYPT: Yes.

NAME OF EOS TECHNICAL COMMITTEE: Fruits and Vegetables.

EOS LIAISON TO THE TECHNICAL COMMITTEE: Ehsan Ahmed Aly .
EOS TECHNICAL COMMITTEE CHAIRMAN: Dr. M. Amin Abdallah, Ain Shams University.
EOS TECHNICAL COMMITTEE MEMBERS:

Dr. Zeinab A. El Haleem, Ministry of Health
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Hidy Michaul Salib, General Organization for Import and Export Control,
George Antoun, Ministry of Health
Ahmed Mohamed Hassan Shaker, Nutrition Institute
Zenabs H. Ahmed, Food Development Center
Michel Botros, Consultant
Zeinab El Kashef, Edfina Company

TECHNICAL ADVISOR: H. Michael Wehr

**Results of Discussion**

The Technical Committee indicated their desire to make those items currently in the Annex section mandatory. This includes the areas of net weight, drain weight, defect levels, packing medium and style of product. The Technical Advisor indicated that this was not in the spirit of the EOS Standards review project to separate safety and essential quality elements from non-essential quality elements. The Committee indicated their strong desire for their approach, however, and this decision was accepted. It this context, the Technical Advisor indicated that, because of the very large number fruit products, constructing one standard with all Annex information for all canned fruit products placed in the mandatory portion of the Standard would make the Standard too large and unworkable. The Technical Advisor suggested that the Committee modify the scope section to make this General Standard applicable to all canned fruits except for specific standards for named fruits. This would necessitate the development of a large number of new standards specific for all common types of canned fruits. Each individual canned fruit standard could then contain the Annex information applicable to the specific product. The Technical Committee agreed to this concept.

In order to handle this change, the existing Scope section was modified by adding the phrase "where there is no named canned fruit standard".

In order to handle the need to incorporate Annex information relating to net weight, drained weight, packing media, etc., into the General Standard, the Technical Advisor suggested the addition of the following sentence into the "Other Relevant Factors" section of the Standard: "Information on normal net weights, drain weights, packing media, product styles, and acceptable defect levels shall be provided by the manufacturer to the appropriate control authorities who shall use this information to assess the product(s). The Technical Committee agreed to this addition.

The Annex section was deleted from the existing draft.

Additionally, the statement relating to Codex approved sugars was removed from Section 3.2.1 relating to packing media.

The redrafted Standard for Canned Fruits is attached in Appendix 3.

## JAMS AND JELLIES

**EOS Standard and Technical Committee Information**

NAME OF STANDARD: Jams (Preserves) and Jellies.
EXISTING EOS STANDARD NUMBER: 129-1986 (Jams/Jellies Section only).
PRODUCTS INCLUDED IN EXISTING STANDARD: Jams and Jellies.
DATE OF LAST REVIEW: October 1997.
IS THE EXISTING STANDARD MANDATORY OR VOLUNTARY: Mandatory.
IS THE STANDARD MODELED AFTER AN INTERNATIONAL NORM: Yes, Codex Alimentarius.
IS/ARE PRODUCTS COVERED UNDER THIS STANDARD MANUFACTURED IN EGYPT: Yes.

NAME OF EOS TECHNICAL COMMITTEE: Fruits and Vegetables.
EOS LIAISON TO THE TECHNICAL COMMITTEE: Ehsan Ahmed Aly .
EOS TECHNICAL COMMITTEE CHAIRMAN: Dr. M. Amin Abdallah, Ain Shams University.
EOS TECHNICAL COMMITTEE MEMBERS:

Dr. Zeinab A. El Haleem, Ministry of Health
Mostafa El Attar, Chemistry Dept., Ministry of Industry and Mineral Wealth
Hidy Michaul Salib, General Organization for Import and Export Control,
George Antoun, Ministry of Health
Ahmed Mohamed Hassan Shaker, Nutrition Institute
Zenabs H. Ahmed, Food Development Center
Michel Botros, Consultant
Zeinab El Kashef, Edfina Company

TECHNICAL ADVISOR: H. Michael Wehr

**Results of Discussion**

The Committee decided to move all information relating to original product fruit content from the Annex to the mandatory section of the Standard. The Technical Advisor pointed out that the Codex standard for jams and jellies placed this provision into the annex and that moving this material back into the mandatory section would not be in the spirit of the purpose of the current review, which is to separate safety and essential quality elements from non-essential quality elements. The Technical Committee decided, however, to move this section. The agreed upon new text would be determined by the Technical Committee at a later time but would be based on the information provided in the Codex Standard for jams and jellies.

Because of confusion with the meaning of "fruit spreads" and the difficulty in translating this phrase, the Technical Committee agreed to remove the phrase from the Scope Section, replacing it with the word "products".

Additionally, the statement relating to Codex approved sugars was removed from Section 3.1.2 relating to packing media.

The redrafted Standard for Jams and Jellies is attached in Appendix 3.

## CITRUS MARMALADE

### EOS Standard and Technical Committee Information

NAME OF STANDARD: Citrus Marmalade.
EXISTING EOS STANDARD NUMBER: 129-1986 (Marmalade Section only).
PRODUCTS INCLUDED IN EXISTING STANDARD: Citrus Marmalades.
DATE OF LAST REVIEW: October 1997.
IS THE EXISTING STANDARD MANDATORY OR VOLUNTARY: Mandatory.
IS THE STANDARD MODELED AFTER AN INTERNATIONAL NORM: Yes, Codex Alimentarius.
IS/ARE PRODUCTS COVERED UNDER THIS STANDARD MANUFACTURED IN EGYPT: Yes.

NAME OF EOS TECHNICAL COMMITTEE: Fruits and Vegetables.
EOS LIAISON TO THE TECHNICAL COMMITTEE: Ehsan Ahmed Aly .
EOS TECHNICAL COMMITTEE CHAIRMAN: Dr. M. Amin Abdallah, Ain Shams University.
EOS TECHNICAL COMMITTEE MEMBERS:

Dr. Zeinab A. El Haleem, Ministry of Health
Mostafa El Attar, Chemistry Dept., Ministry of Industry and Mineral Wealth
Hidy Michaul Salib, General Organization for Import and Export Control,
George Antoun, Ministry of Health
Ahmed Mohamed Hassan Shaker, Nutrition Institute
Zenabs H. Ahmed, Food Development Center
Michel Botros, Consultant
Zeinab El Kashef, Edfina Company

TECHNICAL ADVISOR: H. Michael Wehr

### Results of Discussion

Since the EOS Technical Committee had not had time to obtain comments on this Standard, it was not reviewed in any depth. The Technical Advisor noted that the same comments made for jams/jellies relating to original fruit content and Codex approved sugars would apply to this

Standard also. Similarly, the technical advisor, as with the changes made by the EOS committee to the jams and jellies standard, did not concur with the modifications made to the marmalade standard. A modified Citrus Marmalade Standard has been prepared with the changes requested by the committee.

The redrafted Standard for Citrus Marmalade is attached in Appendix 3.

**FROZEN MEAT**

**EOS Standard and Technical Committee Information**

| | |
|---|---|
| Name of Standard: | Frozen Meat |
| EOS Standard Number: | 1522 (1991) |
| Products Included: | Frozen Carcasses and Cuts |
| Date of Last review: | 30 September 1997 |
| Status of Existing standard: | Mandatory |
| International Reference: | None, revisions modeled on Codex |
| Local Products: | Local product are not covered under this standard |

**EOS Technical Committee:** Meat Products

**EOS Liaison Person:**

Fayza Al Said Esmail (Chemist), Egypt Organization of Standardization

**Technical Committee Chairman:**

Dr Salah Abou Raiia, Faculty of Agriculture, Cairo University.
Dr M. Fahmi Saddik, Institute of Nutrition.

**Committee Members:**

Alaa Radwan, RODICO International Trading, Cairo.
Dr. Ebtisam Eid Ahmed, Central Public Laboratory, Ministry of Health
Dr Mahamoud Abdou Baghadi,General Organization of Import and Export Control
Dr. Zeinab Abd El-Haleim Abd El-Aziz, Food Safety and Control, Ministry of Health
Fayla Esmail Hode, Chemist, Egypt Organization of Standardization
Hassanat Mohamed, Chemical Department, Ministry of Industry
Mohamed Magdy Hamsa, Central Laboratories, Ministry of Health.
Mostafa Medhat Ismail, Egypt Organization of Standardization
Ms. Hanan Ahmed Hosny, The Ministry of Industry
Ms. Hoda Karam, Ministry of Trade and Supply, Cairo

TECHNICAL ADVISOR: Neil Armitage

**Results of Discussion**

The objective was to review the proposed draft standard as last revised on 30 September 1997.

The revised standard had been circulated to the Technical Committee for comment. The session opened with strong opposition from the committee that quantitative fat standards had been removed from the proposed draft. The discussion for the remainder of a full session related to fat and other quantitative quality issues.

**Fat**

The existing Egyptian standard (1522) has specific composition standards for fat content in raw meat: meat intended for direct consumption, 7% and meat intended for processing, 20%. The reason for these standards were reported to relate to the health of consumers and to the wholesomeness of products.

The health aspects of fat relate to cholesterol and its deleterious effect on health and to the concentration of animal remedies and pesticides in fatty tissues. With regard to the latter aspect, the committee reported that limiting the amount of fat on products minimized the exposure to chemical residues.

With regard to wholesomeness, the committee considered that fat rancidity initiated biochemical changes leading to the spoilage of muscle meat. In their view, the committee considered that fat oxidation and subsequent rancidity changes occurred throughout frozen storage particularly when storage temperatures fluctuated. The committee considered that the facilities and the operational controls for refrigerated storage and transportation in Egypt could be improved. The current limitation on shelf life and durability has its origin in the perception that spoilage changes occur continuously during frozen storage.

The committee's perceptions on the health and wholesomeness were not dissuaded by the opinion of the Technical Expert.

**Decomposition**

Quality attributes such as pH, rate of fluid drip, volatile nitrogen compounds and fatty acid production were considered to be measures of general deterioration of product. The standard included a thiobarbituric acid test which is inappropriate for meat. The committee considered that deterioration and spoilage was a feature of frozen storage. Additional practices of thawing/tempering and re-freezing would also contribute to deterioration.

The Technical Expert provided evidence that indicated these attributes were not reliable indicators of deterioration. After a period of time in frozen storage, changes in the taste of meat can be detected by experienced taste panels but these changes are not health related. The

Technical Committee agreed to look at the evidence but in the meantime felt that it was necessary to retain these quantitative attributes as indicators of deterioration.

**Preliminary Discussion**

The frozen meat standard applies only to imported meat. It is a de facto imported meat standard. The committee expressed minimal concern for public heath factors related to the health of the animal and the hygiene of slaughter. The current standard is not applied to domestic slaughtering or to the sale of meat through retail butcher outlets.

The technical expert proposed that mandatory public health aspects of the standard should be separated from quality attributes in the primary "import standard" for meat. The quality aspects might, and perhaps should, be applied to product standards offered for retail sale. They should not be applied as conditions for import.

The review of the revised proposed draft standard continued into a second session in which the technical adviser presented a schematic arrangement of the meat processing industry which set out responsibilities for the various elements in processing based on hazards and appropriate control mechanisms. The objective was to delineate the production of raw meat from meat and processed meat products that were placed onto the retail market. The discussion attempted to identify the strengths of having simplified raw product standards and shifting compositional controls to finished products ready for sale to the consumer. The committee indicated that they were receptive to the proposed structural alignment.

**Agreed Standard**

The third session was devoted to a detailed review of the proposed revised standard with elements of the structural alignment included. In brief: the name of the standard (frozen meat) was ratified and in the scope it was clarified the standard related to imported meat. The species of animals included in the standard were clarified. The definition of meat was clarified and during the accompanying discussion, an attempt to introduce quarantine aspects relating to BSE, e.g. exclusion of nervous tissue, was refuted. Composition issues relating to fat were held over, the text in the body of the standard was not discussed. The section on Related Factors was ratified as re-drafted, the discussion relating to quality elements such as drip and pH were held over. Section 5 relating to Contaminants was clarified in all paragraphs by defaulting to the Codex recommended standard in the absence of any Egyptian standard. In respect of Hygiene, Egyptian and Codex standards for Good Manufacturing Practice were ratified and Codex recommendations for establishing microbiological criteria were also ratified. In addition, the freezing temperature of -12 °C was ratified. Labeling was clarified, the discussion indicated that the text of the document including Codex recommendations and any other EOS standard should also apply. The date of production was clarified and the procedure for establishing the date of durability was ratified. The discussion indicated that all elements contained in the Annex would revert to the

current quantitative criteria and that the elements in the Annex would be regarded as mandatory. In the absence of scientific evidence validating the adoption of such quantitative criteria, the mandating of these elements was contrary to the opinion of the Technical Expert. The discussion did not address the text of the explanatory information relating to the status of the Annex.

After the discussion, in order to make some progress on the issue of fat, the Technical Expert proposed a set of criteria as a compromise to this critical but stalemated issue.

**Finished Standard**

In a final session, with a reduced size Technical Committee, it was intended to confirm that preparation of the finished Standard fairly represented the position that had been agreed at the previous session. The committee did not agree with the set of criteria for fat, proposed as a compromise by the Technical Expert; they reversed their previously agreed position on the temperature for frozen meat and a labeling aspect, and they insisted on the replacement of the composition standards for fat and decomposition in the body of the mandatory standard.

With regard to fat, the Technical Expert had proposed that:

- no criteria apply to whole carcasses and bone-in cuts;
- table cuts when presented for retail sale should not contain more than 7% fat;
- manufacturing meat should not contain more than 30% fat; and
- when the level of fat in manu facturing meat exceeds 20% then the percentage of fat should be declared on the label.

The committee dismissed the first point claiming Egypt has a method to determine the percentage of fat in whole carcasses and bone-in cuts. Internationally, the commercial specifications for carcasses and cuts in their natural proportions are qualitative. The Technical Expert was therefore concerned about the sensitivity of the Egyptian test and the inherent uncertainty in trade when this test was applied at a point-of-entry inspection. The committee did modify the second point to clarify that the criterion applied to "table cuts for direct consumption when presented for retail sale." The committee did not clarify where this test would be applied, i.e. at retail sale or as a point-of-entry inspection. The proposed 30 % fat level in the third point was rejected in favor of the existing 20% standard. The Technical Expert pointed out that in 2 manufactured meat product standards under review, fat levels are permitted to exceed 20%; these were meat balls at 25% and frozen sausage at 30%. The committee indicated that those 2 standards may have to be reviewed, hence dismissing the argument that greater that 20% fat in the manufacturing product should be allowed. Furthermore, the committee indicated that the commercial uncertainty associated with the importing of cuts of meat which naturally contain a high percentage of fat may be overcome by adding, to the carton, low fat cuts so that the average fat content in the carton does not exceed 20% of the total weight of product. The Technical Committee insisted that the composition standards for fat were replaced in the body of the mandatory standard.

With regard to the temperature of frozen meat, the Technical Committee reversed their acceptance of -12°C in favor of the current -18 °C requirement. The committee requested verification that, internationally, -12 °C is the most widely used standard for frozen meat. There is no evidence that colder temperatures provide any greater public health assurance, furthermore current data suggests that organoleptic changes are unlikely to be detected within the current, Egyptian, shelf-life restriction for frozen meat. The committee presented the French Surgelé standard as the model upon which the Egyptian standard had been based. The Technical Expert pointed out that this was an identity standard for high quality product, the minimum French Congelé standard required only -12 °C. The committee then presented an alternative discussion based on custom and practice, i.e. it is customary for vessels and port facilities which handle a wide range of frozen goods to operate at -18 °C or colder. Whilst, in previous sessions, the committee had accepted in principle that -12 °C may have been an adequate temperature for frozen meat, the committee stated that "measuring deep meat temperatures by port-inspection staff was going to be too difficult." Furthermore, "It would be easier for port-inspection staff to monitor air temperature recording devices on shipping containers." As refrigerated containers are customarily maintained at -18°C or colder, the committee felt this was further justification for adopting -18 °C as the Egyptian standard. The Technical Committee then required modification to the mandatory label statement, which is now to read: "Keep Frozen at -18 °C"

With regard to labeling, the Technical Committee reversed their previous position by requiring, in addition to the name and address of the importer, the name and address of the exporter. (The discussions during previous sessions had concluded that the Codex standard, i.e. name, address and license (establishment) number of the slaughterer/ manufacturer should be sufficient information to identify the foreign source of the frozen meat.) The Technical Committee required this additional information because the exporter, who was regarded as the accountable person shipping the goods, was frequently a different person (company) to the slaughterer/ manufacturer. The committee did not consider that information about the identity of the exporter which appears on the official government export certificates accompanying shipments of frozen meat to be adequate. The Technical Expert pointed out that, as it is normal for the slaughterer/manufacturer to arrange the packaging and labeling material this additional information may present logistical difficulties for processors preparing products for export to Egypt.

**Conclusion**

Overall, the frozen meat standard was substantially improved by the Technical Committee but it was disappointing that the Committee felt they were unable to sever control over quality attributes from a standard which should prioritize food safety concerns in order to protect public health. The committee acknowledged that the inclusion of these quality attributes in an import standard may be contrary to the agreement on Technical Barriers to Trade (TBT) and therefore indicated that they were prepared to construct a technical case for the retention of these elements.

It was the view of the committee that the public interest was being served by the inclusion of these quality attributes.

The Technical Expert pointed out that, as this imported meat standard related only to a fraction of the total meat consumed in Egypt, the quality aspects in the standard could not be expected to benefit the public in the manner intended by the Technical Committee.

The revised Standard for Frozen Meat is attached in Appendix 3.

**FROZEN BEEF BURGER**

| | |
|---|---|
| Name of Standard: | Frozen Beef Burger |
| EOS Standard Number: | 1688 (1991) |
| Products Included: | Frozen Meat Burgers |
| Date of Last review: | 30 September 1997 |
| Status of Existing standard: | Mandatory |
| International Reference: | None, revisions modeled on Codex |
| Local Products: | Local products are covered under this standard |

**EOS Technical Committee:** Meat Products

**EOS Liaison Person:**

Fayza Al Said Esmail (Chemist), Egypt Organization of Standardization

**Technical Committee Chairman:**

Dr M. Fahmi Saddik, Institute of Nutrition.

**Committee Members:**

Dr. Abdel Azim Abdel Razek Bayoumy, Ministry of Health
Dr. Mahamoud Abdou Baghadi,General Organization of Import and Export Control
Dr Salah Abou Raiia, Faculty of Agriculture, Cairo University.
Dr. Zeinab Abd El-Haleim Abd El-Aziz, Food Safety and Control, Ministry of Health
Ms. Fayla Esmail Hode, Chemist, Egypt Organization of Standardization
Hassanat Mohamed, Chemical Department, Ministry of Industry
Mohamed Magdy Hamsa, Central Laboratories, Ministry of Health.
Ms. Hoda Karam, Ministry of Trade and Supply, Cairo

TECHNICAL ADVISOR: Neil Armitage

**Results of Discussion**

The objective was to review the proposed draft standard as last revised on 30 September 1997.

The revised standard had been circulated to the Technical Committee for comment. The Technical Expert tabled a re-modeled draft standard that incorporated elements previously discussed in the Frozen Meat standard. The Technical Expert also provided draft standards for 5 other products that were modeled on the tabled draft standard for Frozen Meat Burgers. The rationale being that these other product standards were similarly derived from fresh or frozen meat but differed only by their composition.

**Raw Material Control**

The re-modeled standard had been prepared as a derivative of fresh or frozen meat. The standard prescribed that raw meat should be produced according to the requirements of the Egyptian Organization for Standardization (EOS standards) for edible meat, e.g. Frozen Meat (for imported meat) and EOS standards for GMP in the case of domestic meat. Whilst the committee accepted this in principle, they were unwilling or unable to accept that if EOS standards for raw materials are specified in the frozen burger standard, this binds frozen burgers to use only meat produced according to those standards. The committee insisted that all the requirements specified under related factors and contaminants in the Frozen Meat standard (1522) should be restated in this standard.

The committee indicated that it is the current principle for EOS to regard all standards as unique. They argued that if this standard did not detail raw material controls, rather than incorporating these by specification, then finished meat burger products could be imported into Egypt which may not have been produced in compliance with the detailed controls. The committee did not offer any suggestion as to how the raw material control could be measured to verify compliance. The attention of the committee was predominantly focused on imported meat.

**Composition Standards**

The Technical Committee insisted that all attributes of the current composition standard be re-stated in the revised draft standard. The technical Expert had originally included only basic composition detail such as proportions of red meat, fat, and filling which were sufficient to ensure that burger products met the required standard.

**Shelf-life**

The Technical Committee had previously accepted the narrative in the Frozen Meat Standard (1522) which required the EOS to apply certain principles when determining shelf life. The committee accepted the re-stating of these principles in the Frozen Meat Burger standard but also insisted on including the current definitive position on shelf life. Hence the standard contradicts itself.

The committee was fixed in their views on shelf life. Frozen meat is restricted to a shelf life of 6 months, in spite of standard now requiring certain principles to be applied when determining shelf life. As such, any derivative of frozen meat cannot have a shelf life from the date of manufacture that is more than the residual life of the frozen meat. The scenario is further complicated by the requirement for frozen meat to have at least half of the shelf life remaining at the time of entry into Egypt. Frozen meat burgers could theoretically have a shelf life of 6 months if produced, in an importing country, from meat directly after slaughter. However, this variable was considered by the committee to be too difficult to manage at point-of-entry inspection and, consequently, they opted for a maximum shelf life of 3 months.

**Import Discrimination**

The Technical Committee accepted that this standard applies to meat burgers that are both imported and domestically produced. They also accept that domestically produced burgers may contain both imported meat and domestically produced meat. The rationale for many aspects of the standard seems to be based on the imported meat situation and appears to be silent on domestic production.

This is borne out in the rationale for including detailed raw material controls in a derivative standard, adopting a generic maximum shelf life and requiring the name of the importer to be included on labels of pre-packaged products. The Technical Expert had proposed that the name of the distributor should be a mandatory statement. In the committee's view this would be too difficult to manage and reverted to identifying only the importer.

**Agreed Standard**

In brief: the name of the standard (frozen meat burger) was ratified and it was clarified the standard related to both imported and locally produced meat burgers. The standards for raw meat were ratified but details relating to production and contaminants were re-stated rather than being ratified by incorporation. Composition issues were clarified. In respect of Hygiene, Egyptian and Codex standards for Good Manufacturing Practice were ratified and Codex recommendations for establishing microbiological criteria were also ratified. In addition, the freezing temperature of -12°C was ratified. Labeling, modeled on the frozen meat standard, was clarified. The date of manufacture was clarified and the procedure for establishing the date of durability was ratified although contradicted the inclusion of prescriptive parameters. The Annex did not contain any contentious elements.

**Finished Standard**

In a final session, with a reduced size Technical Committee, it was intended to confirm that preparation of the finished Standard fairly represented the position that had been agreed at the

previous session. The committee modified the text of Section 4, Food Additives and reversed their previously agreed position on the temperature for frozen meat burgers and one aspect of labeling in the same manner as outlined in the discussion on Frozen Meat.

The text of Section 4, Food Additives, was simplified by replacing descriptions of specified additives with a single statement referring to the primary standard for additives permitted in food administered by the Ministry of Health.

The discussion relating to the reversal of the committees decisions in respect of the temperature and labeling of frozen meat applied in the same manner to frozen meat burgers. However, it should be pointed out that the text of the original standard 1688 reviewed by the Technical Expert did not contain any reference to a temperature for freezing.

**Conclusion**

Overall, the frozen meat burger standard was improved. It was disappointing that the Technical Committee was unable to review this standard without direct reference to, and replication of, the specific requirements of the parent standard. The committee stated that all standards are unique although they were quite responsive to the principle that this frozen meat burger standard is very similar to several other standards for manufacturing meat, differing only in the composition.

The revised Standard for Frozen Beef Burger is attached in Appendix 3.

**Additional Standards Prepared by the Technical Advisor for Which No Review Was Carried Out by the EOS Technical Committee:**

| **Name of Standard** | **EOS Number (date)** |
|---|---|
| **Pure Minced Meat** | ES 1694 (1991) |
| **Meat Balls** | ES 1673 (1991) |
| **Minced Meat with Soya Bean Protein** | ES 1641 (1993) |
| **Canned Sausage** | ES 1671 (1991) |
| **Frozen Sausage** | ES 1672 (1991) |
| **Frozen Offals** | ES 1473 (1990) |

| | |
|---|---|
| Status of Existing standards: | Mandatory |
| International References: | None, revisions modeled on Codex |
| Local Products: | Local products are covered under this standard |

**EOS Technical Committee:** Meat Products

**EOS Liaison Person:**

Fayza Al Said Esmail (Chemist), Egypt Organization of Standardization

**Technical Committee Chairman:**

Dr Salah Abou Raiia, Faculty of Agriculture, Cairo University.

**Committee Members:**

Dr. Abdel Azim Abdel Razek Bayoumy, Ministry of Health
Ms. Fayla Esmail Hode, Chemist, Egypt Organization of Standardization
Hassanat Mohamed, Chemical Department, Ministry of Industry
Mohamed Magdy Hamsa, Central Laboratories, Ministry of Health.
Ms. Hoda Karam, Ministry of Trade and Supply, Cairo

TECHNICAL ADVISOR: Neil Armitage

The above reduced size technical committee, which finalized the frozen meat and frozen meat burger standards, had previously received draft copies of all the Standards listed in this section. There was no discussion on these standards and they are presented without any notes in the text by the Technical Expert.

The 5 manufactured product standards (minced meat, meat balls, minced meat with soya bean protein, frozen sausage and canned sausage) had been drafted in the same way as the frozen meat burger and modified according to the discussions relating to the agreed standard for frozen meat burger. Standards for the 5 manufactured products are prepared as draft proposed standards and finished in the light of the discussion relating to the finished standard for frozen meat burgers. The Technical Committee received these draft standards for consideration.

The frozen offal standard, 1473 (1990), was drafted along the lines of the frozen meat standard and modified according to the discussions relating to the agreed standard for frozen meat. The text of the draft proposed standard for frozen offals has been prepared in the light of the discussion relating to the finished standard for frozen meat. The Technical Committee failed to accept this draft proposed standard stating that ES 1473 related only to frozen beef liver. The Technical Expert later checked the text of the standard that had been provided for review, and concluded that the draft proposed standard that had been prepared for the committee, and now appended to this report, accurately represents the title, definition and intent of the Frozen Liver Standard 1473 (1990).

These non-reviewed Standards are attached in Appendix 4.

**Summary - Meat Products**

- The objective of assisting the Technical Committee to approach the revision of Egyptian standards for meat and meat products using scientifically justified and relevant principles has not been achieved.

- The Technical Committee embraced the principle of having a primary raw meat standard and that processing standards for manufactured products could be generic, differing only in their composition, but they were not willing to apply this principle to this current revision of standards.

- The Technical Committee worked relatively effectively but without accountability. Expert opinion was sought from relevant members and or sector groups when needed but there was no transparency to the scientific decision process or any assessment of the impact those decisions might have on trade or commerce.

- The standards for meat and meat products under review contained sufficient overt or covert evidence to conclude these were de facto import standards.

- The Technical Committee have a deep concern for deterioration and spoilage of meat. They regard the preservation of meat by freezing with apprehension, consequently Egyptian criteria for frozen meat and meat products are unnecessarily very stringent.

- The Technical Committee was quite unwavering in their retention of quantitative composition standards for fat in the primary (frozen) meat standard and were prepared to go to great lengths to justify this issue.

- The Technical Committee has a deep concern for truth in labeling, consequently Egyptian requirements for labeling are stringent. The impact on processors and the trade in general had not been assessed and could be significant.

**MILK POWDER**

**EOS Standard and Technical Committee Information**

NAME OF STANDARD: Milk powder
EXISTING EOS STANDARD NUMBER: 1648
PRODUCTS INCLUDED IN EXISTING STANDARD: Milk powders
DATE OF LAST REVIEW: October 1997
IS THE EXISTING STANDARD MANDATORY OR VOLUNTARY: Mandatory
IS THE STANDARD MODELED AFTER AND INTERNATIONAL NORM: Yes - Codex Draft Revised Standard for Milk and Cream Powders

IS/ARE THE PRODUCTS COVERED UNDER THIS STANDARD MANUFACTURED IN EGYPT: Yes

NAME OF EOS TECHNICAL COMMITTEE: Milk and Milk Products
EOS LIAISON TO THE TECHNICAL COMMITTEE: Mohamed Abdel Rahman Khalifah
EOS TECHNICAL COMMITTEE CHAIRMAN: Dr Salem N. Amer, Prof. of Dairy Technology, Cairo University
EOS TECHNICAL COMMITTEE MEMBERS:

Dr Abd El-Kader A. Hefny, Prof. of Dairy Technology, Animal Production Research Institute
Abdel Mageed Handy, Animal Production Institute, Dairy Technology
Agr. Eng. Saleh Ibrahim, Industrial Control Department, Cairo University
Dr Hayat Farag, Chemical Department, Mugiede
Soraya Mohemed, General Origination the Export and Import
Nadia Aly Salem, Specialist in Food Analysis, EOS
Farouk Sadik Khalil, Central Laboratory, Ministry of Health
Mostafa Ismail, EOS

TECHNICAL ADVISOR: Philip Fawcet

**Results of Discussion**

The draft proposed standard resulting from the September 1997 Standards Review Project was submitted to interested parties for review. The comments received were reviewed at this meeting of the EOS Technical Committee. The essence of the comments and the response or decision of the Technical Committee are noted below.

The result of this review was that the committee agreed to a standard that is aligned to the Codex format and, with some exceptions, is consistent with the approach taken by Codex. The final draft standard obtained from this meeting of the EOS Committee is given in Appendix 3.

Suggested comments and points for discussion were the following:

1 The Technical Adviser and a comment from The Netherlands suggested that the definition of milk powder should be amended to allow for methods of manufacture other than drying. The approach of allowing flexibility in methods of manufacture wherever possible is one that has been accepted by Codex Committee on Milk and Milk Products, and accords with the TBT Agreement which specifies that product requirements should be expressed in terms of performance rather than design or descriptive characteristics. The Committee agreed to adopt the wording of the Codex Draft Revised Standard for Milk Powders.

2 The Technical Adviser suggested that it should be clarified that the moisture content of milk powder does not include water of crystallization of lactose. This is necessary in order

to avoid uncertainty in the meaning of the standard, a point made by the International Dairy Federation in their comments on the draft Codex standard. The Committee agreed.

3 The Technical Adviser suggested that the minimum content of protein in the milk solids-not-fat should be uniformly 34% for the three categories of milk powders in the standard. This is a new feature of the Codex Draft Revised Standard for Milk Powders, which is intended to guarantee a minimum protein content in milk powder, and allows protein adjustment by ultrafiltration techniques. The point was the subject of lengthy discussion. The committee was concerned that the standard was lower than had previously applied in Egypt, and thought protein content should be expressed on a whole-product basis. They decided however to accept the international standard, and also to retain the limit for lactose as well for additional protection. The latter limit is in fact superfluous, but has no trade inhibiting effect.

4 Members proposed to re-insert the limits for ash which exist in the previous Egyptian standard. The committee agreed these were essential (though no reason was offered) and decided to include them in the revised standard.

5 The Technical Adviser recommended that the specifications for dispersability in water, color, odor and flavor were not essential to the identity of milk powder and should be transferred to the advisory Annex. Committee members however argued that these specifications were either essential to Egyptian manufacturers (e.g. dispersability) or were essential to the quality of the product (e.g. acidity). The standard is regarded as an important tool for consumer protection. The Committee decided to retain dispersability, color, odor and flavor in the standard, and in addition to return the requirements for solubility and acidity to the standard from the Annex.

There may be some justification for retaining odor, flavor and acidity in the standard on the grounds that they may be used to indicate either poor quality raw materials or serious deterioration of the product. However dispersability and solubility are functional properties of the product and specifications for these properties vary depending on the end use of the product.

6 The Committee noted that the Ministry of Health and EOS will list additives for all foods in future, using the Codex General Standard for Food Additives.

7 The Technical Adviser proposed that Section 6, Hygiene should be replaced with the wording recently agreed by the Codex Committee on Food Hygiene for milk products. There was lengthy discussion on the meaning of the standard Hygiene clauses, which many members had not previously seen. The Ministry of Health was concerned at the lack of specific requirements such as microbiological criteria. However the committee finally agreed to use the CCFH wording, with modifications to make pasteurization mandatory and to retain a requirement that the product be phosphatase negative. Pasteurization is regarded as essential in Egypt.

8 The Committee decided to include a new requirement for constituents by percentage of the product to be listed on packages of milk powder. This refers to lactose, fat, protein, ash and moisture.

9 The Technical Adviser proposed that the date marking requirement should be specified as the date of minimum durability, as this is the preferred Codex method. The Committee however noted that the date of durability is determined by another standard, which they could not amend, and that it is specified as a date of maximum durability.

10 The Technical Adviser proposed that a provision should be included in the standard fo r labeling non-retail containers, that would allow some information to be conveyed in accompanying documents rather than on the package itself. For bulk packs it is unnecessary and sometimes impractical to place information such as ingredient lists on the packages themselves. This provision is included in the Codex standards for milk products. The Committee however decided that all the labeling information must be printed on both consumer packs and non-retail containers. Members of the committee insisted on this requirement, as they considered that providing information on shipping documents was not a satisfactory alternative.

Several points were inserted in the standard later without discussion in the committee. These included:

- changes to generic clauses particularly Hygiene and Labeling;
- changes which were reintroduced from the existing standard. These concerned, for example, requirements that the product should be free from rancidity and from objectionable matter; and
- changes to make the standard consistent with requirements that are based elsewhere, particularly concerning radioactivity, labeling and packaging.

The revised Standard for Milk Powder is attached in Appendix 3.

**PROCESSED CHEESE**

**EOS Standard and Technical Committee Information**

NAME OF STANDARD: Process(ed) Cheese
EXISTING EOS STANDARD NUMBER: 999, Part I
PRODUCTS INCLUDED IN EXISTING STANDARD: Processed cheese
DATE OF LAST REVIEW: September 1997
IS THE EXISTING STANDARD MANDATORY OR VOLUNTARY: Mandatory
IS THE STANDARD MODELED AFTER AND INTERNATIONAL NORM: Yes - Codex Proposed Draft Revised Standard for Process(ed) Cheese
IS/ARE THE PRODUCTS COVERED UNDER THIS STANDARD MANUFACTURED IN EGYPT: Yes

NAME OF EOS TECHNICAL COMMITTEE: Milk and Milk Products
EOS LIAISON TO THE TECHNICAL COMMITTEE: Mohamed Abdel Rahman Khalifah
EOS TECHNICAL COMMITTEE CHAIRMAN: Dr Salem N. Amer, Prof. of Dairy Technology, Cairo University
EOS TECHNICAL COMMITTEE MEMBERS:

Dr Abd El-Kader A. Hefny, Prof. of Dairy Technology, Animal Production Research Institute
Abdel Mageed Handy, Animal Production Institute, Dairy Technology
Agr. Eng. Saleh Ibrahim, Industrial Control Department, Cairo University
Dr Hayat Farag, Chemical Department, Mugiede
Soraya Mohemed, General Organization for Export and Import
Nadia Aly Salem, Specialist in Food Analysis, EOS
Farouk Sadik Khalil, Central Laboratory, Ministry of Health
Dr Ebtisan Eid Ahmed, Ministry of Health, Central Public Health Laboratories, Food Microbiology Department
Dr Mohamed Reda El-Sherbeeny, Nutrition Institute
Dr Abd-al Aziz Rayan, El Maray Khadra Food Industries
Dr Magdi Aly Mohamed, General Organization for Export and Import
Mohamed El Ganzori, Arab Dairy
Eng. Magdy Fahmy Mohamed, Microbiologist, "Enjoy" Foods

TECHNICAL ADVISOR: Philip Fawcet

**Results of Discussion**

The draft proposed standard resulting from the September 1997 Standards Review Project was submitted to interested parties for review. The comments received were reviewed at this meeting of the EOS Technical Committee. The essence of the comments and the response or decision of the Technical Committee are noted below.

The result of this review was that the committee agreed to a standard that is aligned to the Codex format and with several exceptions is consistent with the approach taken by Codex. It should be noted that the Codex standard that was used as a point of reference is itself currently at step 3 of the Codex process and is therefore subject to change before finalization. The final draft standard obtained from this meeting of the EOS Committee is given in Appendix 3.

Suggested comments and points for discussion were the following:

1 The committee decided to maintain the three-part format of the existing standard, rather than include processed cheese, spreadable processed cheese and processed cheese food in a single document. The committee also decided that for the present it would focus on processed cheese.

This is only a matter of formatting, and should be no disadvantage. Once processed cheese is finalized, it will be a simple matter to draft the other two parts.

2 At first the committee agreed that the Scope should include processed cheese for further processing, and should allow for flavored products, in both cases using the Codex wording. Later, however, the committee reversed its decision on further processing , and decided to exclude the use of artificial flavors.

The committee was reluctant to include processed cheese for further processing, as they were concerned about the possibility of reprocessing old processed cheese. The only reason offered for excluding artificial flavors was that they are not allowed in Egypt. In both cases the Technical Adviser expressed the view that there was no sound reason to exclude these options.

3 The Technical Adviser recommended that the definition of processed cheese should be amended to allow for alternative methods of manufacture, as in the proposed Codex draft. The committee agreed at first, but reversed the decision the following day. However in this case the committee was reluctant to accept the Codex wording as they could not envisage alternative processes would be possible.

4 The committee decided to follow the compositional standards of the proposed Codex draft, except that the limits for moisture content relate to bands of about 10% fat in dry matter (similar to the New Zealand regulations), and minimum cheese content is not specified. Instead of a provision for minimum cheese content, the committee at first decided to retain the old limit of 5% maximum lactose, but later changed this decision, noting that the committee had earlier decided to restrict the milk products used as raw materials to cheese, plus cream, butter and butter oil used to adjust the fat in dry matter content.

5 The committee agreed at first to transfer color and flavor requirements to the Annex, but reversed the decision the following day. The committee felt that these parameters are essential quality factors because they can indicate badly deteriorated product. The Technical Adviser accepted this argument as the standards should include "wholesomeness", but there is a real risk that processed cheese could be rejected because the color or flavor are not "characteristic".

6 The Technical Adviser proposed to delete the heat treatment requirement. It is redundant, since the definition requires the product to be melted. The committee agreed but decided to include a phosphatase limit for processed cheese, using the United States standard. The Technical Adviser argued against this requirement, but the committee considered it was necessary.

7 The committee decided to include microbiological criteria, including E. coli, S. aureus, coliforms and Listeria monocytogenes.

The Technical Adviser argued that microbiological criteria were not necessary as the product is very safe and there is no risk to public health. The Ministry of Health

representative however said that there were risks from contaminated ingredients and poor processing, and there had in fact been incidents where children had been affected. The Technical Adviser agreed that if this is true, then microbiological criteria may be necessary, but the emphasis should be placed on ensuring proper processing.

8 The committee decided on further labeling requirements that will apply generically to all standards for dairy products. This includes a requirement that preservatives and their percentages should be listed on the label, whereas the percentage of other ingredients is not required. The committee was unable to justify this approach, except that it is the required in Egypt.

The revised Standard for Processed Cheese is attached in Appendix 3.

**HARD CHEESE**

**EOS Standard and Technical Committee Information**

NAME OF STANDARD: Hard Cheese
EXISTING EOS STANDARD NUMBER: 1007
PRODUCTS INCLUDED IN EXISTING STANDARD: Hard cheeses
DATE OF LAST REVIEW: September 1997
IS THE EXISTING STANDARD MANDATORY OR VOLUNTARY: Mandatory
IS THE STANDARD MODELED AFTER AND INTERNATIONAL NORM: Yes - Codex Draft Revised Standard for Cheese and Proposed Draft Revised Standards for Individual Cheeses
IS/ARE THE PRODUCTS COVERED UNDER THIS STANDARD MANUFACTURED IN EGYPT: Yes

NAME OF EOS TECHNICAL COMMITTEE: Milk and Milk Products
EOS LIAISON TO THE TECHNICAL COMMITTEE: Mohamed Abdel Rahman Khalifah
EOS TECHNICAL COMMITTEE CHAIRMAN: Dr Salem N. Amer, Prof. of Dairy Technology, Cairo University
EOS TECHNICAL COMMITTEE MEMBERS:

Dr Abd El-Kader A. Hefny, Prof. of Dairy Technology, Animal Production Research Institute
Abdel Mageed Handy, Animal Production Institute, Dairy Technology
Agr. Eng. Saleh Ibrahim, Industrial Control Department, Cairo University
Dr Hayat Farag, Chemical Department, Mugiede
Soraya Mohemed, General Organization for Export and Import
Nadia Aly Salem, Specialist in Food Analysis, EOS
Farouk Sadik Khalil, Central Laboratory, Ministry of Health
Dr Ebtisan Eid Ahmed, Ministry of Health, Central Public Health Laboratories, Food Microbiology Department
Dr Mohamed Reda El-Sherbeeny, Nutrition Institute
Dr Abd-al Aziz Rayan, El Maray Khadra Food Industries

Dr Magdi Aly Mohamed, General Organization for Export and Import
Mohamed El Ganzori, Arab Dairy
Eng. Magdy Fahmy Mohamed, Microbiologist, "Enjoy" Foods

TECHNICAL ADVISOR: Philip Fawcet

**Results of Discussion**

The draft proposed standard resulting from the September 1997 Standards Review Project was submitted to interested parties for review. The comments received were reviewed at this meeting of the EOS Technical Committee. The essence of the comments and the response or decision of the Technical Committee are noted below.

The result of this review was that the committee agreed to a standard that is aligned to the Codex format and with some exceptions is consistent with the approach taken by Codex. It should be noted that the Codex standards for individual cheeses that were used as a point of reference are currently at step 3 of the Codex process and are therefore subject to change before finalization. The final draft standard obtained from this meeting of the EOS Committee is given in Appendix 3.

Suggested comments and points for discussion were the following:

1 The committee decided to reverse a recommendation of the September 1997 review that firm (semi-hard) cheeses should be included in the standard as well as hard cheeses. The main reason offered was that this maintains the format of the existing Egyptian standards. For the same reason unripened hard cheese was excluded from the standard. The Technical Adviser concurred on the grounds that there could be different food safety concerns with firm cheese and with unripened cheese.

2 The Technical Adviser recommended that hard cheese should be classified according to the content of moisture on a fat free basis (MFFB). The committee agreed in principle, but considered that the limits in the standard should be expressed as fat in the dry matter and moisture content. A simple table was included in the standard for this purpose.

3 The Technical Adviser recommended that lower fat cheeses (below 45% fat in the dry matter) should be included in the standard, in line with the Draft Revised Codex Standard for Cheese. The committee did not agree, stating that such cheeses are not manufactured or sold in Egypt.

4 The committee decided to include the same microbiological criteria in the standard as for processed cheese.

5 The committee decided to establish complete standards for four individual varieties of hard cheese (Cheddar, Swiss, Romi and Rass) as Parts 2 to 5 of the standard for Hard Cheese.

6 In developing the standards for individual varieties, the committee referred to the Proposed Draft Codex Standards for Individual Cheeses. This has resulted in considerably more detail in the revised standards than is in the existing Egyptian standards. The Technical Adviser noted that the standards should reflect the conditions that are normal in Egypt, and that not all the requirements of the international standards will necessarily apply.

7 The Technical Adviser recommended that some elements of the Description should be regarded as advisory, and transferred to the Annex. This included the requirement for eyes, particularly for sliced and grated products, and the ripening conditions. The committee however decided that the full Codex descriptions were necessary. The committee did however agree that it was not necessary to include the weight of Emmental in the Description.

8 The Technical Adviser recommended that both cows' and buffaloes' milk could be used as raw material for the manufacture of individual varieties of cheese. This is a proposal from the International Dairy Federation for the Codex Committee on Milk and Milk Products. The committee agreed.

The revised Standard for Hard Cheese is attached in Appendix 3.

**FERMENTED MILKS**

**EOS Standard and Technical Committee Information**

NAME OF STANDARD: Fermented Milks
EXISTING EOS STANDARD NUMBERS: 1000 and 1650
PRODUCTS INCLUDED IN EXISTING STANDARDS: Yogurt and sweetened flavored yogurt
DATE OF LAST REVIEW: Not previously reviewed.
IS THE EXISTING STANDARD MANDATORY OR VOLUNTARY: Mandatory
IS THE STANDARD MODELED AFTER AND INTERNATIONAL NORM: Yes - Codex Proposed Draft Standard for Fermented Milks
IS/ARE THE PRODUCTS COVERED UNDER THIS STANDARD MANUFACTURED IN EGYPT: Yes

NAME OF EOS TECHNICAL COMMITTEE: Milk and Milk Products
EOS LIAISON TO THE TECHNICAL COMMITTEE: Mohamed Abdel Rahman Khalifah
EOS TECHNICAL COMMITTEE CHAIRMAN: Dr Salem N. Amer, Prof. of Dairy Technology, Cairo University
EOS TECHNICAL COMMITTEE MEMBERS:

Dr Abd El-Kader A. Hefny, Prof. of Dairy Technology, Animal Production Research Institute, Dairy Technology Research Department, Ministry of Agriculture
Mr Tay Bartlett, Yogurt Production Manager, Nestlé

and 9 of the following committee members:
Abdel Mageed Handy, Animal Production Institute, Dairy Technology
Agr. Eng. Saleh Ibrahim, Industrial Control Department, Cairo University
Dr Hayat Farag, Chemical Department, Mugiede
Soraya Mohemed, General Organization for Export and Import
Nadia Aly Salem, Specialist in Food Analysis, EOS
Farouk Sadik Khalil, Central Laboratory, Ministry of Health
Dr Ebtisan Eid Ahmed, Ministry of Health, Central Public Health Laboratories, Food Microbiology Department
Dr Mohamed Reda El-Sherbeeny, Nutrition Institute
Dr Abd-al Aziz Rayan, El Maray Khadra Food Industries
Dr Magdi Aly Mohamed, General Organization for Export and Import
Mohamed El Ganzori, Arab Dairy
Eng. Magdy Fahmy Mohamed, Microbiologist, "Enjoy" Foods

TECHNICAL ADVISOR: Philip Fawcet

**Results of Discussion**

The starting point of this review was the two Egyptian Standards for Yogurt and Sweetened Flavored Yogurt, and the Proposed Draft Codex Standard for Fermented Milks. On this basis of these standards the Technical Adviser prepared a draft standard covering only yogurt and yogurt products, for discussion by the EOS committee. The committee however expressed the view that they wished to retain the existing Egyptian standards for yogurt and other fermented milks, and to establish a new standard in the Codex format covering all types of fermented milks. The Technical Adviser agreed to proceed on this basis.

The result of the discussion was that the committee agreed to a draft standard that is aligned to the Codex format and with some exceptions is consistent with the approach taken by Codex. It should be noted that the Codex standard for fermented milks that was used as a point of reference is currently at step 3 of the Codex process and is therefore subject to change before finalization. The Technical Adviser also pointed out to the committee the considerable difficulty the International Dairy Federation had in preparing a proposed draft standard for consideration by Codex, and expressed the view that the standard would very likely not progress in Codex, at least not at this year's meeting of the Codex Committee on Milk and Milk Products. The EOS committee nevertheless wished to make use of the Codex proposed draft.

The draft standard obtained from this meeting of the EOS Committee is given in Appendix 3.

Suggested comments and points for discussion were the following:

1 As noted above, the Scope of the standard would cover all types of fermented milks, and would cross-reference other standards for specific types of fermented milks, such as the standards for yogurt.

2 The definitions from the Codex proposed standard were used with a few modifications as follows:

- yogurt was not included as a specific type, as it will be defined elsewhere;
- definitions for Bifighurt (Bifidus milk), Bioghurt and Biogard were added;
- the use of non-nutritive sweeteners (such as aspartame) was excluded, as they are not permitted in Egypt.

3 The committee amended the compositional criteria to align with the existing Egyptian standards for yogurt. The amendments included:

- increasing the minimum milk protein content from 2.8% to 3.0%;
- classifying products according to their milkfat content, i.e., full fat products, minimum 3% milkfat, partially skimmed products, less than 3% milkfat, and skimmed products maximum 0.5% milkfat;
- increased the minimum count of additional labeled microorganisms, such as bifidobacteria, from $10^6$ to $10^7$;
- establishing a new minimum limit of 27% total solids in composite milk products, which includes milk solids, sugar, and added food solids;
- changing the lactic acid limit from a minimum of 0.6% to a maximum of 1.5%.

The latter two changes are noteworthy as they are essentially quality criteria. In particular a lactic acid minimum as proposed for Codex is an indicator of normal lactic fermentation expected in these products and is necessary for its preservative effects; but a lactic acid maximum as proposed for the Egyptian standard is intended to avoid excessive acid development through possible mishandling of the product. The Technical Adviser pointed out the significance of this change, but the committee considered a maximum limit was necessary in Egypt, and observed that the limit would change to the Codex minimum when Egypt was forced to align with Codex under the WTO rules.

The minimum total solids requirement in composite products highlights a dilemma. The proposed Codex standard notes that compositional limits apply before the addition of flavoring substances, but as the committee correctly pointed out, it is impossible to determine by testing the flavored product what the composition of the plain product would have been. However imposing a minimum compositional limit on flavored products indirectly imposes a minimum content of added sugar and flavoring food, which is purely a quality matter.

4 The committee included a provision, based on the existing Egyptian standards for yogurt, prohibiting the use of preservative except for sorbates and benzoates up to 50 mg/kg in added flavoring foods.

The revised Standard for Fermented Milks is attached in Appendix 3.

**CANNED SALMON**

**EOS Standard Information**

NAME OF STANDARD: Canned Salmon Fish
EXISTING EOS STANDARD NUMBER: 288 - 1996
PRODUCTS INCLUDED IN EXISTING STANDARD: Canned Salmon incorporating the meats of many salmon species.
DATE OF LAST REVIEW: 1996
IS THE EXISTING STANDARD MANDATORY OR VOLUNTARY: Mandatory
ARE PRODUCTS COVERED BY THIS STANDARD MANUFACTURED IN EGYPT: No
THE FISH AND FISH PRODUCTS TECHNICAL COMMITTEE:

Dr. Salah Abu-Raiia, Food Science Dept., Cairo University
Dr. M. Fahmi Saddik, Institute of Nutrition
Dr. Said Shalaby, Dept. Parasitology and Diseases, National Research Center
Dr. Sobhi Bassiauny, Faculty of Agri. and Research Affairs, Zagazig University
Ahmed El-Baghdady, Edfina Co. For Fish & Food Preservation
Hanan Ahmed-Hosny, Ministry of Industry
Dr. Ahmed Fawzy, General Organization of Import and Export Control
Moor Mostafa Abo Ell Ela, General Organization of Import and Export Control
Mostafa Medhat Ismail, Egyptian Organization for Standardization
Gamil Saad Ghali, Central Laboratory, Public Health
Samira Ahmed Osman, Chemical Department
Massaud Moustafa Yehia, Chamber of Food Industries
Nadia Aly Salem, Food Analyst Specialist
Abdelsalem Shawky, Canal Company for Food Industries
Dr. Said Eldeen Abdel Razek, National Univ. Of Fisheries and Oceanography
Dr. Eblisam Eid Ahmed, Ministry of Health
Mohamed Hidel Lehman Khalifah, Egyptian Organization for Standardization

FISH AND FISH PRODUCTS TECHNICAL COMMITTEE CHAIR: Dr. Abu-Raiia
EOS LIAISON TO THE TECHNICAL COMMITTEE: Mostafa Medhat Ismail
TECHNICAL ADVISOR: Richard Dees

**Results of Discussion**

The draft proposed standard was provided to the Technical Committee for Fish and Fish Products for review and discussion on March 17, 1998. Available for consultation were the current Egyptian Standard and the Codex Standard for Canned Salmon Fish.

The results of this review and discussion of the draft proposed standard appear as a Final Draft in Appendix 3.

Key comments and points of discussion were the following:

1. The use of drugs and hormones in aquaculture was addressed in the draft for discussion. It appears that Egypt has not yet addressed this issue as it is not in any of their existing fish and fish product standards and no provision has been made for establishment of tolerance levels or allowable compounds or withdrawal periods. Discussion among the members indicates that the EOS will be the Egyptian agency to address these issues.

2. Before arriving at the Annex in the proposed draft, members of the Committee were asking where in the draft the issue of foreign material was addressed. They explained that it is very important to the consumers in Egypt and a key element of consideration. This item had been placed in the Annex during preparation of the draft and is discussed in item 4 below.

3. Committee discussion over labeling included whether or not to include the name of the importer on the label. They decided that it is necessary to include the name of the importer on a product label. During the same discussion, the issue of whether and how to determine an expiration date on canned product labeling found that Egyptian standard 2613 of 1994 is such that these elements are required on product labeling and is not a debatable issue.

4. The Committee debated within itself and with the technical advisor whether or not to include the elements of the Annex as requirements (in the proposed draft they are voluntary) and whether to move them into the body of the standard. The Committee was encouraged by the technical advisor to retain the format and meaning of the proposed draft being reviewed. They decided to retain the elements as a separate Annex, but to make them mandatory. The committee discussion focused on the feeling that it is necessary to make producers and importers responsible for quality issues and that it is necessary to make the quality issues a requirement otherwise the government could do nothing if poor quality material was brought in. Nor could the government keep poor quality material out of the country. The members of the Committee feel that are a number of other factors that come to play such as: 1) a lack of variety of products for consumers to choose from does not allow them the options needed to avoid product they may have found objectionable from a quality standpoint; 2) many consumers are not able to distinguish between good and bad products and are at a disadvantage should poor quality product be allowed into the country for them; 3) Some importers have been found deliberately bringing in poor quality goods and a means of controlling such activities is needed. As a result of this discussion they revised the introductory paragraph to the Standard and also to the Annex to make them consistent. The technical advisor told the Committee that he felt that the inclusion of the provisions of the Annex as mandatory is contrary to the purpose of the meeting and that the draft proposed standard language reflects an attempt to bring their standard into line with the WTO requirements as reflected in the SPS and TBT Agreements.

5. On March 21 the Committee brought this standard back for discussion about labeling requirements and added a mandatory provision for storage instructions to store the product at room temperature.

## CANNED TUNA FISH AND CANNED BONITO FISH

### EOS Standard Information

NAME OF STANDARD: Canned Tuna Fish and Canned Bonito Fish
EXISTING STANDARD NUMBER: 804 - 1995
PRODUCTS INCLUDED IN EXISTING STANDARD: Canned Tuna and Canned Bonito incorporating the meats of many species of tuna and bonito.
DATE OF LAST REVIEW: 1995
IS THE EXISTING STANDARD MANDATORY OR VOLUNTARY: Mandatory
ARE PRODUCTS COVERED BY THIS STANDARD MANUFACTURED IN EGYPT: No
THE FISH AND FISH PRODUCTS TECHNICAL COMMITTEE

Dr. Salah Abu-Raiia, Food Science Dept., Cairo University
Dr. M. Fahmi Saddik, Institute of Nutrition
Dr. Said Shalaby, Dept. Parasitology and Diseases, National Research Center
Dr. Sobhi Bassiauny, Faculty of Agri. and Research Affairs, Zagazig University
Ahmed El-Baghdady, Edfina Co. For Fish & Food Preservation
Hanan Ahmed-Hosny, Ministry of Industry
Dr. Ahmed Fawzy, General Organization of Import and Export Control
Moor Mostafa Abo Ell Ela, General Organization of Import and Export Control
Mostafa Medhat Ismail, Egyptian Organization for Standardization
Gamil Saad Ghali, Central Laboratory, Public Health
Samira Ahmed Osman, Chemical Department
Massaud Moustafa Yehia, Chamber of Food Industries
Nadia Aly Salem, Food Analyst Specialist
Dr. Said Eldeen Abdel Razek, National University of Fisheries and Oceanography
Abdel Salam Shawky, Canal Company for Food Industries
Dr. Eblisam Eid Ahmed, Ministry of Health
Mohamed Hidel Lehman Khalifah, Egyptian Organization for Standardization

FISH AND FISH PRODUCTS TECHNICAL COMMITTEE CHAIR: Dr. Abu-Raiia
EOS LIAISON TO THE TECHNICAL COMMITTEE: Mostafa Medhat Ismail
TECHNICAL ADVISOR: Richard Dees

### Results of Discussion

The draft proposed standard was provided to the Technical Committee for Fish and Fish Products for review and discussion on March 18, 1998. Available for consultation were the current Egyptian Standard and the Codex Standard for Canned Tuna and Bonito Fish.

The results of this review and discussion of the draft proposed standard appear as a Final Draft in Appendix 3.

Key comments and points of discussion were the following:

1. It was decided to use the list of species out of the Codex Standard rather than the one shown in the existing Egyptian Standard.

2. Initially the Committee decided that liquid smoke flavor would not be allowed for use on smoked tuna or bonito included under this standard due to concerns over carcinogenicity of the liquid smoke flavor. On March 19 we reviewed this decision in light of the allowed use of liquid smoke flavor during the smoking of fish under the existing Egyptian Smoked Fish standard. It was decided to allow the use of liquid smoke flavor for tuna and bonito to be canned under this standard to be consistent between standards.

3. A discussion over the maximum allowed level of histamine in meats ensued over the difference between the Codex 20 mg/100 gm and existing Egyptian 10 mg./100 gm. The Codex standard includes both 10 mg/100 gm histamine as an indicator of decomposition and 20 mg./100 gm. histamine as a safety issue. The Committee decided to retain the 10 mg. figure.

4. On approaching the Annex for discussion, the Committee declared that the provisions of the Annex are to be mandatory just as the Canned Salmon standard. They pointed out that both the introductory paragraph to the standard and to the annex should be changed to reflect the mandatory status of the provisions. See paragraph 4 in the discussion of the Canned Salmon standard. They were advised that this is contrary to the purpose and intent of these meetings.

5. They asked that a section be added to the Annex similar to section 1.9 of the Salmon Standard discussed the previous day. That section refers to the allowable maximum amount of extraneous material such as skin, head, fins, viscera that can be present in the product.

6. The Committee members decided to remove section 8.4 from the draft which concerns the labeling of non-retail containers. Instead, they modified section 8.2 from dealing with retail containers to make it applicable to all containers of this product. They said that no bulk shipments of canned product are received in Egypt (unlabeled/bright stack product is not brought into Egypt for labeling).

7. As with the Canned Salmon standard discussed the previous day, a section on drug and hormone residue maximum levels was left in the proposed draft.

8. The Committee decided to include the drained weight of the fish meat as a mandatory label declaration in addition to the net weight. They also decided to require the declaration of form of pack, color of fish flesh, and grade of the pack on the product label. And they decided that if the product contains less than 75% fish meat (some other ingredients are present such as vegetables, rice, noodles, etc.) the label must declare the % of fish meat present.

9. The Committee decided that an expiration date would be mandatory in accordance with existing EOS ES 2613 requirements. Also, the name of the importer is to be required on the label.

10. On March 21 the Committee brought this standard up again for discussion and added a requirement that storage conditions be a statement required on the product label. For canned product it would be room temperature.

**SMOKED FISH**

**EOS Standard Information**

NAME OF STANDARD: Smoked Fish
EXISTING EOS STANDARD NUMBER: 288 - 1996
PRODUCTS INCLUDED IN EXISTING STANDARD: Smoked fish incorporating the meats of many species of fin fish.
DATE OF LAST REVIEW: 1996
IS THE EXISTING STANDARD MANDATORY OR VOLUNTARY: Mandatory
ARE PRODUCTS COVERED BY THIS STANDARD MANUFACTURED IN EGYPT: Yes
THE FISH AND FISH PRODUCTS TECHNICAL COMMITTEE
Dr. Salah Abu-Raiia, Food Science Dept., Cairo University
Dr. M. Fahmi Saddik, Institute of Nutrition
Dr. Said Shalaby, Dept. Parasitology and Diseases, National Research Center
Dr. Sobhi Bassiauny, Faculty of Agri. and Research Affairs, Zagazig University
Ahmed El-Baghdady, Edfina Co. For Fish & Food Preservation
Hanan Ahmed-Hosny, Ministry of Industry
Dr. Ahmed Fawzy, General Organization of Import and Export Control
Moor Mostafa Abo Ell Ela, General Organization of Import and Export Control
Mostafa Medhat Ismail, Egyptian Organization for Standardization
Gamil Saad Ghali, Central Laboratory, Public Health
Samira Ahmed Osman, Chemical Department
Massaud Moustafa Yehia, Chamber of Food Industries
Nadia Aly Salem, Food Analyst Specialist
Dr. Said Eldeen Abdel Razek, National University of Fisheries and Oceanography
Abdel Salem Shawky, Canal Company for Food Industries
Dr. Eblisam Eid Ahmed, Ministry of Health
Mohamed Hidel Lehman Khalifah, Egyptian Organization for Standardization
FISH AND FISH PRODUCTS TECHNICAL COMMITTEE CHAIR: Dr. Abu-Raiia
EOS LIAISON TO THE TECHNICAL COMMITTEE: Mostafa Medhat Ismail
TECHNICAL ADVISOR: Richard Dees

**Results of Discussion**

The draft proposed standard was provided to the Technical Committee for Fish and Fish Products for review and discussion on March 19, 1998. Available for consultation were the current Egyptian Standard and a Step 3 Codex Code of Practice for Smoked Fish. There is no Codex Standard for Smoked Fish. It is anticipated that a draft will be presented at the June 1998 meeting of the Codex Committee for Fish and Fishery Products, however, it is not yet available. Also available for consultation were portions of a guideline for Smoked Fish prepared by the Association of Food and Drug Officials of the U.S. and a University of California, Davis document on the use of smoking to destroy pathogens and control pathogens in smoked fish.

The results of this review and discussion of the draft proposed standard appear as a Final Draft in Appendix 3.

Key comments and points of discussion were the following:

1. The Committee decided to add a sentence to Section 3.1 on fish raw materials that will require that they be from harvest areas free from sources of unacceptable contamination or parasites. Since this standard covers both hot and cold process smoked fish, they decided to require freezing of fish intended for cold smoking if they were harvested from areas that may harbor parasites. Much time was spent discussing how to remove parasites from fish flesh as the Egyptian consumer does not want them present. An example of smoked fish with head and skin on and also skin on fillets packed in a plastic vacuum pack pouch was circulated in the Committee for observation of the difficulties of removing parasites from such product. The Committee was told that it is for that reason that a provision requiring removal or freedom from parasites was not included in the draft proposed standard. They were told that parasite removal is possible from fish fillets of thickness and color that make it possible to detect them. The Committee decided to require harvest area and freezing provisions stated above.

2. It was decided to allow the use of liquid smoke flavor as shown in the existing standard despite concerns over the carcinogenicity of the compounds.

3. During a discussion over parasites, the Committee decided that the standard should address in section 6.2 the presence of parasites that may represent a hazard to health when present in the flesh and gonads. (See further discussion of this point under 7 below.)

4. As with previously discussed draft proposed standards, the Committee decided to include provisions regarding drug and hormone residues.

5. The Committee decided to make appearance of an expiration date on the product label mandatory in accordance with existing EOS standards on that issue. Also required on the label will be such statements as the importers name.

6. The Committee decided that the provisions of the Annex should be mandatory and that the introductory paragraphs to the standard and to the annex needed to reflect that position. They were advised, as during previous discussions of draft proposed standards, that this is contrary to the reason and purpose of these meetings.

7. On March 21 the Committee brought this standard back for discussion.

a) They stated that it is necessary to include storage instructions on the label and decided that the language included in the proposed draft discussed on March 19 was satisfactory.
b) They stated that the method of smoking (Hot or Cold) needed to be on the label.
c) They added a section on parasites in the Annex regarding parasites in the abdominal cavity and viscera of smoked fish. The Committee was informed of the potential botulism problem from allowing intact fish to be smoked and sold and that it is highly recommended that the product not be allowed for sale in Egypt. The Committee response was that this is a product that the consumer expects to see and the consumption of gonads by many in Egypt as a delicacy is wanted by the consumer.
d) The Committee also added a requirement in the Annex that the fish flesh be free of worms or parasites whether alive or dead. They were advised that it is not possible to meet this requirement as has been discussed previously. Stating that the Egyptian consumer does not want to see parasites, they decided to require a freedom from parasites in the Annex.

**FROZEN FISH**

**EOS Standard Information**

NAME OF STANDARD: Frozen Fish
EXISTING EOS STANDARD NUMBER: 889 - 1991
PRODUCTS INCLUDED IN EXISTING STANDARD: Frozen fish of all presentations (head on, fillets, whole, partially cut up, etc) and incorporating the meats of any fin fish species.
DATE OF LAST REVIEW: 1991
IS THE EXISTING STANDARD MANDATORY OR VOLUNTARY: Mandatory
ARE PRODUCTS COVERED BY THIS STANDARD MANUFACTURED IN EGYPT: Yes
THE FISH AND FISH PRODUCTS TECHNICAL COMMITTEE

Dr. Salah Abu-Raiia, Food Science Dept., Cairo University
Dr. M. Fahmi Saddik, Institute of Nutrition
Dr. Said Shalaby, Dept. Parasitology and Diseases, National Research Center
Dr. Sobhi Bassiauny, Faculty of Agri. and Research Affairs, Zagazig University
Ahmed El-Baghdady, Edfina Co. For Fish & Food Preservation
Hanan Ahmed-Hosny, Ministry of Industry
Dr. Ahmed Fawzy, General Organization of Import and Export Control
Moor Mostafa Abo Ell Ela, General Organization of Import and Export Control
Mostafa Medhat Ismail, Egyptian Organization for Standardization
Gamil Saad Ghali, Central Laboratory, Public Health
Samira Ahmed Osman, Chemical Department

Massaud Moustafa Yehia, Chamber of Food Industries
Nadia Aly Salem, Food Analyst Specialist
Dr. Said Eldeen Abdel Razek, National University of Fisheries and Oceanography
Abdel Salam Shawky, Canal Company for Food Industries
Dr. Eblisam Eid Ahmed, Ministry of Health
Dr. Abdel Azim Abdel Razek, Ministry of Health
Mohamed Hidel Lehman Khalifah, Egyptian Organization for Standardization

FISH AND FISH PRODUCTS TECHNICAL COMMITTEE CHAIR: Dr. Abu-Raiia
EOS LIAISON TO THE TECHNICAL COMMITTEE: Mostafa Medhat Ismail
TECHNICAL ADVISOR: Richard Dees

**Results of Discussion**

The draft proposed standard was provided to the Technical Committee for Fish and Fish Products for review and discussion on March 21, 1998. Available for consultation were the current Egyptian Standard and the Codex Standard for Frozen Fish and the Codex Standard for Frozen Fish Fillets.

The results of this review and discussion of the draft proposed standard appear as Final Drafts in Appendix 3.

Key comments and points of discussion were the following:

1. The current Egyptian standard covers both frozen fish and frozen fish fillets. When it became apparent to the Committee that the Codex Alimentarius has a separate standard for Frozen Fish and another for Frozen Fish Fillets, they decided to move to consistency with the Codex and have two standards. At this meeting we dealt with the current draft proposed standard as applicable to Frozen Fish. The Committee requested a draft proposed standard for Frozen Fish Fillets be prepared for their evaluation at a later time.

2. Before initiating review and comment on the draft proposed standard, the Committee decided that both the introductory paragraph to the Standard and the introductory paragraph to the Annex needed to be changed to show that compliance with the Annex provisions is mandatory. They were cautioned, as in previous discussions, that this is against the spirit and intent of these meetings.

3. The Committee adopted the Codex Frozen Fish standard food additives as being acceptable.

4. During a discussion on labeling, the Committee decided to require a statement concerning conditions under which this, and each of the previously discussed products, should be held. For canned product it is room temperature. They will also require the importers name be on the label as well as an expiry date as required by EUS 2613 of 1994.

5. As fish can be frozen whole, they included language in the annex concerning the appearance and number of parasites present in the abdominal cavity and viscera.

6. Regarding drug and hormone residues, the Committee decided to incorporate provisions in the standard to address this issue.

7. As different from other standards, on this standard, the Committee decided to require that the name of the country in which the product was harvested be listed on the label rather than the country in which the product had been processed. The Committee had discussed such requirement for other previously discussed standards, but when reminded that the process for those products would be the most likely source of safety problems, decided to require the country of the processor be listed. For Frozen Fish they decided to require the name of the harvest country. They do require that the name and address of the producer be on the label in addition to country of origin (harvest in this instance). On March 24, the Committee pointed out that standard 1546 requires that the country of origin is the producer country and so they will change the draft proposed standard to comply with those requirements.

**FROZEN FISH FILLETS**

**EOS Standard Information**

NAME OF STANDARD: Frozen Fish Fillets
EXISTING EOS STANDARD NUMBER: 889
PRODUCTS INCLUDED IN EXISTING STANDARD: The existing standard covers all frozen fin fish including fish fillets. The Committee asked that this separate standard for Frozen Fish Fillets be prepared.
DATE OF LAST REVIEW: 1991
IS THE EXISTING STANDARD MANDATORY OR VOLUNTARY: Mandatory
ARE PRODUCTS COVERED BY THIS STANDARD MANUFACTURED IN EGYPT: Yes
THE FISH AND FISH PRODUCTS TECHNICAL COMMITTEE

Dr. Salah Abu-Raiia, Food Science Dept., Cairo University
Dr. M. Fahmi Saddik, Institute of Nutrition
Dr. Said Shalaby, Dept. Parasitology and Diseases, National Research Center
Dr. Sobhi Bassiauny, Faculty of Agri. and Research Affairs, Zagazig University
Ahmed El-Baghdady, Edfina Co. For Fish & Food Preservation
Hanan Ahmed-Hosny, Ministry of Industry
Dr. Ahmed Fawzy, General Organization of Import and Export Control
Moor Mostafa Abo Ell Ela, General Organization of Import and Export Control
Mostafa Medhat Ismail, Egyptian Organization for Standardization
Gamil Saad Ghali, Central Laboratory, Public Health
Samira Ahmed Osman, Chemical Department
Massaud Moustafa Yehia, Chamber of Food Industries
Nadia Aly Salem, Food Analyst Specialist
Dr. Said Eldeen Abdel Razek, National University of Fisheries and Oceanography
Abdel Salam Shawky, Canal Company for Food Industries
Dr. Eblisam Eid Ahmed, Ministry of Health

Dr. Abdel Azim Abdel Razek, Ministry of Health
Mohamed Hidel Lehman Khalifah, Egyptian Organization for Standardization
FISH AND FISH PRODUCTS TECHNICAL COMMITTEE CHAIR: Dr. Abu-Raiia
EOS LIAISON TO THE TECHNICAL COMMITTEE: Mostafa Medhat Ismail
TECHNICAL ADVISOR: Richard Dees

**Results of Discussion:**

The draft proposed standard which was prepared in part from discussions held on March 21 regarding Frozen Fish, was provided to the Technical Committee for Fish and Fishery Products for review and discussion on March 24, 1998. Available for consultation were the current Egyptian Standard and the Codex Standard for Frozen Fish Fillets.

Insufficient time was available for the Technical Advisor to rewrite this draft proposed standard. However, the initial draft of this Standard is included in Appendix 3. The Committee stated its intent to take notes and create a revised version for continued discussion within Egypt.

Key comments and points of discussion were the following:

1. The product description was changed to show that skin, fins and tail are not allowed.

2. Under Section 6.1 the reference to Codex was deleted.

3. Section 6.2 was modified under letter B to delete the word "viable" and the words "or parasites" were inserted under C following the word microorganisms. The Committee decided to retain letter D as written (see General Meeting Summary under Canned Salmon).

3. Under 8.2.6 they changed harvested to produced.

4. The Committee decided that Section 8.3 requires additional thought because standard 2613 does not specify the expiry date for frozen fish fillets.

5. When the Annex came up for discussion, the Technical Advisor pointed out that the Committee should reconsider the blanket establishment of the provisions of the Annex as mandatory (see General Meeting Summary under the Canned Salmon section of this report).

**FROZEN SHRIMPS**

**EOS Standard Information**

NAME OF STANDARD: Frozen Shrimps
EXISTING EOS STANDARD NUMBER: 516 - 1993
PRODUCTS INCLUDED IN EXISTING STANDARD: Frozen Shrimp in various presentations.
DATE OF LAST REVIEW: 1993

IS THE EXISTING STANDARD MANDATORY OR VOLUNTARY: Importers and producers do not have to comply with the provisions of this standard. However, if they use one provision of this standard, they must comply with all of the provisions.
ARE PRODUCTS COVERED BY THIS STANDARD MANUFACTURED IN EGYPT: Yes
THE FISH AND FISH PRODUCTS TECHNICAL COMMITTEE:

Dr. Salah Abu-Raiia, Food Science Dept., Cairo University
Dr. M. Fahmi Saddik, Institute of Nutrition
Dr. Said Shalaby, Dept. Parasitology and Diseases, National Research Center
Dr. Sobhi Bassiauny, Faculty of Agri. and Research Affairs, Zagazig University
Ahmed El-Baghdady, Edfina Co. For Fish & Food Preservation
Hanan Ahmed-Hosny, Ministry of Industry
Dr. Ahmed Fawzy, General Organization of Import and Export Control
Moor Mostafa Abo Ell Ela, General Organization of Import and Export Control
Mostafa Medhat Ismail, Egyptian Organization for Standardization
Gamil Saad Ghali, Central Laboratory, Public Health
Samira Ahmed Osman, Chemical Department
Massaud Moustafa Yehia, Chamber of Food Industries
Nadia Aly Salem, Food Analyst Specialist
Dr. Said Eldeen Abdel Razek, National University of Fisheries and Oceanography
Abdel Salam Shawky, Canal Company for Food Industries
Dr. Eblisam Eid Ahmed, Ministry of Health
Dr. Abdel Azim Abdel Razek, Ministry of Health
Mohamed Hidel Lehman Khalifah, Egyptian Organization for Standardization

FISH AND FISH PRODUCTS TECHNICAL COMMITTEE CHAIR: Dr. Abu-Riaai
EOS LIAISON TO THE TECHNICAL COMMITTEE: Mostafa Medhat Ismail
TECHNICAL ADVISOR: Richard Dees

**Results of Discussion**

The proposed draft standard was provided to the Technical Committee for Fish and Fish Products for review and discussion on March 24, 1998. Available for consultation were the current Egyptian Standard the Codex Standard for Frozen Shrimp and Prawns. Because the Technical Advisor does not have sufficient time to prepare a redraft of the discussion document, the Committee intends to use the results of the meeting to prepare a redraft.

A copy of the proposed draft standard that was discussed on March 24 appears in Appendix 3.

Key comments and points of discussion were the following:

1. The Committee stated an intention to modify the opening paragraph of the Standard and also of the Annex to show that the provisions are voluntary unless one of them is used. If one of the provisions is used, all of the provisions must be complied with.

2. The Committee decided to remove Sections 4.2 and 4.3.

3. They will add "Ministry of Agriculture" at the end of Section 5.1.

4. The reference to Codex will be removed from Sections 5.4, 8.0, and 8.2.

5. Sections 8.2 and 8.3 will be changed to be consistent with standards previously discussed. They will add a requirement that the grade and size of the shrimp be declared on the label.

6. Section 8.4 will be removed as they state no such product is sold in Egypt.

7. Under Section 9.0, Sampling was added in front of the word "inspection".

8. The Committee intends to review Section 1.2 of the Annex especially the reference to the pH of the product.

9. The Committee intends to review the Grade and Size designations shown in their current standard. The Technical Advisor commented that the complexity of the existing designations may not be helpful to the consumer and that a less complex set of descriptive terms may be appropriate.

**PACKAGED ANCHOVIES**

**EOS Standard Information**

NAME OF STANDARD: Packaged Anchovies
EXISTING EOS STANDARD NUMBER: 808 - 1996
PRODUCTS INCLUDED IN EXISTING STANDARD: Packaged Anchovies in various forms and with various media.
DATE OF LAST REVIEW: 1996
IS THE EXISTING STANDARD MANDATORY OR VOLUNTARY: Mandatory
ARE PRODUCTS COVERED BY THIS STANDARD MANUFACTURED IN EGYPT: Yes
THE FISH AND FISH PRODUCTS TECHNICAL COMMITTEE:

Dr. Salah Abu-Raiia, Food Science Dept., Cairo University
Dr. M. Fahmi Saddik, Institute of Nutrition
Dr. Said Shalaby, Dept. Parasitology and Diseases, National Research Center
Dr. Sobhi Bassiauny, Faculty of Agri. and Research Affairs, Zagazig University
Ahmed El-Baghdady, Edfina Co. For Fish & Food Preservation
Hanan Ahmed-Hosny, Ministry of Industry
Dr. Ahmed Fawzy, General Organization of Import and Export Control
Moor Mostafa Abo Ell Ela, General Organization of Import and Export Control
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Dr. Abdel Azim Abdel Razek, Ministry of Health
Mohamed Hidel Lehman Khalifah, Egyptian Organization for Standardization
FISH AND FISH PRODUCTS TECHNICAL COMMITTEE CHAIR: Dr. Abu-Riaai
EOS LIAISON TO THE TECHNICAL COMMITTEE: Mostafa Medhat Ismail
TECHNICAL ADVISOR: Richard Dees

**Results of Discussion**

The draft proposed standard was provided to the Technical Committee for Fish and Fish Products for review and discussion on March 25, 1998. Available for consultation were the current Egyptian Standard, the Codex Standard for Salted Fish and Dried Salted Fish of the Gadidae Family of Fishes, and technical information on the preservation of fish by salting and drying. The Codex Alimentarius does not have a standard for Anchovies preserved by salting and drying. The Committee intends to use the results of this review and discussion to produce a revised draft standard.

A copy of the draft proposed standard provided by the Technical Advisor is included in Appendix 3.

Key comments and points of discussion were the following:

1. The standard being reviewed is for Packaged Anchovies. The Committee sees a need to have a standard for Salted and Dried Anchovies which will cover the fish material used in the preparation of Packaged Anchovies and may also be sold by themselves without packaging. The Committee stated that a new standard would be produced.

2. After having the opening paragraph of the standard read to them and having been encouraged to adopt the proposed language, the Committee decided to modify the paragraph to make compliance with the Annex provisions mandatory. They also changed the opening paragraph of the Annex to show that it contains mandatory provisions.

3. Section 1.2 of the Standard was changed to 60% from 50%.

4. They deleted the last sentence of Section 2.2 saying it was an error in translation.

5. Under Section 3.1, after the Technical Advisor explained that if this product was marketed whole, a chance exists that botulinum toxin would be formed in the gut. The Committee agreed to the advice of the technical advisor and included a requirement for evisceration of this type of anchovy.

6. Also under 3.1 they will insert a paragraph on the need for the harvest area not to contribute contaminants to the fish above EOS standards.

7. Under Section 4.0, rather than adopting the Codex food additive list, they referred to the need to comply with MOH food additive standards.

8. They deleted the reference to Codex from Section 5.5.

9. Section 6.1 will change to reflect the need to comply with EOS and MOH standards and delete the reference to Codex.

10. Section 6.2 will be revised to show the need to use EOS analytical procedures. It will have the word "viable" removed from B, and will have the words "or parasites" inserted after microorganisms in C. They did not change the 20 mg. level for histamine despite some members of the Committee wanting to.

11. Section 7.3 had the number "153" removed and the number "1546" inserted in it's place.

12. The reference to Codex in Section 8.0 was removed and the mandatory labeling provisions were changed to reflect provisions include in standards discussed earlier including the "date of expiry" provisions under Section 8.4.

13. The Committee will change the opening paragraph to the Annex to show that the provisions of the Annex are mandatory.

**General Meeting Summary**

At each session, the Technical Advisor provided background materials and a draft proposed rewritten product standard. The draft was discussed line by line and committee decisions recorded. For the standards discussed on March 17 through March 21 the Technical Advisor was able to prepare draft proposals based on the discussions held previously. For the standards discussed on March 24 and March 25, the Committee decided to record their decisions and produce a second draft themselves.

During the meeting on March 24, the Committee stated that they intend to hold further meetings to discuss all of the drafts and depending on the results of those meetings, possibly produce another draft. At that meeting the Technical Advisor provided the rewritten proposed drafts of the 4 standards discussed up to that date.

The Technical advisor commented during the March 24 meeting that there were some themes within the 4 redrafted proposed documents that he wished to point out and provide comments on. They were as follows:

1. The Committee should reconsider the establishment of the provisions of the Annexes as mandatory. They may wish to review each Annex line by line to question whether the item is essential or not and during the process of review consider whether they can justify their

position under the SPS and TBT Agreements. The Technical Advisor strongly advised against across the board adoption of the Annex provisions as mandatory. The Committee was shown on the redrafted proposed standards that the language put forth by the Technical Advisor in the initial draft proposed standards is included in the redrafts as a foot note.

2. That the Committee reconsider the establishment of a tolerance of 10 mg. Histamine per 100 grams of fish meat in the standards. It was pointed out that the Codex standards use a level of 20 mg./100 gm. as a safety level and 10 mg./100 gm. as a decomposition indicator. It was pointed out that the appropriate level to use for their product standards is laid out in the Codex standard.

3. The Technical Advisor strongly advised against allowing whole intact fish of all sizes to be smoked. It was explained that the Committee has been basing a need for expiration dating of products on a belief that storage and transport conditions in Egypt make it necessary to prescribe shelf life of products. It was emphasized that the placement of whole intact smoked fish into that or other country systems presents a potential lethal hazard. The Committee was informed of the possible toxin formation in the product and advised that such a product is considered too hazardous to market in the U.S.

A copy of the January 1998 edition of the U.S. Food and Drug Administration Fish and Fishery Products Hazards and Controls Guide was presented to the Committee by the Technical Advisor.

The Committee had previously made a photocopy of the Technical Advisor's Seafood Hazard Analysis and Critical Control Point training curriculum and course manual being used in the United States.

## 5.0 CONCLUSIONS AND RECOMMENDATIONS

**Substantial Progress Made In Some Areas**

Substantial progress in food standards review was achieved in some areas. Based on the work initiated in the October 1997 EOS Standards review project, and on comments received from interested parties on those Standards, final consensus was reached by the EOS Technical Committee (although with some important reservations expressed by the Technical Advisors – see above discussion and comments below) on several standards including those for milk powder, processed cheese food, hard cheese, fruit juices, tomato products, jams/jellies, marmalades, and dry pulses. Additionally, successful initial review was undertaken on various seafood products including canned salmon, canned tuna, smoked fish, frozen shrimp, frozen fish fillets and packaged anchovies. Work on additional standards was also carried out as indicated in Section 4 above and in the revised EOS Standards presented in Appendix 3.

**Operating Policies Continue, However, To Hinder Progress**

The 1996 study of Egypt's quality control system [*Research Study of the Quality Control System in Egypt*- see footnote 1] noted that Egypt utilized its product standards system, including those involving food products, for multiple purposes.

Based on the findings of the 1996 study and on additional observations made during both the 1997 EOS Standards review and this March 1998 review, it appears that, for the food sector, in addition to ensuring basic product safety through the use of such provisions as pesticide residue tolerances, good manufacturing practices, permitted uses of food additives, and specifying essential composition elements, EOS Standards appear to be used for several additional purposes, including the following.

- To carry out national health policy.

- To help ensure consumer protection rather than relying on comprehensive fraud and product labeling laws and on consumer education programs.

- To assist in ensuring product safety rather than addressing certain infrastructure issues that should be in place to prevent unsafe or spoiled product. Such issues include systems to provide proper temperature control during distribution, transport and retail sale, sanitary transport, and provisions for sanitary control at wholesale and retail establishments.

Additional observations made during this and previous standards project include the following.

- While standards are often needed for a variety of reasons, there appears to be a strong need within the Egyptian regulatory system to have and maintain a standard for each and every product. Often, a regulatory systems approach that controls processes rather than specific products may be a better approach than the widespread use of product standards.

- The maintenance by Egypt of multiple regulatory inspection and control systems for a product rather than to vest the responsibility for a single product type within a single competent authority.

- The differential application of standards to import vs. domestic product. For example, the frozen meat standard appears to apply solely to import product and ignores similar meat products produced domestically.

- The tendency to establish provisions within standards based on weak or incomplete scientific information.

These are important domestic policy areas that ultimately impact on trade and economic policy by setting up comprehensive food product standards that over-regulate products. The end result is

increased product cost, lesser product variety for consumers, and importantly, a real potential for a lesser level of food safety since resources are devoted to non-essential quality elements.

While this project, and its predecessor carried out in October 1997 have made real and substantial progress in updating existing EOS food standards and in removing some unnecessary quality elements, it is still clear that the operating philosophies noted in the 1996 study still severely limit the success in achieving revised standards that meet international norms and that are compatible with Egypt's obligations under the SPS and TBT Agreements. EOS Technical Committees do not appear, in most cases, to have made a truly meaningful commitment to reform the standards setting process, removing non-essential quality elements from the standards. Indeed, some members of this technical team noted that perhaps the only solution to the standards issues existing in Egypt is resolution through WTO mechanisms. This appears to be particularly true for product areas where no Codex Alimentarius standards exist (e.g., meat and coffee).

Examples of the difficulties associated with these operating policies observed during this project include the following.

- Issue: The requirement for limiting fat levels for frozen carcass and primal cut meat products is related to the prevention of cholesterol related health problems for Egyptians.

  This is using Egyptian Standards to implement national health policy. If such a policy is to survive a TBT challenge, then Egypt must be able to scientifically demonstrate that its higher level of health protection (i.e., specific fat levels that are not maintained by other countries) is justified by a cholesterol related health issue that is unique to its population (as opposed to the populations of other countries).

- Issue: The requirement for limiting fat levels in carcass and primal cut meat products to prevent economic cheat of the consumer.

  This is using Egyptian Standards in lieu of sufficiently strong fraud laws to prosecute offending sellers. Additionally, this is using Egyptian Standards in lieu of appropriate consumer education programs to fully educate and inform consumers as to what is and is not visibly acceptable fat levels in meat.

- Issue: The requirement for limiting fat levels in meat products in order to prevent adverse consumer health effects due to excessive pesticide residues, rancid fat and microbial spoilage and/or illness.

  This is inappropriately using Egyptian Standards in multiple ways. Pesticide residue Maximum Residue Limits (MRLs) are already set by EOS. These limits should be the mechanism of protection to ensure against excessive pesticide residues, not fat limits; if the MRL's are inadequate, they, not the fat levels, should be modified. Fat rancidity and microbial issues are issues relating to temperature control and (for microbiology) to product handling and sanitation. These are more appropriately handled by adequate

inspection programs, educational programs, and improving the distribution and retail infrastructure.

- Issue: The requirement for color control in roasted coffee beans to prevent cancer.

  This appears to be an example of establishing a provision on weak or inadequate scientific information. While coffee roasting does create carcinogenic compounds, the issue is not the simple existence of these compounds in coffee. Rather it the concentration of these compounds in extracts of roasted coffee and the dietary intake or exposure to the compounds by the population over a lifetime of consumption that is important. What is needed prior to setting a standard on color in coffee is the documentation through an adequate risk assessment that levels of certain carcinogenic compounds in coffee consumed by Egyptians are sufficiently high to create a substantial risk of cancer.

- Issue: Making the voluntary annexes of dairy, seafood and other food product standards mandatory.

  The current approach employed by the Codex Alimentarius is to place into an annex of a commodity standard those elements that are outside the scope of the SPS and TBT Agreements. The provisions of these Annexes are those elements of a standard that are more properly commercial items to be determined between buyer and seller. The draft EOS Standards developed in this and the October 1997 projects utilized this current Codex approach to standards development. By making the provisions of the annexes mandatory (or by moving certain provisions back into the main body of the Standard, which occurred with some standards, including dairy products and tomato products) , Egypt will effectively have made little progress in its standards revision process; essentially all that will have been accomplished will be some updating as to technical provisions for a product and the reformatting of the Standard. This situation appears to reflect the strong standards mindset of Egypt.

  One specific example arises from the review of EOS Standards for dairy products. In the standard for milk powder, the Technical Adviser recommended that the specifications for dispersability in water, color, odor and flavor were not essential to the identity of milk powder and should be transferred to the advisory Annex. Instead the EOS Milk and Milk Products Committee decided to retain dispersability, color, odor and flavor in the standard, and in addition to return the requirements for solubility and acidity to the standard from the Annex. It was argued that these specifications were either essential to Egyptian manufacturers (e.g. dispersability) or were essential to the quality of the product (e.g. acidity).

## Next Steps

Recognizing that: 1) there are clearly needs of developing countries such as Egypt that require incorporation of certain provisions in product standards that might not occur in either Codex Standards or standards maintained by a developed country; and, 2) the work of this project provides Standards that are in still in the draft stage and subject to further revision by EOS, the Technical Advisors are still concerned that the policies used by Egypt in establishing food product standards do not adequately permit the reconstruction of many Standards in a meaningful manner.

Recommendations

1. Until policy issues, such as those noted above, relating to how standards are to be used in Egypt are clarified at the top Ministerial level, it is the recommendation of this team of Technical Advisors that it would not be productive to carry out further review of EOS Standards. Without this guidance, the team believes that the operating philosophy of the EOS Technical Committee members will make progress difficult to achieve. In this regard, it is important to keep in mind the provisions of the SPS and TBT Agreements and the implications of Egypt's obligations as a signatory to the GATT Uruguay Round Trade Agreements. The issue is not necessary one of completely changing policy (e.g., use of standards to implement national health policy) but rather one of deciding whether such policies can, in their present form, be compatible if Egypt's responsibilities under the GATT. If they cannot, then change is necessary.

2. To implement Recommendation 1 the Technical Advisors recommend that a short (e.g., 2 day) high level conference be held to include the Ministers or their immediate Deputies, and appropriate program heads of the following agencies: Ministry of Industry (including EOS), Ministry of Health, Ministry of Trade and Supply (including the General Organization for Import and Export Control), and Ministry of Agriculture. The focus of this meeting should be on those policies important to standards setting as noted in this report. Preferably, this meeting should be held outside of Cairo in a setting that will be conducive to discussion and will restrict interruptions.

The Technical Advisors for this project believe it would also be helpful for Egypt to consider several activities that could help to establish some guidance and direction for future work on the revision of EOS Standards, and to enhance Egypt's scientific capabilities that will be needed to establish and revise Standards. In this regard, the following additional recommendations are made.

3. Consider the development of guiding principles for the operation of EOS Technical Committees. Such guidance might include, for example, the use of Codex Standards and related texts to the extent possible. The Principles should also include guidance on the relationship of national policy in such areas as health, safety, consumer protection and perhaps economic development to standards setting. The Australia New Zealand National Food Authority (ANZFA) has found such a set of Principles (see Appendix 6) to be helpful in developing food standards as part of their new joint Australia-New Zealand food regulatory control program. The ANZFA Principles include the following four points.

- Reduce the level of prescriptiveness of standards to facilitate innovation by allowing wider permission on the use of ingredients and additives, but with consideration of the possible increased need for consumer information.
- Develop standards which are easier to understand and make amendment more straightforward.
- Replace standards which regulate individual foods with standards that apply across all foods or a range of foods.
- Consider the possibility of industry codes of practice as an alternative to regulation.

The ANZFA program also promotes consistency between domestic and international food standards where these are at variance.

4. For controversial standards, obtain outside peer review from governments and other organizations on re-drafted standards. The Codex Secretariat should be among the peer reviewers. Such a peer review must include a true willingness by Egypt to consider comments received and to meaningfully (including scientifically where appropriate) justify the retention of provisions that are recommended for deletion or change. This review should be in addition to the normal WTO notification process.

5. Consider requesting the Codex Alimentarius Secretariat to develop new standards where such standards would be helpful to assist Egypt in arriving at Standards where consensus domestically has been difficult. Two such areas might be coffee and coffee products, and meat and meat products including frozen beef. The use of international expertise in a neutral environment is often helpful in resolving complex and difficult issues.

6. Prepare technical working briefs on specific areas of science and health related to standards that currently pose a difficulty in achieving success in revising standards. Two such work areas could be the relationship of meat fat to cholesterol levels in the Egyptian population and the potential for carcinogenic effects resulting from the coffee roasting process. Such briefs must be scientifically sound, complete, unbiased, and use internationally recognized principles of risk analysis.

7. Strengthen Egypt's capability in risk assessment including that related to dietary intake information and exposure assessment. It may be appropriate to also consider the area of relative risk with respect to EOS food standards.

In conclusion, while recognizing that the revised EOS Standards developed under this program are still draft standards subject to further revision, it is disappointing that, after two plus years of work, little progress has been made in correcting the deficiencies noted in the 1996 report (*Research Study of the Quality Control System in Egypt)* with respect to food product standards. Non-essential quality provisions still remain in the Standards at the recommendation of EOS Technical Committees. It would be appropriate to stop what we are doing, at least for the

moment, and reassess the situation with respect to the commitment of Egypt to carry out meaningful reform with respect to their food standards. The conference proposed in recommendation 2 above is, in this Technical Team's judgment, an important next step to determine the future course of work in this area.

Again, in the judgment of this Technical Team, it will be important for Egypt to show focus and commitment to regulatory reform with respect to the product standards area. The Technical Team is aware that several of Egypt's more important trading partners have expressed frustration at the non-tariff barriers to trade arising from Egypt's present policy of making mandatory those innumerable quality standards that are unrelated to scientifically sound health and safety concerns. As a signatory to the GATT and WTO agreements, Egypt has committed itself to eliminating unnecessary and unjustified barriers to trade. The WTO agreements authorize remedial action against member countries that are alleged not to have met their obligations or commitments, if this results in the nullification or impairment of the rights other member countries have under the agreements. While Egypt's trading partners have shown considerable patience in first allowing it to reform its current standards and quality control regime, there is general consensus that many of that regime's elements are inconsistent with the SPS and TBT agreements of the WTO. To avoid remedial action being taken against it, it is important for Egypt to show focus, commitment and movement toward regulatory reform in the product standards area. Otherwise, some of its trading partners are likely lose patience in the near future and to seek remediation under the WTO dispute settlement understanding.

# APPENDIX 1

# PROJECT SCOPE OF WORK

**APPENDIX 1**

# DEVELOPMENT ECONOMIC POLICY REFORM ANALYSIS "DEPRA" PROJECT

**A USAID/Egypt-Funded Project**
**Ministry of Economy Research and Information Sector and**
**Ministry of Trade and Supply**
**49 Nubar St., Bab-El-Luq, Cairo, Egypt**
**Tel. & Fax: 20-2-356-1040, Tel. 20-2-594-0031, 594-2364**

7 December 1997

ACTION MEMORANDUM

TO: Dr. Hafiz Shaltout, DEPRA COTR, USAID/EG/SP

FROM: C. Stuart Callison, Chief of Party, DEPRA Project

SUBJECT: Amendment to SOW for EOS Standards Review Study (TA)
DEPRA Task Order #13

REF: USAID/E Contract #263-C-00-96-00001-00

Attached is a copy of DEPRA Task Order #13 and the original scope of work (SOW) of the Standards Review Study/Technical Assistance for the Egyptian Organization for Standards (EOS), which was approved by the DEPRA COTR on September 10, 1997. This study has been successfully completed and resulted in the review of 9 food (some for multiple products) and 8 non-food standards and the draft revision of 12 food and 8 non-food standards, despite the fact that the expat study team was reduced from 4 to 3 at the last minute. A report summarizing this effort, dated October 2, 1997, was previously submitted to USAID as required under our contract.

The purpose of this memorandum is to suggest some amendments to the original SOW and request your approval of them:

1. Due to a last minute decision by the Food and Agricultural Organization (FAO) in Rome that they could not accept funding from a private firm for the travel, per diem and salary of their agricultural standards expert, Dr. Enrico Casadei, to participate as a member of the team, his travel had to be cancelled and the DEPRA Team had to proceed with only one food standards expert instead of two. The remaining food team member had time to assist with the review of only 9 food standards instead of the 14 that were planned. The following standards on the original list were not reviewed: frozen dough, tea, coffee, frozen poultry and rabbits, frozen liver, frozen kidney and hearts, and some tomato products.

We propose to bring the team leader and food standards expert, Dr. Mike Wehr, and one other food standards expert back for a two-week follow-up visit in March 1998 for the following activities:

1) to review the progress made by the EOS Technical Committees on completing the revision and approval of the standards already reviewed;

2) to help the appropriate EOS Technical Committees complete the review and revision of the standards listed above that were planned for review in September but which were not completed for the reasons stated; and

3) to help the appropriate EOS Technical Committees review additional standards suggested for review by Dr. Abdel Baset El-Sebai, President of EOS. By letter dated 1 Nov 1997 Dr. Abdel Baset suggested the following additional standards for review (see attachment 2):

a. canned tuna and bonio
b. smoked fish
c. canned salmon fish
d. containers polyethylene used for packaging foods
e. single-use rigid and semi-rigid plastic cups and containers for packing food products

This two-man team would continue the work as outlined in the original SOW as technical advisors to the appropriate EOS Technical Committees meeting in official session; and they would leave behind a written report of what they did, with copies of the additional draft standards they helped revise.

2. In view of USAID's reluctance to approve the necessary third country national waiver for Dr. Casadei's participation, we request you contact FAO officially on behalf of USAID to ask if it will fund his travel, per diem and salary for this exercise. Please request his services for 14 workdays in March 1998, 2 of which would be travel days and 12 for work days in Cairo. Dr. Casadei's supervisors have indicated in the past (to Nathan Associates) that they believe the provision of this technical assistance to EOS is important and that FAO might be willing to support it, but that it could take a month or two to obtain the necessary internal approvals. Attached is a copy of Dr. Casadei's CV. His telephone number is 39-6-522-54794 and his e-mail address is <Enrico.Casadei@fao.org>. The key person on the supervisory staff with whom we were in contact is Mr. John Lupien, whose e-mail address is <John.Lupien@fao.org>. I can probably get his telephone number from Nathan Associates, if needed.

Dr. Casadei is a nutrition officer with the FAO, with long experience as a chemical laboratory analyst and an FAO food standards officer, as will as with Codex Alimentarius, the organization of reference for international food standards under the GATT/WTO. He is thus uniquely qualified for this task. Having an FAO/Codex representative on the team and involved in this sensitive effort is very important, from both technical and political perspectives.

3. There are 20 unused days of LOE authorized in the original task order. I propose to use 16 of them to fund Mike Wehr's return, 2 days of which can be used for preliminary research in the U.S. on the new standards to be reviewed before coming to Cairo, 2 days are for travel, and 12 days for work in Egypt. If you approve this memorandum, a new COTR approval form to authorize the use of this LOE by Dr. Mike Wehr will be submitted for your approval.

4. If FAO will not fund Dr. Casadei's participation, I shall ask Nathan Associates to try once again to find a qualified American expert who is available and willing to accept this assignment with Dr. Wehr. While we believe FAO participation would be the most beneficial from the Egyptian standpoint, assuring them that the need for the reforms under discussion, and their precise nature, are not coming solely from an American point of view, having another American on the team would be better than just having Dr. Wehr back again by himself. In this event I shall prepare an amendment to Task Order 13 for your approval, authorizing the use of 10 additional days of short-term LOE for this study/TA, as well as a COTR approval form for the second team member.

I recommend your approval of the continuation of this study/TA as outlined above, to keep up the momentum and help assure the success of this important endeavor.

Approved ____(Signed)_____

Disapproved _____

Date ____12/10/97_____

Atch: 1) Callison-Nelson memo dtd. 1 Sep 97 with T.O. #13 & SOW
2) Ltr from Dr.Eng.A.B.El-Sebai, President, EOS, dtd 1 Nov 1997
3) CV of Dr. Enrico Casadei

cc: Anne Terio, Contracting Officer, USAID/PROC
John Varley, Director, DEPRA Project, Nathan Associates Inc.

Memo162

## APPENDIX 2

## EOS FOOD PRODUCT STANDARDS SELECTED FOR REVIEW

1. Processed Cheese
2. Hard Cheese
3. Yogurt
4. Sweetened Flavored Yogurt
5. Concentrated Milk (Evaporated & Condensed)
6. Sweetened Flavored Milk (UHT Process)
7. Milk Powder
8. Frozen Meat
9. Frozen Beef Burger
10. Frozen Sausage
11. Canned Sausage
12. Meat Balls
13. Minced Meat
14. Minced Meat Mixed with Soya Bean Protein
15. Frozen Poultry & Rabbits
16. Frozen Liver
17. Frozen Kidneys, Hearts, Spleen, Cerebrum, Pancreas & Tongue
18. Canned Salmon Fish
19. Smoked Fish
20. Tuna and Bonito
21. Frozen Fish
22. Frozen Shrimp
23. Packaged Anchovies
24. Preserved Tomato Products
25. Fruit Preserves
26. Dry Pulses
27. Coffee and its Products
28. Polyethylene Terephalate Packs
29. Disposable..Plastic Glasses & Packages

A.R.E.

ES 999 /1 - 1988
UDC 637.14

# EGYPTIAN STANDARDS
# 999 - 1988
# PROCESSED CHEESE
# PART I: PROCESSED CHEESE

EGYPTIAN ORGANIZATION FOR STANDARDIZATION & QUALITY CONTROL

Adopted on 24/8/1988

# PROCESSED CHEESE : PART I

## Introduction

These specifications annul and replace ES 999 - 1970. which have been previously registered and published in the official ES records on 22/8/1970. The new specifications are released in parts.

## 1- Scope

These standard specifications include the general cccditions and specifications concerning processed cheese and the mode of its inspection and testing.

## 2- Definition

It is the outcome of one or more kinds of processed cheeses. after their mincing and mixing with some emulsion and table sait.

## 3- General Conditions

3/1 Free of manufacturing defects that affect the consistency , colour, taste and odour
3/2 Free of residues
3/3 Preserving its distinguished physical properties
3/4 Its texture should be pasty and homogenous
3/5 It should be homogenous such that none of its components becomes separated
3/6 It should maintain its specific taste and odour
3/7 Its appearance should be shiny and free of any colour flaws
3/8 It should be of a smooth and soft texture
3/9 !t should be free of gaps
3/10 It should be free of arsenic materials
3/11 Preserving materials used should be in accordance with the arretes of the Ministry of Health and in ratios stated therein
3/12 It should be of different sizes and forms

## 4- Specifications

4/1 Water content not more than 50%
4/2 Ratio of fat content to solid substances in full-cream products should not be less than 45%, in 3l4 cream products 35 % and in l/2 cream products 25 %
4/3 Sodium chloride not more than 4% and allowed emulsion salts not more than 3%, provided that both do not exceed 6%
4/4 Ash not more than 8%
4/5 pH not less than 5.2
4/6 Arsenic not more than 0.25 part in a million
4/7 Lead not more than 0.3 part in a million
4/8 Mercury not more than 0.02 part in a million
4/9 Cadmium not more than 0.05 part in a million

4/10 Copper not more than 0.3 part in a million
4/11 **Zinc** not more than 20 parts i n a million
4/12 Free of standard colon bacteria
4/13 Free of affecting microbes and their poisons
4/14 Free of fungous growths and their poisons

## 5- Packages & Cards

Packages should be sea led and non reactiv e with contents. They shoul d comply with Presidential Decree No. 798/1957 concerning container s for packing foodstuffs, while raking into consideration the contents of Ministerial Arrete No. 354/1985 concerning the obligation of local industrial establishments that produce canned, frozen and packed foodstuffs to insert certain data on packages. Th e following data should be inserted in Arabic on each package:-

5/1 Name of Product. Addres s & Trade Mark
5/2 Name of Kind
5/3 Fat level to total solid substances
5/4 Net weight per unit
5/5 Components and Additives
5/6 Date of Production & Expiry or Validity Date directl y on the package, or on packages containing 40 gms or less
5/7 Conditions for transportation, storag e & exhibition directly on the packages, or on packages containing 40 gms or less
5/8 The term "Product of Egypt" in case of local production, an d Country of Origin in case of importation

## 6- Modes of Inspection & Testing

According to ES 15 5 - 1974, concerning standard physical and chemical modes of inspecting milk & dairy products.

## References

Codex Alimentarius Commission CX 5170 - 19th Session
Code of Principles Concerning Milk & Milk Products.

Kosikowski F.V. (1978). Cheese and fermented milk foods
2nd Ed. Cornell University Ithaca New York U.S.A.

Mayer A. 1973 Processed Cheese manufacture
Food Trade Press Ltd. London.

Authorities Participating in Setting these Standards

- National Research Center
  Misr Dairy Co.
- Central Laboratories - Ministry of Health
  Chemistry Authority
  Chemist Mahmoud Gomaa Ahmed in his personal capacity

Arab Republic of Egypt

The Egyptian Standard
No. 1007 - 1989

# HARDCHEESE

The Egyptian Organization for Standardization and Quality Control

# The Egyptian Standard of Hard Cheese

## Introduction

This standard supersedes and replaces the Standard No. 1007 / 1970 previously registered and published in the Official Register on 22/8/1970.

## -1- Scope

This standard is concerned with the general conditions and particular specifications of the following hard cheeses:

Cheddar Cheese - Swiss Cheese - Romi Cheese - Rass Cheese

## -2- Definitions

### 2-1 General Definition

It is the curd resulting from the curdling of the pasteurized milk with rennet enzyme or any other enzymes in presence of lactic acid either added or resulting from the activity of bacteria progenies and getting rid of a large part of the curdling water. Unpasteurized milk may be used.

### 2-2 Cheddar Cheese

It is the hard cheese resulting from another curd upon which cheddar process by the grader of the brand is effected which is characterized with firm texture, free from gaseous holes, and cracks, and with having the brand's flavour and taste.

### 2-3 Swiss Cheese (Emantal - Gruyier)

It is the flexible firm texture cheese having lustrous shiny eyes and holes either round or oval, resulting from the activity of pronionic acid bacteria, characterized with the ideal taste of the brand .

### 2-4 Romi Cheese (Cashcaval - Balqan)

It is the hard cheese having flexible texture resulting from the paste of the mill curd .

2-5 Rass Cheese (Rivalutiri)

It is the hard cheese having firm texture containing many small holes.

## -3- General Conditions

3-1 Conditions of Hard Cheese

3-1-1 In case of using unpasteurized milk in cheese manufacturing, it shouid not be offered for consumption before the elapse of 60 days from the production date.

3-1-2 Materials permitted to be used;

3-1-2-1 Ultra hydrogen oxide in a way that leaves no effect therefrom before manufacturing

3--1-2-2 Farms purified and clear of the bacteria producing lactic acid and propionic acid in case of Swiss cheese.

3-l-2-3 Calcium Chloride

3-1-2-3 Sodium Chloride

3-l-2-5 Curdling enzymes

3-l-2-6 Enzymes of animal or microbic origin to accelerate cooking

3-l-2-7 Enzymes resulting from pigs are prohibited to be used.

3-l-3 Natural taste flavours may be added

3-l-4 Natural colours which are hygienically permitted may be added

3-l-5 In case of using preservatives, they should be as per decrees of the Ministry of Health and within the percentages prescribed therein.

3-l-6 Cheese should maintain the taste and flavour distinguishing the brand

3-l-7 It should be free from bitterness and rancidness.

3-l-8 It should be free from any colour change.

3-l-9 It should be free from extraneous fats and starchy matters.

3-l-10 It should be free from swelling and extraordinary gaps.

3-l-11 Hard Cheese should be in me degree distinguishing the brand.
3-l-12 In case of painting cheese , this should be with hygienically permitted materials.

3-l-13 Hard cheese not indicating its fat percentage shall be considered as full cream cheese.

3-2 Cheddar Cheese conditions

3-2-1 It should be of compact close texture

3-2- Colour should be non - dark yellowish orange.

3-2-3 It should be free from stains.

3-2-4 Some small mechanic holes may be found.

3-2-5 It should be of cylindrical or cuboid shape.

3-2-6 It should have hard dry rind. If it is with no rind it should be covered with suitable tight sealed transparent cover , and may be packed with the wax permitted for foods.

3-3 Conditions of Swiss cheese

3-3-l It should be distinguished with the ideal taste of the fermentation of the mild sweetish hazelnut propionic acid.

3-3-2 It should maintain the natural properties distinguishing the brand

3-3-3 It should have firm elastic texture

It should have lustrous shiny eyes and holes which are round to oval of regular distribution.

3-3-5 Colour ranges from creamy to yellow.

3-3-6 It should have hard dry rind which may be packed with wax allowable to be used for foods. If it is without rind it shouid be covered with a suitable tight sealed transparent cover.

3-1 Conditions of Romi Cheese

3-1- It should have the bitter strong flavour distinguishing the cooked cheese.

3 4 2 Cheese texture should be of homogenous flakes compact and almost free from mechanical holes.

343 Texture should be flexible elastic in fresh cheese, fragile in cooked cheese.

3-4-4 Cheese colour should be yellowish creamy.

345 The rind should be solid hard dry and smooth. If it is without rind it should be covered with suitable transparent tight sealed cover.

3-5 Conditions of Rass cheese

3-5-l Cheese should be of strong citric light flavour with apparent taste of spice if added

3-5-2 Texture should be firm dry and fragile.

3-5-3 It should be of homogenous texture with many small holes in addition to irregular mechanical holes.

3-5-4 The rind should be smooth.

## 4 Specifications

4-1 Fat in the total dry matter should not be less than 45% in full cream cheese, 35% in 3/4 cream cheese and 25% in half cream cheese.

4-2 Humidity percentage should not exceed the following:

4-2-l Cheddar Cheese 39%

Swiss Cheese 40%

4-2-3 Romi Cheese 42% in case of fresh cheese and 38% in case of cooked cheese.

4-2-4 Rass Cheese 40%

4-3 The holes diameter in Swiss cheese ranges between 1/2 and 3 cm.

4-4 Mineral pollutants percentage should not exceed the following:

4-4-1 Mercury 0.02 mg/kg

4-4-2 **Arsenic** 0.25 mg/kg

4-4-3 Lead 0.3 mg/kg

4-4-4 Copper 0.3 mg/kg

4-4-5 Zinc 0.2 mg/kg

4-5 It should be free from microbes causing diseases and their poisons.

4-6 It should be free from ishercia culi bacteria.

4-7 It should be free from fungus growth and its poisons.

## -5- Packages and Data

5-1 Hard cheese ready for consumption shall be packed in closed packages which do not react with their contents. They should be in conformity with the Presidential Decree No. 798 / 1957 concerning containers.

5-2 With observing the Decree of the Minister of Industry No. 354 / 1985 concerning obligating the local industrial establishments producing canned, frozen and packed foodstuffs to abide by the data to be affixed on their packages. and what is provided for in the Standard No. 1546 “Data of labels of the packed foodstuffs” the following data should be written in clear block letters
in Arabic language. They may be written in other foreign languages in addition to Arabic

5-2-1 Name. address and trademark of the producer

5-2-2 Same and type of the brand

5-2-3 Fat percentage in the dry matter

5-2-4 Net weight

5-2-5 Statement with any additives

5-2-6 Production date and expiry date or validity period

5-2-7 Transport and storage conditions

5-2-8 The phrase "Made in Egypt" in case of local production. and country of origin in case of import.

## -6- Methods of Checking and Testing

Tests and examinations shall be undertaken as per the Standard No. 155 “Standard natural and chemical methods to test milk and dairy products”.

## -7- Technical Terms

Romi Cheese
Swiss Cheese
Cheddar Cheese
Homogeneous flakes
Cheddar process - step of cheddaring
Lustrous shiny eyes
Strong flavour (Sharp flavour)
Hard rind
Firm texture
Firm elastic
Compact close texture
Mild sweetish

References

1- Codex alimentarius commission CX5/70 - 19 th session
Code of Principles concernin g milk and milk products

2- Davis J.G. (1965). Cheese. Vol. I. Basic Technology
Churchill Livingstone. London.

3- Davis J.G. (1976). Cheese. Vol. III. Manufacturing methods
Churchill Livingstone. London.

4- International Dairy Federation. Bulletin. (1981). Document 141
IDF-Catalogue of Cheeses. (Brussels) FID/IDF.

5- Kosikowski F.V. (1978). Cheese and Fermented milk Foods 2 nd
Edn. Published by the author. Cornell University, Ithac a New York.

6- Scott R. (1981). Cheesemaking Practice.
Applied Science Publishers LTD. London.

Authorities participating in preparing this Standard:

(1) Central Laboratorie s - Ministry of Health

(2) Chemistry Department

(3) Misr Dairy Products

(4) The National Research Center

(5) Dairy Dept., Faculty of Agriculture, Cairo University

(6) Chemist Mahmoud G u m a' a Ahmed Ex-Director General of Chemistry Dept.

(7) Research Center for Animal Production, Ministry of Agriculture.

# THE EGYPTIAN ORGANIZATION FOR STANDARDIZATION AND QUALITY CONTROL

Law No. 2/ 1957 has provided for the establishment of an independent organization to be the National Competent Authority reference for ail affairs of standardization in the country, to undertake the setting out of standards for all the inputs of industry, such as ran materials, products, technical processes , instruments, machines , gauges and measuring units, and approved references for unified terms and symbols.

For the implementation of this law, the Presidential Decree No. 29/1957 was issued to decide the establishment of the Egyptian Organization for Standardization and Quality Control, with the competence of coordinating work among the departments, authorities and organizations operating in the fields of standardization and directing them to the following purposes:

1- Finding approved references for unified criteria.

2- Issuing standards for raw materials and products, unified classifications, technical terms, definitions and symbols.

3- Providing means and methods capable of realizing the conformity of raw materials and goods to the approved standards.

4- Facilitating the procurement of alternative and mutual pieces and to raise the standard of local production.

5- Coordinating standardizatio n actions in the Republic of Egypt with their international Counterparts.

The Organization shall be managed by a board of directors to be chaired by the concerned Under Secretary, includin g 23 members representing variou s authorities concerne d with standardization. quality control and collaboration.

The Organization ha s two standing committees , one for standards and the other for calibration. and both are concerned with working out and follow ing up the implementation of technical programmes in the framework of th e plan approved by the board of directors.

The Organization follows the system of fixing quality marks on goods and products conforming to the Egyptian Standards as a means of protecting consumer s and motivating producers to raise the standard of their production to the level of the Egyptian Standards, such system is implemented by the Executive Committee for Quality Mark, formed by a decision of the board of directors.

The quality mark consists of an ornamental shape containing the initials of the term “Egyptian Standard” in Arabic and the two English letters ES as an abbreviation of the two words “Egyptian Standard”.

**ARAB REPUBLIC OF EGYPT** **ES 1000 - 1990**

# EGYPTIAN STANDARDS

# 1000 - 1990

# YOGHURT

**Egyptian Organization for Standardization and Quality Control (EOSQC)**

# Yoghurt

## Introduction:

This standard cancels and replaces the Egyptian Standard ES 1000 - 1985 concerned with yoghurt.

## 1. Scope

This standard is concerned with yoghurt as well as its testing methods.

## 2. Definitions

It is the heat treated milk for a period not less than that required for pasteurization of milk, to which pure cultures of lactic acid bacteria are added to give the milk the characteristic flavour, appearance and texture of yoghurt.

## 3. General Requirements

3.1. The milk used for the production of yoghurt, will be either whole cow milk or whole buffalo milk or a mixture of both, standardized milk, recombined milk and reconstituted milk.
3.2. Similar kinds of milk used for the production of yoghurt, must satisfy physical and constitutional characteristics of these milk products.
3.3. The final product must be free of impurities.
3.4. Permitted texture stabilizers may be added.
3.5. The product is free of preservative or any other additives which are not sanitary permitted.
3.6. The product will be free of color, taste and odour defects and its texture will be consistent and free of gaseous holes.
3.7. The product must be kept in a refrigerator during handling.
3.8. Preparation and production of yoghurt will be done in the officially registered plants.

## 4. Specifications

4.1. In case of the yoghurt product from buffalo milk, the percent of fat will not be less than 5.5% and the percent of non-fatty solid materials will not be less than 8.75%.
4.2. In case of yoghurt produced from cow milk, standardized milk, recombined and reconstituted milk, the percent of fat will not be less than 3% and, 3.5% in case of mixed milk and, the percent of non-fatty solid materials will not be less than 8.5% for all.
4.3. In case of semi-skimmed yoghurt, the percent of fat will not be less than 1.5% and the percent of non-fatty solid materials will be mot less than 9%.
4.4. In case of skimmed yoghurt, the percent of non-fatty solids will not be less than 9.5%.
4.5. The percent of acidity in the product, calculated as lactic acid, will not exceed 1.5%.
4.6. Mycotoxins in the final product will be within the permitted limits.
4.7. The product will be free of pathogenic microbes and its harmful secretions.
4.8. Residual pesticides will not exceed the permitted limits defined by FOA.

4.9. The percent of radiation contamination within the permitted limits defined by the concerned authorities.

## 5. Packaging and Label

5.1. The product will be packed in well sealed packages.
5.2. Following the content of the Ministerial Decree no 354 for 1985, concerned with the label information for food products, the following information will be declared on the packages in Arabic language:
  5.2.1. The name and address of the factory or the producer, the trade mark and registration number.
  5.2.2. The kind of the used liquid milk.
  5.2.3. The net weight
  5.2.4. The percent of fat and non-fatty solid materials
  5.2.5. The date of production and shelf life.
  5.2.6. The additives and their percentages.

## 6. Testing Methods

Testing is carried out according to ES 155/1974 concerned with the physical and chemical methods for testing milk and milk products.

## 7. Technical Terms

Peroxidese
Incubation
Recombined Milk
Reconstituted Milk
Standardized Milk

## 8. References


- Basic, JLG and Kurmann, J.A (1978)
- Fermented Fresh Milk Products - Vol Yoghurt
- Technical Dairy Publishing House, Copenhagen, Denmark.


## Participants in the Developing of this Standard:

- Faculty of Agriculture - Cairo University
- Chemistry Department
- Department of Industrial Control
- National Research Center - Dairy Section
- The General Authority for Export - Import Control
- Faculty of Agriculture - El Azhar University
- Misr Company for Milk
- Research Institute for Animal Production
- Juhaina Company for Milk and Juices

**ARAB REPUBLIC OF EGYPT** **ES 1650 - 1991**

# EGYPTIAN STANDARD

# 1650 - 1991

# SWEETENED FLAVORED YOGHURT

**Egyptian Organization for Standardization and Quality Control (EOS)**

# Sweetened Flavored Yoghurt

## Introduction:

This standard cancels and replaces the Egyptian standard ES 1650/1988 concerned with sweetened flavored yoghurt.

## 1. Scope

This standard is concerned with general requirements and specifications for consistent or stirred sweetened flavored yoghurt.

## 2. Definition

It is the product of a consistent of stirred texture resulting from fermentation of natural or reconstituted milks from condensed or dried milks or their mixtures, this product is sweetened, heat treated and fermented by the addition of pure cultures of lactic acid bacteria, parts or juices or concentrates of natural fruits are added.

## 3. General Requirements

3.1. The raw materials used for the manufacture of the product will conform to the relevant standard of each.

3.2. The product will satisfy its natural characteristics with regard to the appearance, flavor (taste) and odour.

3.3. Its texture will be homogeneous and free from gaseous holes resulting from microbial contamination.

3.4. Permitted food additives such as flavors, odors and texture stabilizers may be added.

3.5. The used sweetening material will be sucrose.

3.6. Artificial colors and sweeteners are not permitted.

3.7. Permitted natural food coloring materials are permitted.

3.8. The packages will not be swallowed.

3.9. The packages of the final product will be kept (stored) at a temperature not exceeding $5^0$C.

3.10. The product will not be heat treated after being naturally fermented as a result of the addition of the starter.

3.11. The product will be manufactured in officially registered plants whose personnel are subjected to continuous health control.

## 4. Specifications

4.1. In case of using whole milk, the fat percentage, will not be less than 3% and the percentage of non-fatty milk solids will not be less than 8.25%.

4.2. In case of using semi-skimmed milk, the percentage of fat will not be less than 1.5% and the percentage of non-fatty milk solids will not be less than 9%.

4.3. In case of using skimmed milk, the percentage of non-fatty milk solids will not be less than 9.5%.

4.4. The percentage of sucrose, in the final product, will not be less than 5%.

4.5. The percentage of acidity, calculated as lactic acid, will not exceed 1.5%.

4.6. The percentage of benzoic or sorbic acid will not exceed 50 p.p.m.

4.7. The product will be free of pathogenic micro-organisms, microbes of yeast and mold and their excretions.

4.8. The product will be free of Coliform group bacteria.

4.9. Mycotoxins in the final products will be within the permitted limits.

4.10. Residual pesticides will be within the specified international limits issued by FAO as well as those mentioned in the relevant Egyptian Standards.

4.11. The level of radioactivity in the product will be within the limits proscribed by the concerned authorities.

## 5. Packages and Labeling

5.1. The product will be packed in tightly closed containers which conform to the Presidential Decree no 798/1957 concerned with containers used for packaging of food materials.

5.2. The content of the ES 1546, concerned with labeling of prepackaged food products, will be taken into consideration.

5.3. The following information will be written, in Arabic language, on the container, additional foreign language may be used:

5.3.1. Name and kind of the product
5.3.2. Name and trade mark of the producer
5.3.3. Fat percent
5.3.4. Net weight
5.3.5. Additives

5.3.6.Components (constituents)
5.3.7.Production date and shelf life or expiration date.
5.3.8.Produced in Egypt
5.3.9.Requirements for storage, transport and handling (if there is any).

## 6. Testing Methods

Testing is carried out according to ES 155 concerned with physical and chemical testing methods for milk and milk products.

## 7. Technical Terms

Sweetened flavored yoghurt
Fruit juices and concentrates
Stirrer

## 8. Reference


- Basic, J. L. J. and Kurmann, J. A. 1978
- Fermented fresh milk products Vol. 1- Yoghurt.
- Technical Dairy Publishing House, Copenhagen, Denmark.


## Participants:

National Research Center
Central Laboratories - Ministry of Health
Food Industries Chamber
Misr Company For Dairy
Faculty of Agriculture - Dairy Section - Cairo University
Chemistry Department
Institute of Animal Production Researches
Juhaina Company

**ARAB REPUBLIC OF EGYPT** **ES 1830 - 1990**

# EGYPTIAN STANDARD

# 1830 - 1990

# CONCENTRATED MILK
## (Evaporated and Condensed Milk)

**Egyptian Organization for Standardization**
**and Quality Control (EOS)**

# Evaporated and Condensed Milk

## 1. Scope

This Standard is concerned with general requirements and specifications for evaporated and sweetened condensed milk as well as their testing methods.

## 2. Definitions

***Evaporated Milk:*** It is the product resulting from concentrating raw or skimmed milk only by partially getting rid of water of the milk.

***Sweetened Condensed Milk:*** It is the product resulting from concentrating raw or skimmed milk by partially getting rid of water of the milk and, the addition of natural carbohydrate sugars.

## 3. General Requirements

3.1. If water is added to the product, a homogeneous liquid, of similar characteristics of raw milk will be produced.

3.2. The product will be free of pathogenic microbes and its toxins.

3.3. The product will be free of yeast and mold microbes and its toxins.

3.4. The evaporated milk will be sterilized.

3.5. The product will be free of sedimentation and precipitation.

3.6. The product will be free of cramelization.

3.7. The milk used will be either cow or buffalo milk.

## 4. Specifications

4.1. Evaporated milk
4.1.1. Evaporated whole milk
4.1.1.1. The percentage of the total milk solid materials will not be less than 25%.
4.1.1.2. The percentage of milk fat will not be less than 7.5%.
4.1.1.3. The percentage of protein will not be less than 7%.
4.1.1.4. The percentage of lactose will not exceed 10%.
4.1.1.5. The percentage of ash will not exceed 1.5%.

4.1.2. Evaporated skimmed milk
4.1.2.1. The percentage of total milk solids will not be less than 20%.

4.1.2.2.The percentage of milk fat will not exceed 1%.
4.1.2.3.The percentage of protein will not be less than 9%.
4.1.2.4.The percentage of lactose will not exceed 15%.
4.1.2.5.The percentage of ash will not exceed 2.4%.

4.2.Sweetened Condensed Milk
4.2.1.Sweetened condensed whole milk
4.2.1.1.The percentage of total milk solids will not be less than 28%.
4.2.1.2.The percentage of milk fat will not be less than 8%.
4.2.1.3.The percentage of protein will not be less than 8%.
4.2.1.4.The percentage of lactose will not exceed 13%.
4.2.1.5.The percentage of ash will not exceed 1.8%.
4.2.1.6.The percentage natural carbohydrate sugars will not be less than 40%.
4.2.1.7.the total bacteria count will not exceed 500 cell/gm.
4.2.1.8.5 gm. of product will be free Coliform bacteria.

4.2.2.Sweetened Condensed Skimmed Milk
4.2.2.1.The percentage of total milk solids will not be less than 24%.
4.2.2.2.The percentage of milk fat will not exceed 1%.
4.2.2.3.The percentage of protein will not be less than 9%.
4.2.2.4.The percentage of lactose will not exceed 18%.
4.2.2.5.The percentage of ash will not exceed 2%.
4.2.2.6.The percentage of natural carbohydrate sugars will not be less than 40%.
4.2.2.7.The total bacteria count will not exceed 500 cell/gm.
4.2.2.8.5 gm. of the product will be free of Coliform bacteria.

4.3. The addition of one or more compound of the following stabilizers is permitted:
Sodium, potassium and calcium salts of the following acid:
Hydrochloric, Citric, Carbonic, Orthophosphoric and Polyphosphoric acid
(calculated as dehydrated salts) within the following limits:
- Not more than 2000 p.p.m, if one salt is added.
- Not more than 3000 p.p.m, if a mixture of salts is added.

4.4. The use of caraginan with the rate of 150 mgm./kg is permitted.

4.5. The residual pesticides in the product will be within the international permitted limits.

4.6. The final product will be free of antibiotics.

4.7. The product will be completely free of contamination with radio active materials (contamination means that the percent of the radio active materials in the product exceeds the limit prescribed by the concerned authorities).

## 5. Packing and Labeling

5.1. The concentrated milk will be packaged in suitable packages conforming to the Presidential Decree no. 798/1957 concerned with the containers used for packaging of food materials.

5.2. The content of the ministerial decree no. 354/1985, concerned with enforcing the local industrial enterprises, which manufacture canned, frozen and prepackaged food products, with the information to be declared on the containers of the food products and, the content of ES 1549, concerned with labeling of the prepackaged food products, will be taken into consideration. In addition, the following information will be clearly written in Arabic language on the container, additional foreign language may be used:

5.2.1. Name, address and trade mark of the producer.
5.2.2. Name and kind of the product.
5.2.3. Milk fat percentage and percentage of sucrose if added.
5.2.4. Kind of used sugars.
5.2.5. Added materials (additives).
5.2.6. Production and expiration date.
5.2.7. Net weight of the content of the container.
5.2.8. Instructions of use.
5.2.9. The phrase "Made in Egypt" in case of local production and country of origin in case of imported products.

## 6. Testing Methods

6.1. Preservation Strength Test

One part of the representative sample is kept for a period of one week at a temperature of 37 $^{0}$C and the other part of the sample will be kept for five days at a temperature of 25 $^{0}$C then the two parts will be examined to be sure that:

No swallow has occurred in the container, no clotting, no increase in the acidity or any change in taste or odour of the product.

6.2. Other tests will be carried out according to ES 155, physical and chemical testing methods for milk and milk products.

## 7. Technical Terms

- Evaporated whole milk.
- Evaporated skimmed milk.
- Sweetened condensed whole milk.
- Sweetened condensed skimmed milk.

**ARAB REPUBLIC OF EGYPT** **ES 1641 - 1993**

# EGYPTIAN STANDARD

# 1641 - 1993

# SWEETENED FLAVORED MILK
## (Sterilized by UHT Process)

**Egyptian Organization for Standardization**
**and Quality Control (EOS)**

# Sweetened Flavored Milk
## (Sterilized by UHT Process)

**Introduction:**

This standard cancels and replaces ES 1641/1987 concerned with sweetened flavored milk sterilized by UHT process.

**1. Scope**

This standard is concerned with general requirements and specifications for sweetened flavored milk sterilized by UHT process, as well as its testing methods.

**2. Definition**

It is the milk prepared from fresh natural milk or recombined or reconstituted milk, sweetened with sugar and to which parts or juices or concentrates of fruits are added and which is homogenized and sterilized by UHT process then packaged in sterilized containers.

**3. General Requirements**

3.1. Sterilization of milk will be carried out by one of the adopted UHT processes taking into consideration that the product will not be handled before its representative sample passes the test of preservation strength.

3.2. The product will be free of objectionable taste, odour and appearance defects.

3.3. The product will be free of foreign matters and impurities.

3.4. The product will be free of any artificial coloring or preserving material, it will also be free of acidity adjustable matters.

3.5. The product will be free of drugs and antibiotic traces.

3.6. Permitted food natural colors, flavors, odors and texture stabilizers may be added.

3.7. Only natural sugars are used for sweetening.

3.8. Artificial sweeteners are not permitted.

3.9. Raw materials (constituents) used for the manufacture of the product will conform to the relevant standard of each.

3.10. The product will be packaged under conditions which ensure and guarantee that it will not be contaminated.

3.11. The product will be manufactured in officially registered plants.

## 4. Specification

4.1. The percentage of sugar in the final product, calculated as converted sugar, will not be less than 5% by weight.

4.2. The percentage of acidity in the final product, calculated as lactic acid, will not exceed 0.25%.

4.3. The count of the microbial colonies in the prepackaged product, after being incubated for a period of one week at a temperature of 37 $^{0}$C , will not exceed 10cells/gm using the method of the standard count at a temperature of 37 $^{0}$C for 48 hours.

4.4. The product will be free of pathogenic microorganisms and its toxins.

4.5. Mycotoxins in the product will be within the permitted limits.

4.6. In case of whole milk product, the percentage of milk fat will not be less than 3% and the percentage of total solids will not be less than 15%.

4.7. In case of semi skimmed (partial skimmed) milk, the percent of milk fat will not be less than 1.5 and the percentage of total solids will not be less than 15%.

4.8. In case of skimmed milk the percentage of the total solids will not be less than 15%.

4.9. Residual pesticides will be within the specified international limits issued by FAO as well as those mentioned in the relevant Egyptian standards.

4.10. The level of radioactivity in the product will be within the limits prescribed by the concerned authorities.

## 5. Packages and Labeling

5.1. The packages will be conforming to the Presidential Decree no. 798 concerned with containers used for packaging of food materials provided that it will be sterilized impermeable to gasses and do not react with the milk constituents.

5.2. With the consideration of the content of ES 1546, concerned with the labeling of prepackaged food products, the following information will be written on the container in Arabic language, additional foreign language may be used:

5.2.1. Name, address, and trade mark of the producer.

5.2.2. Manufactured of fresh natural milk or reconstituted or recombined milk, this phrase will be written in particular letters.

5.2.3. Percentage of fat and solid materials.

5.2.4. The phrase, sweetened sterilized milk, the word sterilized will be written in particular and clear letters.

5.2.5. Net weight or volume of the content.

5.2.6. Constituents and additives particulars.
5.2.7. Production date and shelf life or expiration date.
5.2.8. The phrase "Made in Egypt" in case of local production.

## 6. Testing Methods

6.1. Preservation Strength Test
Representative samples of each patch will be taken and kept for a period of one week at a temperature of 37 $^{0}$C, then the samples will be tested to be sure that:
No swallow has occurred in the container, no clotting, no increase of the acidity or any change in taste or odour of the product.

6.2. Physical and chemical testing will be carried out according to ES 155 concerned with physical and chemical methods for testing of milk and milk products.

6.3. Microbiological testing will be carried out according the relevant Egyptian standard issued by EOS.

## 7. Technical Terms

- Reconstituted milk
- Recombined milk

## 8. References


- Wite, G. (1981)
"Experience and Common Problems in UHT Processing of Dairy Food"
Australian Society of Dairy Technology no. 26

- Lang, F. (1982)
Flavored Milk Around The World
Milk Industry Vol. 84


## Participants

- Laboratories of the Ministry of Health
- Chemistry Department
- National Research Center
- Faculty of Agriculture - Cairo University
- Faculty of Agriculture - El Azhar University
- Institute of Animal Production Researches
- Misr Company for Dairy Products
- Juhaina Company for Dairy Products

ARAB **REPUBLIC OF EGYPT**

ES :1648-1988
UDC 637.1

EGYPTIAN STANDARD

1648 - 1988

# MILK PCWDER

EGYPTIAN ORGANIZATION FOR **STANDARDIZATION** AND **QUALITY OONTROL**

# EGYPTIAN STANDARD SPECIFICATIONS FOR POWDER MILK

## PREAMBLE

These specifications cancel Articl e 3/3 of the Egyptian Standard Specifications 45 1/6/19 on " Milk and its products"

## 1. SCOPE

These Standard Specifications govern the general conditions and the specifications for powder milk.

## 2. DEFINITION

It is a product of dried fresh whole milk or dried non-fat or partially skimmed milk from which the water ha s been removed.

## 3. GENERAL CONDITIONS

3.1 The product mus t retain the flavour and odour specific to raw milk, free of any abnormal odour or flavour.

3.2 It must be free of any rancidity.

3.3 It must flow smoothly and be free of coagulations that may be difficult to disperse manually.

3.4 It must be free of preservatives an d colouring agents.

3.5 It must be free of any abnormal fats or sugar additives.

3.6 It must be free of any impurities.

3.7 When dispersed in water, it must give a homogeneous liquid with the characteristics of fresh milk.

3.8 Dispersibility must be complete in rapidly soluble powder milk

3.9 The product must test negative to phosphatase.

3.10 It must be free of antibiotic traces.

3.11 Pesticide traces must be within the limits approved by the Food and Agriculture Organization (FAO) of the United Nations.

3.12 The product must be completely free of radioactive pollutants. (By radioactive pollution we mea n the presence of a percentage of radioactive material greater than that which is specified by the competent authorities).

## 4. SPECIFICATIONS

4.1 Dried whole milk should contain:
4.1.1 At least 26% of fat
**4.1.2** Not more than 5% of moisture
4.1.3 At least 25% of protein.
4.1.4 Not more than 38% of lactose
4.1.5 Not more than 6% of ash

4.2 Partially skimmed dried milk should contain:
4.2.1 Between 1.5% and 26% of fat.
4.2.2 Not more than 5% of moisture
4.2.3 Between 25% and 36% of protein.
4.2.4 Between 38% and ??? % of lactose
4.2.5 Between 6% and 8% of ash.

4.3 Nonfat dried milk should contain
4.3.1 Not more than 1.5% of fat
4.3.2 Not more than 5% of moisture
4.3.3 At least 36% of protein
4.3.4 Not more than 53% of lactose
4.3.5 Not more than 8% of ash

4.4 Percentage of solubility should be at least 85% when drum driers are used and 98.5% when spray driers are used.

4.5 Percentage of acidity should not exceed 1.2% in dried whole milk, 1.4% in partially skimmed dried milk and 1.5% in nonfat dried milk.

1.6 It is permissible to add sodium, potassium and calciu m **salts** to the following acids as stabilizing agents:

Hydrochloric acid - citric aci d - carbonic aci d - arthophospheric aci d - poiyphosphoric acid at a percentage not exceedin g 5000/1000,000 as anhydrous materials.

4.7 It **is** permissible to use the following emulsifiers for rapidly soluble powder milk in the percentages indicated hereunder:
4.7.1 Monoglyceride and diglyceride: Not more than 2500/1000,000
4.7.2 Lecithin **: Not** more than 5000/l000,000

4.8 The product must be free of disease causing organisms and their toxins.

4.9 The total count of aerobic bacteria should not exceed, at 37° C/48 hours, 50000 ceils/gram.

4.10 The product must be totally free o f salmonella.

4.11 The total coun t of staphylococcus aureus and its toxins should not exceed 10/gram.

4.12 The total count of co liform ba cteria should not exceed 10/gram.

4.13 The product must be free o f fungal bacteria and its toxins.

## 5. PACKAGING AN D

5.1 Powder milk should be packed in suitable containers that conform to the Republican Decree No. 798/1957 concerning containers to be used in the packing of food products.

5.2 The provisions contained in Ministerial Decree No . 354/1985, concerning the obligation of local industrial establishments which produce canned, frozen and packed food products t o place the necessary information on the product, should also be taken into consideration as well as the provisions contained in the Egyptian Standard Specifications No. 1546 concerning information to be printed on labels of packed foods. The fo llowing information should be clearly printed on the label in Arabic. It may also be printed in a second language in addition to Arabic:

5.2.1 Producer's name, address and trademark.
5.2.2 Name and type of product.
5.23 Percentage of fat
5.2.4 Additives if any.
5.2.5 Production and expiry date.
5.2.6 Net weight of contents.
5.2.7 Method of dehydration.
5.2.8 Method of restoration to liquid form.
5.2.9 The phrase "Made in Egypt" for locally produced items and country of origin for imported products.

## 6. METHODS OF INSPECTIO N AND TESTING

Inspection an d testing methods should conform to the Egyptian Standard Specifications No.155 concerning the natural and chemical methods of testing milk and milk products as well as the Egyptian Standard Specifications concerning the bacteriological testing methods issued by the Organization in this respect.

**ARAB REPUBLIC OF EGYPT** **ES 1522-1991**

# EGYPTIAN STANDARD SPECIFICATIONS
# 1522 – 1991
# FROZEN MEAT

**EGYPTIAN ORGANISATION FOR STANDARDISATION AND QUALITY CONTROL**

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**Dated 22-8-93**

DATE OF APPROVAL: 20/11/1991

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Standard Specifications ES 1522-1991
Approval: 20/11/1991

# FROZEN MEAT

## INTRODUCTION

The present specifications abrogate and substitute for the Egyptian Standard Specifications 1522 of 1986.

## 1-FIELD

The present standard specifications include the general conditions and specifications concerning frozen meat, methods of examination and testing thereof.

## 2-DEFINITION

Frozen meat is the result of preservation of meat of healthy cow, buffalo, sheep, goat and camel animals by one of the speedy freezing methods, following slaughtering, processing and cleaning thereof and removing impurities;
Consisting of either A- frozen meat with bones
or B- boneless frozen meat.

## 3-GENERAL CONDITIONS

3/1 Animals – source of meat – should fulfill the following conditions:

3/1/1 they should come from regions having proved to be free from epidemics and radiations.

3/1/2 it should be established that they have not absolutely been treated with hormones.

3/1/3 it should be established that they have not been treated with antibiotics either through nutrition or treatment at least during the last month before slaughtering.

3/1/4 it should be established through veterinary examination before and after slaughtering that they are free from the joint and infectious diseases, their stages or secretions.

3/1/5 they should be slaughtered according to the Islamic Legislation with full-bleeding.

3/2 Frozen meat with bones should fulfill the following conditions:

3/2/1 they should be provided by animals fulfilling the conditions indicated in item 3/1.

3/2/2 the processing operation should be made directly after slaughtering and processing means removal of the skin layer, of the viscera, the head and extremities and then the cleaning operation shall be affected with clean running water.

3/2/3 Meat shall be in the form of large pieces not less than one quarter of large animal or complete small animal like sheep and goat.

3/2/4 Meat should be maintaining the pleural membrane and lymphatic glands without removal of any part which may obstruct its re-examination to be sure that it is safe and free from diseases, and to determine its age and kind.

3/2/5 The primary cooling operation shall be made at a temperature exceeding not 4°C for a period of not less than 24 hours after which the freezing operation shall start directly.

3/2/6 The freezing operation shall be effected at a maximum temperature of -40°C and shall continue until temperature of the internal tissues attains -18°C.

3/2/7 Storing shall be effected at a maximum temperature of – 18°C and the period of suitability for consumption shall not exceed 9 months for the cow, camel and buffalo meat and 6 months for the sheep and goat meat, as from date of slaughtering, and in case of small packs whose weight does not exceed 2 kgs their storing period shall not exceed 3 months at a maximum temperature of – 18°C.

3/2/8 Parts of meat intended for direct consumption: fat should not exceed 7%.
Parts of meat intended for processing: fat should not exceed 20%.

3/2/9 Parts of meat intended for processing only, like:
breast meat (BRISKET), abdominal meat (FLANK) in which fat exceed 7%: the period of suitability for consumption shall not exceed 6 months from date of slaughtering and storing temperature shall not exceed – 18°C.

3/2/10 In case of shipping or transport the means of transport shall be equipped with cold-stores whose temperature shall not exceed – 18°C.

3/2/11 The bags in which frozen meat is packed should not contain any frozen or unfrozen fluid separate (drip).

3/2/12 In case of using frozen meat for the production of any processed products in any form the period of suitability of the processed product for consumption may not exceed the balance of the period of suitability of the raw frozen meat for consumption.

3/3 Frozen boneless meat:
It should fulfill all the preceding conditions to the exclusion of item 3/2/3 and 3/2/4.

## 4-SPECIFICATIONS

4/1 Frozen meat should have a normal appearance and should be free from frost bites (freeze burns) and the frost bites intend to mean the change of colour of the surface of meat turning to dark brown due to the loss of humidity of the tissues by reason of being exposed to oxidation of meat dyes.

4/2 Frozen meat should have acceptable natural properties and should be free from any foreign odor.

4/3 Surface of the meat should be free from any viscous matter or any sign of spoilage or deterioration.

4/4 Free from pathological micro-organisms and parasites of various stages and secretions harming the consumer's health.

4/5 The rate of fluid separate (drip) should not exceed – after defrost – 1% in weight and the fluid separate intends to mean the contents of the animal cell due to the destruction of its walls during the defrost operation.

4/6 The volatile nitrogenous compounds should not exceed 20 mg/100 gm of the sample estimated as nitrogen.

4/7 The PH value of frozen meat ranges between 5.6 – 6.2

4/8 The rate of thiobarbituric acid shall not exceed 0.9 mg manold head/ 1 kg.

4/9 the total bacterial count shall not exceed one million cells/gm.

4/10 Meat should be free from Salmonella bacteria /25 gm sample

4/11 Free from Shigella bacteria / 25 gm sample

4/12 Free from fungal growths.

## 5-PACKING AND WRAPPING

5/1 Frozen meat with bones:
Each part should be wrapped inside a suitable tightly-closed cover safe to the consumer's health and preventing the meat pollution or occurrence of any undesirable changes during transport or storage.

5/2 Frozen boneless meat:
The parts shall be packed inside humidity-proof treated carton packs of homogenous weight and size. Pieces of meat may be packed inside polyethylene bags suitable for packing of foodstuffs before being put inside the carton cases and each carton case shall be tightly closed with iron straps.

5/3 Packs shall bear the following data in Arabic language and any other foreign language.

5/3/1 Manufacturer's name, address and trade mark.

5/3/2 Kind of meat.

5/3/3 Date of slaughtering and expiry date (Day, Month, Year)

5/3/4 Weight when packed.

5/3/5 The expression "Slaughtered according to the Islamic Legislation" shall be recorded on the carton cases and packs.

## 6-METHODS OF EXAMINATION AND TESTS

The methods of examination and tests shall be in accordance with the Egyptian standard specifications concerning the methods of examination and tests issued by the organization in this connection.

## 7-TECHNICAL TERMINOLOGY

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## References

Marvin L. Speck (1976)
Compendium of method for the microbiological examination of food

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International Commission of Microbio Logical
Specifications for foods "Micro-organisms in foods" ed2.

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Meat science second ed

GRACY. J. f; (1986)
Meat Hygien. Bailliere Tindall.
Eight ed England

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Dated 22-8-93

**Arab Republic of Egypt**

# EGYPTIAN STANDARD

# 1688 - 1991

# Frozen Beef Burger

**Amendment of ES Pertaining to**
**Frozen Beef Burger**

The present standards abrogate and replace ES no. 1688/1989.

## 1. Scope

The following standards cover the general conditions and specifications and special techniques of inspection and testing of frozen beef burger.

## 2. Definition

Frozen beef burger is the product prepared from minced meat to which spices, filling agents, natural improver and allowable preservants are either added or not. The product takes the shape of circular units of similar size and thickness, preserved in a frozen form.

## 3. General Conditions

3.1. The animal source of meat must fulfill the following conditions:
3.1.1. Originate from regions proven to be totally free from epidemics or radiation.
3.1.2. It must be proven that it was not treated with hormones.
3.1.3. It must be proven that it was not treated with antibiotics either during feeding of medical treatment at least one month before slaughtering.
3.1.4. Veterinary examination before and after slaughtering must prove that they were free from common and contagious diseases including any parasitic phases or secretions.
3.1.5. Slaughtered according to the requirements of the Islamic shari'ah (laws), ensuring, particularly, full bleeding.
3.1.6. Must be taken from the following animals: cows, buffalos, sheep, goats or camels.

3.2. Meat used in preparing this product must fulfill the following conditions:
3.2.1. Taken from animals fulfilling conditions stipulated in 3.1. above.
3.2.2. Free from fungal growth.
3.2.3. Free from signs of spoilage or deterioration.
3.2.4. Free from bad or abnormal odor.
3.2.5. Free from dirt and foreign substances.
3.2.6. Free from cartilage, bones, joints, apparent blood vessels and agglomerates.
3.2.7. Pesticidal residues should be within the internationally acceptable limits defined by the FAO and the Egyptian standards issued by the EOS in this regard.
3.2.8. If frozen, its validity must not exceed half of the period of its validity for human consumption.
3.2.9. Free from head, nose, ear, lip meat, mucous membrane, reproductive system parts, lungs, esophagus, stomach intestines, bladder and hair.

3.3. Product ingredients and additives must fulfill the following conditions:
3.3.1. Free from artificial colors.
3.3.2. Free from artificial flavors and aromatics.
3.3.3. All other inputs to processing must conform with the special standards relating to each.
3.4. The final product must fulfill the following conditions:
3.4.1. Composed of a mixture conforming with the requirements stipulated in 3.3. above.

3.4.2. Maintaining its characteristics flavor and aroma (without any alien flavor or aroma).
3.4.3. Percentage of radioactive measurement must be within limits define by the concerned authorities.
3.4.4. Free from pork meat or fats.
3.4.5. Validity must not exceed 3 months from the date of packing, provided that the validity of the final product must not overtake the Validity of the meat from which it was prepared.

## 4. Specifications

The final product must fulfill the following specifications:

| | Content | Maximum | Minimum |
|---|---|---|---|
| 4.1. | Humidity | 60 % | |
| 4.2. | Red meat | | 60 % |
| 4.3. | Fats | 20 % | |
| 4.4. | Meat protein | | 15 % |
| 4.5. | Filling agents | 20 % | |
| 4.6. | Carbohydrates in filling agents | 5 % | |
| 4.7. | Sodium Chloride (salt) | 2 % | |
| 4.8. | Phosphates | 0.5 % | |
| 4.9. | Ascorbic acid or its salts | 500 ppm | |
| 4.10. | Mono-Sodium Glutamates | 5000 ppm | |
| 4.11. | Sorbic acid or one of its salts | 500 ppm | |
| 4.12. | Total count of aerobic bacteria | $10^5$ | |
| 4.13. | Total count of aerobic bacteria | $10^2$ | |
| 4.14. | Total count of colon bacteria | $10^3$ | |
| 4.15. | Total count of streptococci (Golden cluster bacteria) | $10^2$ | |
| 4.16 | Salmonella | none | |
| 4.17 | Shigella | none | |

## 5. Packing and Labeling

5.1. The product must be packed in suitable packages that preserve its characteristics and fulfill the packaging requirements stipulated in the Presidential Decree No. 798 of 1957 concerning packages of food stuff.

5.2. Without prejudice to ES 1546 concerning labels of packed (and canned) food stuff, the following information must be written Arabic and possibly in any other foreign language besides Arabic:

5.2.1. Producer's name, address and trade-mark.

5.2.2. Kind of meat used and its primary condition (fresh or frozen).

5.2.3. Data of other ingredients, arranged a descending order, with particular reference to the preserving agents within the set limits.

5.2.4. Production and expiry dates (Day/Month/year)

5.2.5. Net weight.

5.2.6. Information pertaining to handling.

5.2.7. The phrase "Made in Egypt" in case the product was produced locally and the country of origin in case it was imported.

## 6. Methods of Examination and Testing

Examination and testing shall be conducted in accordance with the Egyptian standards issued by EOS in this regard.

## 7. Technical Terminology

Frozen beef burger
Filling agent
Improver

## 8. References

ICMSF 1978
The International commission on Microbiological specification for foods.

Institutions that participated in laying down this ES.

- The National Research Center.
- Central Laboratories of the MOH.
- Faculty of Agriculture/Cairo University.
- Faculty of Agriculture/ Ain Shams University.
- Faculty of Veterinary Medicine/University of Banha.
- Faculty of Veterinary Medicine/Cairo University.

ARAB REPUBLIC OF EGYPT

E.S.: 1972-1991
U.D.C.: 637.523.1
664.8.037

# EGYPTIAN STANDARD
# 1972 - 1991
# FROZEN SAUSAGE

# FROZEN SAUSAGE
# ES: 1972 - 1991

## I. SCOPE

**This standard is concerned with general requirements, specifications and testing methods for frozen sausage.**

## 2. Definitions

**Frozen sausage is the product from mincing meat mixed with spices with - or without - filling agent or naturai approved and preservative, and packed in natural coats from thin intestine of cheep or artificial coats satisfying to health requirements, and preservative in freezing case.**

## 3. General Requirements

**3.1 The animal source of meats, from which the product is prepared shall be:**

**3.1.1 Free of irradiation and epidemic diseases.**
**3.1.2 Has not been treated with hormones.**
**3.1.3 Has not been treated with anti-biotics at least in the last month before slaughtering.**
**3.1.4 Examine before and after slaughtering to ensure that it's free of prevalence diseases and its separates.**
**3.1.5 Slaughter according to Islamic religion and completely bleeding.**
**3.1.6 Must be from these animals: cows, buffalo, cheep, goats and camels.**

**3.2 The meats from which the product is prepared shall be :**

**3.2.1 From animal sources comply requirements mentioned in item (3/l)**
**3.2.2 Free of fungi**
**3.2.3 Free of signs of spoilage and damage**
**3.2.4 Free of abnormal odours**
**3.2.5 Free of objectionable and strange matters**
**3.2.6 Free of cartilage, bones, connective tissues, arterioles and coagulated blood**
**3.2.7 Pesticide residues shall be within limits determined by F.A.0. or the relevant E.S.**
**3.2.8 In case of using frozen meat, its shelf-life must not exceed half of shelf-life must not exceed half of shelf -life for human consumption**

**3.3 The minced meat, from which the product is prepared shall be:**

**3.3.1 From meat satisfying requirements mentioned in item (3.2)**

**3.3.2 Free of tissues obtained from head, ear, lips, mucous membrane, reproductive system parts, udder, lungs, stomach, intestines, esophagus, and bladder**

**3.4 The mixed product shall be :**

**3.4.1 Free of artificial colours**

**3.4.2 Free of artificial flavours and odours**

**3.4.3 All ingredients used in production must comply with its concerned standard**

**3.5 The final product shall be :**

**3.5.1 From mixed satisfying requirements mentioned in item (3.4)**

**3.5.2 The natural properties keep safe**

**3.5.3 Shelf-life must not exceed 3 months from date of packing, not exceeding expiry date of the raw meat**

## 4- Specification

**The product shall have the following specifications :**

| Content | Maximum limit | Minimum limit |
|---|---|---|
| 4.1 Moisture | 60% | |
| 4.2 Fat | 30% | |
| 4.3 Lean meat | | 60% |
| 4.4 Total protein | | 15% |
| 4.5 Total ashes | 5% | |
| 4.6 Ashes insoluble in acid | 0.1% | |
| 4.7 Edible salt | 3% | |
| 4.8 Filling agents | 5% | |
| 4.9 Nitrate, nitrate salts | 125 mg/kg | |
| 4.10 Monosodium Glutamate | | |
| 4.11 Total volatile nitrogen | 20 mglkg | |
| 4.12 Thiobarbituric acid | 0.9 mg/kg | anoldhid/l0 mg.m |
| 4.13 Total count of aerobic bacteria | $10^6$ | |
| 4.14 Total count of non-aerobic spores bacteria | $10^2$ | |
| 4.15 Total count of Escherichia coli | $10^3$ | |
| 4.16 Total count of clostridium perfringens | $10^3$ | |
| 4.17 Salmonella | free | |
| 4.18 Shegella | free | |

## 5- Packaging and Labeling

5.1 The product shall be packed in suitable containers conform to the presidential decree number 79811957 concerning the containers used of food products.

5.2 Consideration should be given to the Ministerial decree number 354/1985 enforcement of local industrial companies, which produce canned, frozen and packaged foods, with the information to be declared food products packages as well as to E.S. 1546 concerning "Labeling of prepackaged food products".

All the following particulars should be clearly written:
-In Arabic language with the language of the country of origin in case of imported product:

5.2.1 Name, address and trade mark of the producer
5.2.2 Name of the product
5.2.3 List of ingredients:
- -lean meat
- - kind of meat
- - spices
- - preservatives (within permitted limits)
- - plant ingredients
- - natural flavours and colours- when used

5.2.4 Date of production and expiry date:
Day/month/year, it should be written:
Shelf-fife not exceed 3 months from production date
5.2.5 Weight when produced

## 6. Testing methods and Analysis

Testing and analysis are carded out according to the relevant E.S. concerning testing methods for meat and meat products.

## 7. Technical Terminologies

Frozen Sausage
Staphylococcus aurous
Salmonella
Volatile nitrogen basis

ARAB REPUBLIC OF EGYPT

E.S.: 1971-1991
U.D.C.: 637.523.7
664.933.2

# EGYPTIAN STANDARD
# 1971 - 1991
# CANNED SAUSAGE

# Amendment of E.S. Pertaining to
## Canned Sausage

## I. SCOPE

**This standard is concerned with general requirements and specifications for canned sausage.**

## 2. Definitions

**Canned sausage is the product from mincing meat with - or without - filling agent, natural approver and preservative which is packing in natural or artificial food membranes, cooked with or without smoking and canned after or before removing the membranes in suitable packaging media and processed by heat after sealing proposed to preserve.**

## 3. General Requirements

**3.1 The animal source of meats, from which the product is prepared shall be:**

**3.1.1 Free of irradiation and epidemic diseases.**
**3.1.2 Has not been treated with hormones.**
**3.1.3 Has not been treated with anti-biotics at least in the last month before slaughtering.**
**3.1.4 Examine before and after slaughtering to ensure that it's free of prevalence diseases and its separates.**
**3.1.5 Slaughter according to Islamic religion and completely bleeding.**
**3.1.6 Must be from these animals: cows, buffalo, cheep, goats and camels.**

**3.2 The meats from which the product is prepared shall be:**
**3.2.1 From animal sources comply requirements mentioned in item (3/l)**
**3.2.2 Free of signs of spoilage and damage**
**3.2.3 Free of abnormal odours**
**3.2.4 Free of filth and strange matters**
**3.2.5 Free of cartilage, bones, connective tissues, arterioles and coagulated blood and nerves**
**3.2.6 Pesticide residues shall be within limits determined by F.A.0. or the relevant E.S.**
**3.2.7 in case of using frozen meat, its shelf-life must not exceed half of shelf-life must not exceed half of shelf-life for human consumption**

**3.3 The minced meat, from which the product is prepared shall be:**
**3.3.1 Meat comply requirements mentioned in item (3.2)**

3.3.2 **Free of tissues obtained from head, ear, lips, mucous membrane, reproductive system parts, udder, lungs, stomach, intestines, esophagus, and bladder**

**3.4 The mixed product shall be:**

**3.4.1 Free of artificial coiours**

**3.4.2 Free of artificial flavours and odours**

**3.4.3 All ingredients used in production must comply with its concerned standard**

**3.4.4 Free of clostridium per fringes and clostridium botulinum**

**3.4.5 Pressure test should be negative**

# 4- Specification

**The product shall have the foliowing specifications** :

| Serial No. | Content | Maximum limit |
|---|---|---|
| 1 | Moisture | 60% |
| 2 | Fat | 20% |
| 3 | Total protein | |
| 4 | Filling agents | 20% |
| 6 | Edible Salt | 2% |
| 7 | Ascorbic acid or its salt | 500 mg/kg |
| 8 | Sulfuric acid or its salts | 450 mg/kg |
| 9 | Nitrate or nitrate salts | 125 ppm |
| 10 | Monosodium glutamate | 5000 ppm |
| 11 | Phosphate salts | 5,% |
| 12 | Arsenic | 1 ppm |
| 13 | Copper | 15 ppm |
| 14 | Lead | 5 ppm |
| 15 | Zinc | 20ppm |
| 16 | Tin | 1 ppm |
| 17 | Total volatile nitrogen | 20 mg/lOOg |
| 18 | Total count of aerobic bacteria | free |
| 19 | Total count of non-aerobic spors bacteria | 1 0 mg/lOOg |
| 20 | Total count of clostridium per-fringens | free |
| 21 | Total count of Escherichia coli | free |
| 22 | Salmonella | free |
| 23 | Shegalla | free |
| 24 | Spors of fungi and yeast | free |

## 5- Packaging and Labeling

5.1 **The product shall be packed in suitable containers conform to the presidential decree number 798/1957 concerning the containers used of food products.**

**5.2 According to the Ministerial decree number 354/1985 for enforce of local manufactories establishment that producing canned, frozen and packaged foods to write all information on its containers as well as to E.S. 1546, "Labeling of prepackaged food products." It should be written clear and steady in Arabic language--beside the Arabic language, they may be written in any other language.**

**5.2.1 Name, address and trademark of the producer**
**5.2.2 Name of the product**
**5.2.3 List of ingredients:**
- **lean meat**
- **kind of meat**
- **spices**
- **preservatives**
- **plant ingredients**
- **natural flavours and colours- when used**

**5.2.4 Date of production and expiry date:**
**Day/month/year**
**5.2.5 Weight when produced**

## 6. Testing methods and Analysis

**Testing and analysis are carried out according to the relevant E.S. concerning testing methods for meat and meat products.**

## 7. References

**-Pearson's (1981)**
**Chemical analysis of foods**

**-The international commission on microbiological specifications for foods**
**Academic Press Inc. 1980**
**- Fifth Avenue, New York, 10003**
**- Micro organisms in foods 1,2 IC USF**

**Arab Republic of Egypt**

**ES: 1973-1991**
**U.O.C. 637-525**

# Egyptian Standard
# 1973 – 1991
# Meat Balls

# Meat Balls
# ES: 1973 – 1991

## 1- Scope

This standard is concerned with general requirements, specifications and testing methods for balls meat from animal's meat.

## 2- Definitions

Meat balls is the product from mincing fresh or frozen meats after saving may be adding any filling and proved natural plants, and packed in suitable packs and preservative in freezing case.

## 3- General Requirements

**3.1 The animal's source of meats, from which the product is prepared shall be:**

3.1.1 Free of irradiation and epidemic diseases
3.1.2 Has not been treated with hormones
3.1.3 Has not been treated with anti-biotics at least in the last month before slaughtering
3.1.4 Examined before and after slaughtering to ensure that it's free of prevalence diseases and its separates
3.1.5 Slaughter according to Islamic religion and completely bleeding
3.1.6 Must be from these animals: cows, buffalo, cheep, goats and camels

**3.2 The meats from which the product is prepared shall be:**

3.2.1 From animal sources satisfying with requirements mentioned in item (3/1)
3.2.2 Free of pathogenic micro-organisms, or that cause spoilage or its excretions
3.2.3 Free of objectionable and abnormal odours
3.2.4 Free of signs of spoilage and damage
3.2.5 Free of filth and strange matters
3.2.6 Free of cartilage, bones, connective tissues, apparent arteries, coagulated blood
3.2.7 Pesticide residues shall be within limits determined by F.A.O or the relevant E.S.
3.2.8 In case of using frozen meat, its shelf-life must not exceed half of shelf- for human consumption

**3.3 The minced meat, from which the product is prepared shall be :**

3.3.1 From meat satisfying with requirements mentioned in item (3.2)

3.3.2 Free of tissues obtained from head, ear, lips, mucous membrane, reproductive system parts, lungs, esophagus, intestines and bladder

**3.4 The mixed product shall be:**

3.4.1 Free of artificial colours, flavours and odours

3.4.2 When add filling agent, it's allow add cereals like: rice, wheat, groat, potato, bread and others that's allow

3.4.3 It's allow to add approved natural plants as: onion, parsley and garlic

3.4.4 Contamination in the products must be according to the permitted limits set by the relevant authorities

3.4.5 Each ingredient used in preparing the product must comply with its concerned standard

## 4. Specification

**The product shall have the following specifications:**

| Serial | Content | Max. limit | Min. limit |
|---|---|---|---|
| **4.1** | **Moisture** | **60%** | |
| **4.2** | **Total ashes** | **5%** | |
| **4.3** | **Fat** | **25%** | |
| **4.4** | **Lean meat** | | **60%** |
| **4.5** | **Protein** | | **15%** |
| **4.6** | **Edible salt** | **3%** | |
| **4.7** | **Approved plants** | **10%** | |
| **4.8** | **Nitrate, nitrate salts** | **125 mg/kg** | |
| **4.9** | **Total count of aerobic bacteria** | **$10^6$** | |
| **4.10** | **Total filling agents** | **20%** | |
| **4.11** | **Total count of non-aerobic spors bacteria** | **$10^2$** | |
| **4.12** | **Total count of clostridium perfringens** | **$10^3$** | |
| **4.13** | **Salmonella** | **Free** | |
| **4.14** | **Shegella** | **Free** | |

## 5. Packaging and Labeling

5.1 The product shall be packed in suitable containers impenetrable moisture and To keep its characteristics, conform to the presidential decree number 798/1957 concerning the containers used of food products.

5.2 Consideration should be given to the Ministerial decree number 354/1985 enforcement of local industrial companies, which produce canned, frozen and packaged foods, with the information to be declared food products packages as well as to E.S. 1546 concerning "Labeling of prepackaged food products".

**All the following particulars should be clearly written:**

5.2.1 In Arabic language with the language of the country of origin in case of imported product

5.2.2 Labeling must be clear and steady

**5.2.3 Labeling encompass the following:**

- Name, address and trade mark of the producer
- Kind of used meat
- Date of production and expiry date: day/month/year, it should
- List of ingredients which comprises:
- lean meat, spices, preservatives, plants, natural flavours
- net weight and price of package, price of kg
- conditions of handling, mentioned "Freezing at -18° C. and no
- Sowing" (sic., "thawing"?)

## 6. Testing methods and Analysis

Testing and analysis are carried out according to the relevant E.S. concerning testing methods for meat and meat products.

## 7. Technical Terminology

- Micro-organisms in foods (1978)
2d-I-C.M.S.F. university of Toronto Press, Toronto Buffalo, London
- 1.C.M.S.F. (1978: International commission on micro biological specification for food

ARAB REPUBLIC OF EGYPT

# EGYPTIAN STANDARD
# 1694 - 1991
# PURE MINCED MEAT

# PURE MINCED MEAT

INTRODUCTION : THIS STANDARD CANCELS AND REPLACE **ES1694/1989**

## 1. SCOPE

**This standard is concerned with general requirements, specifications and testing methods for pure minced meat.**

## 2. Definitions

**Pure minced meat is the product from mincing fresh or frozen meat without adding any filling agent, preservative or additives and packed in appropriate packs for cool** and frozen.

## 3. General Requirements

**3.1 The animal source of meats, from which the product is prepared shall be:**

**3.1.1 Free of irradiation and epidemic diseases.**
**3.1.2 Has not been treated with hormones.**
**3.1.3 Has not been treated with anti-biotics either through feeding or medical treatment at least in the last month before slaughtering.**
**3.1.4 Examined before and after slaughtering to ensure that it's free of prevalence diseases and its separates.**
**3.1.5 Slaughtered according to Islamic religion and completely bleeding.**
**3.1.6 Must be from these animals: cows, buffalos, sheep, goats and camels.**

**3.2 The meats from which the product is prepared shall be :**

**3.2.1 From animal sources comply with requirements mentioned in item (3/1)**
**3.2.2 Free of signs of spoilage and damage**
**3.2.3 Free of objectionable and abnormal odours**
**3.2.4 Free of fifth and strange matters**
**3.2.5 Free of cartilage, bones, connective tissues, apparent arteries, coagulated blood and nerves**
**3.2.6 Pesticide residues shall be within limits determined by F.A.0. or the relevant E.S.**
**3.2.7 In case of using frozen meat, its shelf-life must not exceed half of shelf- for human consumption**

**3.3 The mixed meat shall be:**

**3.3.1 meat comply with requirements mentioned in item (3.2)**

**3.3.2 Free of tissues obtained from head, ear, lips, mucous membrane, reproductive system parts, udder, lungs, stomach, intestines, esophagus, and bladder**

**3.3.3 Free of lard and pork**

**3.3.1 Free of natural and artificial colours**

**3.3.5 Free of natural and artificial flavours and odours**

**3.3.6 Free of filling agent and preservatives**

**3.4 The final product shall be :**

**3.4.1 Keep its natural odours without any foreign odours**

**3.4.2 Products shall be free from radio active materials (contamination does not exceed the permitted limits set by the relevant authorities)**

**3.4.3 Shelf-life must not exceed 3 months from the date of packing, not exceeding expiry date of the raw meat**

# 4- Specification

**The product shall have the following specifications :**

| Serial | Content | Max.limit | Min.limit |
|---|---|---|---|
| 4.1 | Moisture | 70% | |
| 4.2 | Total ashes | 1.5% | |
| 4.3 | Fat | 20% | |
| 4.4 | Lean meat | | 80% |
| 4.5 | protein | | 18% |
| 4.6 | Edible salt | 1% | |
| 4.7 | Ascorbic acid or its salts | 500 mg/kg | |
| 4.8 | Monosodium Glutamate | 500 mg/kg | |
| 4.9 | Total volatile nitrogen | 20 mg/lOOg | |
| 4.10 | Thiobarbituric acid | 0.9 mg maloneldehide/ 10 mg | |
| 4.11 | Total count of aerobic bacteria | $10^6$ | |
| 4.12 | Total count of clostridium perfringens | $10^2$ | |
| 4.13 | Salmonella | free | |
| 4.14 | Shegella | free | |

## 5- Packaging and Labeling

**5.1 The product shall be packed in suitable containers impenetrable moisture and to keep its characteristics, conform to the presidential decree number 798/1957 concerning the containers used of food products.**

**5.2 Consideration should be given to the Ministerial decree number 354/1985 enforcement of local industrial companies, which produce canned, frozen and packaged foods, with the information to be declared food products packages as well as to E.S. 1546 concerning "Labeling of prepackaged food products."**

**- The information and dates on the labels should be written in Arabic language. Beside the Arabic language, they may be written in any other language, provided that, these information and dates should be engraved, raised lettering, printed or stamped with un-removable ink directly on the packs or on its label.**

**5.2.1 Name, address and trade mark of the producer**
**5.2.2 Name of the product (pure minced meat) and kind of meat**
**5.2.3 Net weight**
**5.2.4 Date of production and expiry date :**
**Day/month/year, it should**
**5.2.5 Conditions of handling**
**5.2.6 The phrase made in Egyptian case of local production and country of origin for imported products**

## 6. Testinq methods and Analysis

**Testing and analysis are carried out according to the relevant E.S. concerning testing methods for meat and meat products.**

## 7. Technical Terminologies

**Pure minced meat**
**Volatile nitrogen basis**

## 8. Technical Terminologies

- **ICMSF 1978**
  **International commission on micro-biological specification for food**
- **A.O.A.C. 1984**
  **Association of official analytical chemists**
- **Institutions that participated in laying down this ES**
  - **The National Research Center**
  - **Central laboratories of the MOH**
  - **Faculty of Agriculture/Cairo University**
  - **Faculty of Agriculture/Ain Shams University**
  - **Faculty of Veterinary Medicine/University of**
  - **Faculty of Veterinary Medicine/Cairo University**

**ARAB REPUBLIC OF EGYPT** **ES 2097 - 1992**

# EGYPTIAN STANDARDS

# 1641 - 1993

# MINCED MEAT MIXED WITH SOYA BEAN PROTEIN

**Egyptian Organization for Standardization and Quality Control (EOSQC)**

# Minced Meat Mixed With Soya Bean Protein

## 1. Scope

These standards are concerned with the general conditions, specifications and inspection and testing techniques relating to minced meat mixed with soya bean protein.

## 2. Definition

The minced meat mixed with soya bean protein is the product of mincing fresh or frozen meat and mixed with soya bean protein. Edible salt and spices could be added or not. The product is packed in containers suitable for refrigerating or freezing.

## 3. General Conditions

3.1.Animals from which meat is taken must fulfill the following:
3.1.1.Originate from regions free from epidemics and radiation.
3.1.2.Proven not to have been treated, at all, with hormones.
3.1.3.Proven not to have been treated with antibiotics at least one month before slaughtering.
3.1.4.Proven, through the before and after slaughtering veterinary examination, to have been free from the joint and infectious diseases, their stages or secretions.
3.1.5.They should be slaughtered according to the Islamic Legislation with full-bleeding.
3.1.6.Taken from the following animals: cows, buffaloes, sheep, goats, and camels

3.2.The meat must fulfill the following conditions:
3.2.1.Taken from animals, conforming with the general conditions stipulated in (3.1) above.
3.2.2.Free from all signs of deterioration and decomposition.
3.2.3.Free from bad or abnormal odour.
3.2.4.Free from dirt and alien substances.
3.2.5.Free from cartilage, bones, joints, apparent blood vessels, agglomerates.
3.2.6.Pesticide residues should be within the internationally acceptable limits defined by FAO and the Egyptian standards issued by EOS in this regard.
3.2.7.If frozen, its validity must not exceed half of the period of its validity for human consumption.

3.3.The project mix must fulfill the following:
3.3.1.Taken from meat conforming with the conditions stipulated in (3.2) above.
3.3.2.Free from head, nose, ear, lip meat, mucous membrane, reproductive system parts, lungs, esophagus, stomach, intestines, and bladder.
3.3.3.Free from pork meat or fats.
3.3.4.Free from natural or artificial colors.
3.3.5.Free from natural artificial flavors and aromatics.
3.3.6.Soya bean proteins should not exceed 10% of the product.
3.3.7.Fibers must not exceed 4% of the product's weight.

3.3.8. Free from filling or preservatives substances.

3.4. The final product must fulfill the following conditions:
3.4.1. Maintain its odour and without any alien aroma.
3.4.2. Percentage of radioactivity must be within the limits defined by the concerned authorities.
3.4.3. Validity must not exceed 3 months from the date of packing, provided that the validity of the final product must not overtake the validity of the meat from which it was prepared.

## 4. Specifications

| Item | Content | Maximum | Minimum |
|---|---|---|---|
| 4.1. | **Humidity** | **65%** | **--** |
| 4.2. | **Total dust** | **1.5%** | **--** |
| 4.3. | **Fats** | **20%** | **--** |
| 4.4. | **Red Meat** | **--** | **70%** |
| 4.5. | **Meat Protein** | **20%** | **--** |
| 4.6. | **Soya Bean Protein** | **10%** | **--** |
| 4.7. | **Edible Salt** | **1%** | **--** |
| 4.8. | **Ascorbic acid or one of its salts** | **500 mgm/kg** | **--** |
| 4.9. | **Monosodium Glutamates** | **5000 mgm/kg** | **--** |
| 4.10. | **Volatile Nitrogenous Compounds** | **20 mgm/100gm (sample)** | **--** |
| 4.11. | **Thiobarbituric acid** | **0.9 mgm manoldhead 110 mgm** | **--** |
| 4.12. | **Total count of aerobic bacteria** | **$10^6$** | **--** |
| 4.13. | **Total count of non-aerobic bacteria** | **$10^2$** | **--** |
| 4.14 | **Total count of streptococci (Golden Cluster Bacteria)** | **$10^2$** | **--** |
| 4.15. | **Salmonella** | **none** | |
| 4.16. | **Shigella** | **none** | |

## 5. Packing and labeling

5.1. The product must be packed in suitable packages that preserves its characteristics and fulfill the packaging requirements stipulated in the Presidential Decree no. 798 of 1957 concerning packages of foodstuffs.

5.2. To conform with the Ministerial Decree no. 354 of 1985 concerning obligating local manufacturing firms in the field of canned, frozen, and packed food stuffs, to write on the label all information in clear, non-erasable Arabic letters (it is allowed to write it in another foreign language) the following:
5.2.1. Producer's name, address and trade mark.
5.2.2. The product name (minced meat mixed with soya bean protein) and kind.
5.2.3. Net weight
5.2.4. Production and expired dates
5.2.5. Information pertaining to handling.

5.2.6. The phrase "Made in Egypt" in case of local production or the country of origin in the case of importation.

## 6. Methods of Examination and Testing

Examination and testing shall be conducted in accordance with the Egyptian standards issued by EOS in this regard.

## 7. Technical Terminology

Minced meat mixed with soya bean protein.

## 8. References

Institutions that participated in laying down this standard are:
The National Research Center
Central Laboratories of the Ministry of Health
Faculty of Agriculture - Ain Shams University
Faculty of Agriculture - Cairo University
Faculty of Veterinary Medicine - Cairo University
Faculty of Veterinary Medicine - Banha Branch - Zagazig University

**Arab Republic of Egypt**
**Ministry of Industry and Mineral Wealth**

ES: 1090-1996
UDC: 636-5

# Egyptian Standards

# *FROZEN POULTRY AND RABBITS*

# Egyptian Standards
# Concerning Frozen Poultry and Rabbits

## Introduction

The following standards abrogate and replace ES 1090/1986

## 1. Scope

The following standards focus on the general conditions and specifications pertaining to frozen poultry and rabbits.

## 2. Definition

Poultry and rabbits are the domestic birds and rabbits which are good for human consumption and fast frozen, having been cleaned properly and the internal organs removed.

## 3. Types

3.1. Frozen domestic birds
3.1.1. Poultry
3.1.1.1. Faltering poultry
Make and female chickens whose age ranges between 6-10 weeks and whose weight after preparation is not less than 900 gms, with soft flesh and skin and elastic sterna.
3.1.1.2. Grill poultry
They are fattening poultry whose weight is no less than 500 gms and is below 800 gms with soft flesh and skin and elastic sterna.

3.1.2. Turkey
Male and female birds whose weight after preparations for marketing exceeds 3 kgms.

3.1.3. Duck and geese
Male or female birds whose weight after preparation for marketing does not exceed 2 kgms.

3.1.4. Pigeons
Including chicks and growing pigeons produced from various sources of husbandry.

3.1.5. Quails
Including intensive and normal breeding of ordinary and commercial strains whose age ranges between 30-40 days.

3.2. Frozen rabbits
These include adult and fattened rabbits of both sexes and various strains, with unblemished flesh. Their age must be more than 8 weeks.

## 4. **General conditions**

The following general conditions must be fulfilled in frozen poultry and rabbits:

4.1. Their importation is banned from countries with epidemic and infectious diseases stipulated in the regulations of veterinary quarantine or from countries which do not slaughter according to Islamic Shari'ah or fail to fulfill the Egyptian Standards.

4.2. Parents and grand parents, which are no longer capable of producing eggs, are prohibited from being marketed either is full or in parts.

4.3. The source living units must be free from contagious diseases, or diseases communicable to human beings. They must have been veterinary checked before slaughtering in licensed slaughter-houses.

4.4. The source living units must have been free from any diseases or su perficial or inner changes resulting from any contaminants.

4.5. The source units must neither be feverish, having broken bones, wounds, bruises, abscesses, bleeding secretions or damages.

4.6. Slaughtering must be conducted according to the Islamic requirements and the proper technical operations that follow slaughtering and complete bleeding, including cleaning in running water that fulfill the hygienic conditions.

4.7. The slaughtered birds or rabbits must be totally free from feather or hair remnants or any defect resulting from errors in any step of slaughtering and preparation phases. Viscera, heads and legs must be removed (unless heads are referred to under special contractual provisions). The neck be separately wrapped and placed inside the abdominal cavity during packing.

4.8. In case of including liver, heart gizzard and kidneys (in case of rabbits), these organs must be clean and free from gall bladder. The gizzard's internal cortex must be removed. They must be wrapped and packed separately. In these case the Egyptian Standards concerning frozen livers shall apply.

4.9. Pre-cooling is conducted to ensure high quality product.

4.10. Freezing is conducted under $-40^0$C provided that temperature inside tissues reaches $-18^0$C within 4 to 6 hours.

4.11. Products must be stored under $-18^0$C and a relative humidity of no less than 90%. Validity duration, as of the date slaughtering to consumption, should not exceed 9 month. Imported poultry, whose half of its validity for consumption has elapsed, will not be permitted into Egypt.

4.12. Means of shipping and transport must have freezing units whose temperature should not exceed $-18^0$C. in case of domestic handling, normal freezing vehicles must be used.

## 5. Standards

5.1. Poultry and rabbits must be slaughtered by hand according to Islamic Shari'ah (Law) without resorting to electric shock or gas and left until bleeding is completed. Preparation, pre-cooling and fast-freezing should be conducted according to the state-of-the-art in the industry. Imported consignments must be accompanied with a certificate authenticated by the embassy or consulate of the ARE in the country of origin, proving that slaughtering was in accordance with Shari'ah and that the poultry, source of product, fulfill the Egyptian standards and are good for human consumption.

5.2. Re-freezing, re-packing and re-partitioning of frozen units, having been defrosted, are not allowed.

5.3. Poultry are packing intact or partitioned or boneless. Rabbits must be packed intact and not partitioned.
In case of partitioning turkeys, each part should not be less than 1 kgm whether with bones or boneless.

5.4. The surface must be dry and free from viscous substances, fungal or bacterial growth or any sign of deterioration, rancidity or bad odor resulting from contamination.

5.5. Frozen poultry and rabbits must be clean and totally free from defects resulting during slaughtering, preparation and processing. These must not contain viscera, lungs or trachea.

5.6. In poultry, legs must be separated at joints and wings must be left co mplete.

5.7. Drip, after defrosting, must not exceed 5%.

5.8. With regard to the content of Salmonella and food poisoning microbes or their toxins the Minister of Health's Decree No. 298 of 1980 and its subsequent amendments shall be applied.

5.9. The frozen units must have good appearance, maintaining their natural properties, with not foreign odor and rancidity. They must be free from preservatives, coloring agents or antibiotics.

5.10. The frozen units must have natural color and be free from freezing defects (burns).

5.11. Theobarbituric acid must not exceed 0.9 mgm/kg of a sample of well-minced poultry meat, estimated as mono-oldhide.

5.12. Total volatile nitrogenous compounds must not exceed 20 mgm/100gms, estimated as nitrogen.

5.13. Total count of aerobic bacteria must not exceed $10^5$ cells/gm of the skin layer of the frozen unit.

5.14. Residues of insecticides in the frozen unit must be within the internationally accepted limits.

5.15. Residues of radiation must be within the internationally accepted limits.

5.16. Pollutants and heavy metals must be within the internationally accepted limits.

5.17. Veterinary drugs, hormones and the like compounds must be within the internationally accepted limits.

## 6. **Packing and Labelling**

6.1. Bags used in packing in product must be hygienically approved and made of polyethylene or any other similar substance, impermeable to humidity, tightly-closed and leave no toxic residues on poultry or cause it to be polluted. Bags must, at least, have on transparent surface.

6.2. Packs must be stacked inside humidity-proof cases to protect them from any probable contamination during handling or storage and to maintain them in good shape. The frozen units must be of homogeneous (similar) size and weight.

6.3. The following data must clearly be printed on the outer side of each bag, using an indelible, non-harmful substance (in Arabic besides other foreign languages).

6.3.1. Weight of unit at packing.

6.3.2. Date of Slaughtering and expiry date.

6.3.3. Country of origin or "Product of Egypt" in case of domestic p roduction.

6.3.4. Name of abattoir and number of its license.
6.3.5. Name of company and its trade-mark
6.3.6. Type of product.
6.3.7. The phrase “Slaughtered according to Islamic Shari’ah.

6.4. The following data must be printed on the cases, using an indelible and non-harmful substance (in Arabic besides other languages):
6.4.1. Name of abattoir
6.4.2. Name of company and its trade mark
6.4.3. Type of product
6.4.4. Date of slaughtering and expire date
6.4.5. Number of units in each box
6.4.6. Country of origin or “produced in Egypt” in case the pr oduct is produced locally.
6.4.7. The phrase “Slaughtered according to Islamic Shari’ah”

## 7. **Examination and Testing**

Examination and testing shall be conducted in accordance with ES issued by EOS in this regard.

## 8. **Technical Terminologies**

Chicken
Turkeys
Ducks and Geese
Rabbits
Pigeon
Quail

## 9. **References**

1- Tressler and Evers (1957)
The Freezing Preservation of Foods
V. I. Freezing of fresh foods.
2- Bremner, A.S. 1987
Poultry Meat hygiene and Inspection
3- Frezier, W.C 1967
Food Microbiology
4- Lebanese Standards on Frozen Poultry
Participants in Amending these standards:
Faculty of Agriculture, Cairo University
Chemistry Authority
Central Labs of MOH
Institute of Nutrition
GOEIC
MOTS
Chamber of Commerce/Alex
Industrial Control Authority
Ministry of Agriculture (Animal Production Sector)

# Egyptian Standards
# Concerning Frozen Liver

## Introduction

The following standards allegorize and replace ES 1473 of 180 concerning frozen liver

## 1. Scope

The standards focus on general conditions, specifications and inspection and testing techniques relating to frozen liver.

## 2. Definition

Frozen liver is the liver taken from farm animal (with or without hearts) or from domestic birds (with or without hearts and gizzards after removing appendages and additional tissues, washing under proper hygienic conditions and packing for frozen storage.

## 3. General Conditions

3.1. Animal and birds, from which liver is taken, must fulfill the following conditions:
3.1.1. Originate from regions free from epidemics and radiation.
3.1.2. Proven not to have been treated, at all, with hormones.
3.1.3. Proven not to have been treated with antibiotics at least one month before slaughtering.
3.1.4. Proven, through the before and after slaughtering veterinary examination, to have been free from contagious diseases or any of their phases or secretions.
3.1.5. Slaughtered according to the Islamic Shari'ah (laws) .
3.1.6. Taken from the following animals: cows, buffaloes, sheep, goats, camels, rabbits and domestic birds.

3.2. Frozen liver (hearts and gizzards if any) must fulfill the following conditions:
3.2.1. Taken from animals, conforming with general conditions stipulated in 3.1. above.
3.2.2. Free from cysts and parasites.
3.2.3. Free from all signs of deterioration
3.2.4. Free from bad or abnormal odor
3.2.5. Free from dirt and alien substances
3.2.6. Free from appendages and additional tissues and removal of the gall bladder from the liver carefully.
3.2.7. Free from congestion, softness, hypertrophy, tumors, surface damages of any other undesirable changes.
3.2.8. Residues of insecticides must not exceed the internationally - accepted limits.
3.2.9. Fast frozen under no more than $-40^0$C for a period not exceeding 6 hours; and stored in a freezing unit under a temperature not exceeding $-20^0$C, relative humidity of no less than 90% for no more than 7 month as of the beginning of freezing .

3.3. Retail packs must fulfill the following conditions:
3.3.1. Conformity with the requirements stipulated in 3.2. above.

3.3.2. Maintaining normal appearance and properties that characterize the species of animal, such as color, odor and shape.

3.3.3. Fast frozen under a temperature not exceeding -40 $^0$C for no more than 6 hours; and stored in a freezing unit whose temperature must not exceed -20 $^0$C, with relative humidity of no less than 90% for a period not exceeding 2 months as of the date of packing, provide that the expire date of the final product should fall within the expire date of the liver from which it was prepared.

3.3.4. Frozen liver units must be free from freezer burns.

3.3.5. In case of packs where frozen liver is mixed with gizzards and hearts of domestic birds, the percent of liver must not be less than 50% of the contents and the internal cortex of the gizzards must have been removed.

## 4. **Standards**

| Serial No. | Item | Maximum | Minimum |
|---|---|---|---|
| 1 | Drip | 10% | |
| 2 | PH | 6.8 | 6.0 |
| 3 | Volatile Nitrogenous compounds | 30 mgm/100gm | |
| 4 | Total count of aerobic bacteria | $10^5$ | |
| 5 | Total count of spore non-aerobic bacteria | | |
| 6 | Total count of colon bacteria | $10^2$ | |
| 7 | Pathogenic E. Coli | -- | |
| 8 | Salmonella | -- | |
| 9 | Shegella | -- | |

## 5. **Packing**

5.1. When packing frozen liver the following conditions must be observed:

- Polyethylene bags must be impermeable to humidity, gases and vapors
- Bags must be packed inside wooden or carton cases resistant to humidity (treated against moisture).
- Units inside each case must be homogeneous in size and weight.

5.2. Requirements stipulated in Ministerial Decree No. 798/1957 concerning packs of food stuffs and Ministerial Decree No. 354/1985 - partially amended in 1989 - concerning committing domestic producers of canned and packed frozen food stuffs to label their products, must be observed. The following data must clearly written on packs and cases.

- Source (type)of liver.
- Producer's name, address and trademark.
- Date of freezing and expire date.
- Net weight of the frozen unit.
- Number of units (packs) in each case.
- Country of origin or (product of the ARE) in case of domestic production. In case livers of domestic birds are mixed with gizzards and hearts, clear reference must be written on the label.

## 6. Methods of Examination and Testing

Methods of examination and testing will be those issued by the EOS in this regard and applied to examination and testing of meat.

## 7. Technical Technologies

- Gall bladder
- Freezer burns
- liver
- Gizzard
- Drip
- Cysts
- Parasite
- Congestion

## 8. References


- Pearson, D. 1970
- The Chemical Analysis of Food
- 6 ed. J. A. A. Churchill. London
- The Freezing Preservation of Foods
- V.I Freezing of Fresh Foods by Tressler and Evers


Institutions that participated in laying down these standards.

- Faculty of Agriculture Ain Shams University
- Faculty of Veterinary Medicine - Cairo University
- Faculty of Veterinary Medicine - Banha University
- National Research Center (NRC)
- Central Laboratories of MOH
- Directorate of Veterinary Medicine - Giza
- Ministry of Supply (Public Sector Authority for food Commodities)
- General Organization for Exports and Imports Control (GOEIC)
- Faculty of Agriculture, Alexandria University
- Food Control Department, MOH.

# Egyptian Standard

## 2062 - 1991

## Frozen Kidneys, Hearts, Spleen, Cerebrum, Pancreas, and Tongue

## 1. Scope

The following standards focus on the general conditions and techniques of inspection and testing of frozen kidneys, hearts, spleen, cerebrum, pancreas and tongue.

## 2. Definition

Frozen kidneys, hearts, spleen, cerebrum, pancreas and tongue are organs taken from buffaloes, cows, sheep, goats and camels, having removed the additional tissues, washed the organs under proper hygienic conditions, packaged and fast-frozen immediately and stored under deep freezing conditions.

## 3. General Conditions

3.1. Animals, from which the above-cited organs are taken, must fulfill the following general conditions:
3.1.1. Originate from regions proven to be free from epidemics and radiation.
3.1.2. Proven, beyond any doubt, that they were not treated with hormones.
3.1.3. Proven not to have been treated with antibiotics at least during the last month that preceded slaughtering.
3.1.4. Proven through veterinary examination before and post-slaughtering, to have been free from contagious and common disease, their phases and secretion.
3.1.5. Slaughtered according to the Islamic Shari'ah requirements, including full bleeding.
3.1.6. Taken from the following animal species buffaloes, cows, sheep, goat and camels.

3.2. Frozen organs must fulfill the following conditions:
3.2.1. Originate from animals fulfilling conditions stipulated in 3.1 above.
3.2.2. Free from pathogens, spoiling micro organisms and/or their secretions.
3.2.3. Free from signs of deterioration or injury.
3.2.4. Free from bad or abnormal odors.
3.2.5 Free from dirt and alien substances.
3.2.6. Free from appendices and additional tissues.
3.2.7. Free from abnormal softness, blood congestion, dilation, absence of tumors, damages or any other (undesirable) changes.
3.2.8. Pesticidal residues must be within the internationally accepted limits issued by EOS in this connection.

3.3. The final product must fulfill the following conditions:
3.3.1. Conformity with the conditions stipulated in 3.2. above.
3.3.2. To be frozen in fast freezing units, the temperature must not exceed $-40^{0}$, freezing must continue until the temperature of the organ's internal tissues reaches $-18^{0}$ C within a period that does not exceed 6 hours.
3.3.3. To be stored in a freezing preservation unit the temperature of which must not exceed $-18^{0}$ C and a relative humidity of a no less than 90% for a period not exceeding 4 months for kidneys, hearts and tongue and 2 months for cerebrum, pancreas and spleen, from the date of slaughtering.
3.3.4. To be transported or shipped in preservation units, the temperature of which must not exceed $-18^{0}$ C.

## 4. Standards

4.1. It must not be exposed to melting and re-freezing during storage or transport.
4.2. It must be free from freezing burns.
4.3. It must be maintaining its normal characteristics of color, odor and appearance that characterize the animal species.
4.4. Aerobic bacteria's total count must not exceed $10^0$ cells/gm.
4.5. Spored non-aerobic bacteria's total count must not exceed $10^2$ cells/gm.
4.6. Colon bacteria's total count must not exceed $10^2$ cells/gm.
4.7. Free from pathogenic E. Coli.
4.8. Free from Salmonella Microbe.
4.9. Free from Shigella Microbe.

## 5. Packaging and Labeling

5.1. The product must be packed in suitable packages that conform with the presidential decree no. 798 of 1957 concerning packing food stuffs.
5.2. Without prejudice to the Ministerial decree no. 354 of 1985 whereby the domestic producers of canned, frozen or packed foods are obliged to label their packs, and (without prejudice) to ES 1456 titled "Information on packed food stuff labels" — the following information must be clearly and indelibly written on packs in Arabic, and may be likewise written in other foreign languages besides Arabic:
5.2.1. The producer's name, address and trademark
5.2.2. Type of product
5.2.3. Slaughtering and expiry dates (day, month, year)
5.2.4. Weight when packed.
5.2.5. Method of preservation.
5.2.6. Country of origin, or in case the product was locally produced, the phrase "Product of Egypt."

## 6. Methods of Examination and Testing

Inspection and testing will be conducted in accordance with the pertinent ES issued by EOS in this regard.

## 7. Technical Terminologies

Kidney
Heart
Spleen
Cerebrum
Pancreas
Tongue

## 8. References

- GRACY, J. F.
Meat Hygiene ─ Bailliere Tindall
Eighth ed., England

## 9. Participating Institutions

- Central Laboratories, MOH
- National Research Center (NRC)
- Faculty of Veterinary Medicine, University of Banha
- Faculty of agriculture, Cairo University
- The Institute of Nutrition
- General Department of Public Health and slaughter - houses (abattoirs), Directorate of veterinary Medicine, Cairo Governorate.

**ARAB REPUBLIC OF EGYPT** **ES 288 - 1996**
**MINISTRY OF INDUSTRY & MINERAL WEALTH**

# ES 1472 - 1995

# CANNED SALMON FISH

**Egyptian Organization for Standardization**
**and Quality Control (EOSQC)**

# Canned Salmon Fish

## Preamble

These standards abrogate and replace ES 1472 of 1980 concerning canned salmon fish.

## 1. Scope

These standards cover the general conditions and specifications of canned salmon fish and methods of inspection and testing thereof.

## 2. Definition

Canned salmon fish is the product of preserving the flesh of salmon fish having been prepared and packed, in a suitable medium, in tightly closed metal cans treated thermally for preservation purposes.

## 3. Species used in Canning

- Oncorhynchus nerka
- Oncorhynchus kisytel
- Oncorhynchus tschawytscha
- Oncorhynchus gorbuscha
- Oncorhynchus keta
- Oncorhynchus nasou
- Salmo solar

## 4. General Conditions

4.1. All raw materials (inputs) used in processing must conform with their respective standards.
4.2. The product must be made of unblemished fish, characterized by firm tissues and totally free from wounds, bruises, mucous substances and unacceptable odour.
4.3. Fish used must be decapitated, having removed the fins, tail and viscera. They must be washed carefully with clean water to remove impurities.
4.4. The product must be free from all alien substances and other factors that induce decomposition. It must maintain the characteristic colour, flavour and odour of the canned product.
4.5. The product must be free of blood spot and vessels and hard bones. Soft bones are permissible.
4.6. Fish units must be of the same species. They must be uniform in size and length and stacked regularly inside the tin.
4.7. The final product made of non-skinned varieties must be free from skin defects.

4.8. The media of packing must either an edible oil or saline solution. Salmon oil may be used as a media for packing, provided that it has proved good for human consumption. The media must have the natural colour and texture that characterize the type used.
4.9. The product may be prepared of fresh, frozen or smoked fish which must be good for human consumption.
4.10. Pressure inside the cans must be negative.
4.11. The product must be canned in any of the following form:
4.11.1. Regular Packing: corns sectional cuts of the fish aligned vertically inside the can.
4.11.2. Bone and Scale free Salmon: regular cuts of salmon fish, having the skin and backbone been removed.
4.11.3. Salmon Flakes: small pieces of salmon flesh.

## 5. Standards

5.1. The product's pH value shall not exceed 6.7
5.2. Edible salt shall not exceed 2%.
5.3. Total fatty substances in the product shall not be less than 15% by weight in case of packing in edible oil.
5.4. Volume of contents shall not be less than 95% of the can's water capacity.
5.5. Percent of the solution formed in the product shall not exceed 10% of net weight if and when oil is used as a media for packing.
5.6. Salmon meat's net weight shall not be less than 70% of the tin's weight stated on the label.
5.7. Fins, viscera, parts of head and scales shall not exceed 2% of the net weight.
5.8. Histamines shall not exceed 10mg/100 gm of the end product.
5.9. Total volatile nitrogenous alkaline should not exceed 40 mg/100 gm as nitrogen in the sample. This same percentage in raw fish (as intermediate raw material) should not exceed 20 mg/100 gm in the sample.
5.10. The product must be free from pathogenic bacteria and their toxins.
5.11. The product must be free from bacteria that produce hydrogen sulfate.
5.12. The product must be free from clostridium botulinum and its toxins.
5.13. Heavy metals in the product shall not exceed the following:
- Lead 1mg/kg
- Cadmium 0.1 mg/kg
- Mercury 0.5 mg/kg

5.14. Radiation should be within limits defined by the concerned authorities.
5.15. Pesticidal residues should be within the internationally-accepted limits issued by the FAO and the Egyptian standards issued by the EOSQC in this regard.

## 6. Packs and Labels

6.1. The product must be packed in tin cans internally coated with anti-rust material or in convenient packs to maintain flavour, colour and natural odour of the contents.
6.2. Packs must fulfill the requirements stipulated in the Presidential Decree No. 798 of 1957 and ES 153 regarding tins produced for packing foodstuffs.
6.3. Provisions of Ministerial Decree No. 354/1985 must be observed, with particular reference to labeling canned and frozen foods and similarly are the provisions of ES 1546 covering the information to be printed in Arabic in addition to the language of the country of origin in case of imported products.
6.3.1. Producer's name, address and trade mark.

6.3.2.6.3.2. Name of the variety and species of fish.
6.3.3.Net weight of the pack
6.3.4.Net weight of the canned fish meat.
6.3.5.List of the ingredients.
6.3.6.Media and shape of the packing process.
6.3.7.Number of production operation.
6.3.8.Expire and production dates.
6.3.9.The phrase "Made in Egypt" if the product is locally produced and the country of origin in case of importation.

## 7. Inspection and Testing

7.1.Inspection and testing shall be conducted according to the ES issued by the EOSQS concerning canned fish inspection and testing.
7.2.Micro-biological tests shall be conducted according to ES issued by EOSQS.

## 8. Technical Terminlogies

Clostridium Botulinum

## 9. References

1- Codex Standard No3 - 1981
Canned-pacific salmon
Codex alimentarius commiussion
Codex alimentarius commiussion
Cl 1993/29 - FFP

2- Egan, S Kirk, Sawyer 1981
Pearson's Chemical Analysis of food 8th edition
Churchill Livingston
Edinburgh London Melbourne and New York

**EGYPTIAN STANDARDS**
**ES 288 - 1996**

# SMOKED FISH

**Arab Republic of Egypt**
**Ministry of Industry and Mineral Wealth**
**Egyptian Organization for Standardization and Quality Control**

# Egyptian Standards
# Concerning Smoke Fish

## Preamble

These standards abrogate and replace ES 288 - 1991 concerning smoked fish.

## 1. Scope

The standards cover the general conditions and standards of smoked fish including methods of inspection and testing.

## 2. Definitions

Smoked fish are those prepared, salted and partially dried; and then exposed to smoke produced from incomplete burning of certain types of wood or wood flour at a limited space so that the smoke penetrates tissues of the flesh which ultimately acquires the colour, flavour and odour characterizing smoked fish. Smoking is done under cold, semi-hot and hot temperature.

## 3. General Conditions

3.1. The product must be produced either from fresh fish or previously frozen fish that are good for human consumption and fulfilling their respective standards.
3.2. Fish must have been fished at places proven to have been free from epidemics.
3.3. Fish must have been fished using legal techniques.
3.4. Fish used must be selected from among smokable varieties.
3.5. Fish used must be soft skinned or with bright scales.
3.6. The final product must be totally free from scales.
3.7. The product must be free from alien flavour or odour.
3.8. The product must have physical properties characterizing the variety.
3.9. The product must have a firm texture.
3.10. The product must conform with the type of fish referred to on the pack's label. It must be of homogenous size and length, be it complete (in toto) or viscera - removed or viccera - and - head removed or sliced.
3.11. No substance other than the natural dry wood or wood flour, characterized by the acceptable smell, shall be used in the process of smoking.
3.12. Smoking fluids resulting from wood smoke solution may be used at suitable dilution and with a methodology that gives the final product its characteristic colour, flavour and odour in a manner that does not affect neither the standard properties of the product nor the consumer's health.
3.13. It is not permissible to refreeze smoked fish after defrost on shelf.
3.14. Smoked fish must be produced by licensed plants that fulfill all the hygienic requirements for good production.

## 4. Standards

4.1.Percent of salt in the final product shall not exceed the following limits:
4.1.1.Cold Smoked Intact Fish: not exceeding 15% based on dry weight (8% of wet weight) and no less than 6% based on dry weight for incomplete fish salt shall not exceed 10% based on dry weight (5% of net weight) and shall not be less than 4.5% of dry weight (2.5% of wet weight).
4.1.2.Semi-Hot-Smoked Fish: not exceeding 10% based on dry weight (6% of wet weight) and not less than 6% based on dry weight (3% wet weight).
4.1.3.Hot-Smoked Fish: not exceeding 4% based on dry weight (2% of wet weight) and not less than 3% of dry weight (1.5% of wet weight) for both intact and incomplete fish (with viscera and/or head removed).
4.2.Tri-amine Nitrogen shall not exceed 10mg/100gm of fish flesh.
4.3.Ammonium Nitrogen shall not exceed 20mg/100gm of fish flesh.
4.4.Theobarbituric acid shall not exceed 4.5 malonalhyde /kg.
4.5.Radiation should be within limits defined by the concerned authorities.
4.6.Histamines should not exceed 10 mg/100gm of fish flesh.
4.7.Heavy metals must be within limits defined in ES 2360/93 (Maximum limits of heavy metals in foodstuffs).
4.8.The product should be from harmful parasites in there various stages of development.
4.9.Flesh tissues of the product must be totally free from parasites or any of their developmental phases, be them alive or dead.
4.10.The product must be free from fungal growth and toxins.
4.11.The product must be free from Salmonella and Shigella bacteria in 25 gms
4.12.The product should be free from E. Coli
4.13.The product should be free from Vibrio-parahaemolyticus.
4.14.the product must be free from Lysteria monocytogenus.
4.15.The total count of aerobic bacteria should not exceed 100,000 cells/gm
4.16.The total count of colon bacteria shall not exceed 10 cells/gm.
4.17.The product must be free from coagulate positive staphylococci.
4.18.The total count of germs of non-aerobic bacteria, which produce hydrogen sulfide, shall not exceed 100cells/gm.
4.19.Mechanical defects (bruises, wound and scratches) in the product shall not exceed 5% by number.
4.20.Additives must be within limits defined by the concerned authorities.

## 5. Packs and Labeling

5.1.Packs must conform with Presidential Decree 798 of 1957 concerning packaging foodstuffs.
5.2.Provisions stipulated in ES 1546 concerning labeling of food products and ES 2613/94 validity of foodstuffs shall be observed. The following data, which may be printed in another foreign language besides Arabic, must be indelibly printed on the packs or labels:
5.2.1.Producer's name, address and trade mark (if any)
5.2.2.Variety of smoked fish.
5.2.3.Production and expiry dates.
5.2.4.Net weight on packaging
5.2.5.Method of smoking
5.2.6.Mode of handling and storage

5.2.7. The phrase "Made in Egypt" in case the product was locally produced. Reference must be made to the country of origin if the product was imported.

## 6. Inspection and Testing Methods

Inspection and testing shall be conducted according to ES 2760/94 defining physical and chemical techniques of testing fish and fish products - 3 rd section under smoked fish.

## 7. Technical Terminology

- Coagulase positive staphylococci
- Vibro parahaemolyticus
- E. Coli

**Arab Republic of Egypt**

**ES 804-1995**
**UDC 664.95**
**ICS**

# EGYPTIAN STANDARDS

# 804 - 1995

# TUNA AND BONITO

**EGYPTIAN ORGANIZATION FOR STANDARDIZATION AND QUALITY CONTROL. CAIRO**

***Preamble***

These standards annul and replace ES 804/1990 regarding canned Tuna and Bonito.

**1. Area covered by these ES**

These standards relate to the general conditions and special specifications of various types of Tuna and Bonito and ways of their inspection and testing.

**2. Definition**

Canned Tuna and Bonito is a preserved Tuna or Bonito meat, packed in tin or any other convenient packages, having been prepared and packed in an edible oil, salty solution or both.

**3. Fish varieties used:**

| Canned Tuna | Bonito |
|---|---|
| - Thunnus alalunga | - Sarda chiliensis |
| - Thunnus albacares | - Sarda Orientals |
| - Thunnus atlanticus | - Sarda Sarda |
| - Thunnus obesus | - Sarda Velox |
| - Thunnus thynnus maccoyii | - (Cybiosarda elegans) |
| - Thunnus thynnus Orientals | - (Gymnosarda unicolor) |
| - Thunnus thynnus - thynnus | - (Orcynopsis unicolor) |
| - Thunnus tongoll | - (Sarda austalis) |
| - Euthynnus affinis | |
| - Euthynnus alletteratus | |
| - Euthynnus lineatus | |
| - Euthynnus pelamis | |
| - (Syn. Katsuwonus pelamis) | |
| - (Allothuss fallai) | |
| - (Auxis rochei) | |
| - (Auxis thazard) | |

4. General conditions

4.1. Canned Tuna or Bonito meat must be selected from fresh or frozen fish varieties, clean and good for human consumption.

4.2. It must have the characteristic color, taste and odor.

4.3. It must be free from meat of other fish varieties.

4.4. It must be free from scales, skins, bones, blood clots and meat of red muscles. It must also be regularly pressed together inside the packet.

4.5. The edible oil added to the product must meet the standards of edible oils.

4.6. The salt used must conform with the standards of the edible salt.

4.7. Pressure inside the can must be negative.

## 5. Standards:

5.1. Tuna and Bonito meat should be packed in the following grades:-
5.1.1. Fancy grade
5.1.1.1. Large chunks: solid packs resulting from cross-sectional cuts in the fish meat at not one-inch thickness. They should be aligned parallel to the tin's edges. Smaller chunks and flakes should not exceed 18% of the net weight of the can, color of the fish meat must be white (light). A can may contain 1-3 solid pieces.

5.1.2. First grade
5.1.2.1 Large chunks: (as in fancy grade) fish should be of dark color.
5.1.2.2. Medium chunks of less than 0.5-inch-thickness, not exceeding 50% of the tin's net weight. Fish meat color must be light (or white)
5.1.2.3. Flakes; cans contain more than 50% less than 0.5-inch-thick chunks of white color.

5.1.3. Second grade

5.1.3.1. Chunks or flakes (as in first grade) of dark meat.
5.1.3.2. Shredded meat, small uniform pieces of white, light or dark color, and does not form paste
5.2. pH should range between 5.9 and 6.1
5.3. Edible salt in the product should not exceed 2%
5.4. Solution formed in the product should not exceed 5% of the net weight when oil is used alone as a medium for packing.
5.5. Meat's net weight in the final product should not be less than 70% of the tin's weight stated on the label, provided that the medium of packing should be adequate enough to cover the meat.
5.6. The product must be free from pathogenic bacteria and their toxins.
5.7. The product must be free from non-aerobic bacteria (which produce Hydrogen Sulfides).
5.8. The product must be free from Clostridium Botulinum and its toxins.
5.9. Total volatile nitrogenous alkalines should not exceed 40 mg/100 gm as nitrogen in the sample. This same percentage in raw fish (as intermediate raw material) should not exceed 20 mg/100 gm in the sample.
5.10. Histamines should not exceed 10 mg/100gm of the end product.
5.11. Heavy metals must conform with ES 2360/1993 concerning maximum limits of heavy metals in foodstuffs.
5.12. Radiation should be within limits defined by the concerned authorities.

## 6. Packs and labels

6.1. Tuna and/or Bonito meat must be packed in tin cans coated internally with anti-rust material, or in convenient packs to maintain flavor, color and natural odor of the contents.

6.2. Packs must fulfill the requirements stipulated in the presidential Decree No. 798 of 1957 and ES 153 regarding tins produced for packaging foodstuffs.
6.3. Provisions of Ministerial Decree No. 354/1985 must be observed, with particular reference to labeling canned and frozen foods and similarly are the provisions of ES 1546 covering the information to be given Arabic in addition to the language of the country of origin in case of imported canned and/or frozen foods:-
6.3.1. Name, grade, form and color of the canned meat
6.3.2. Producer's name, address and trade mark.
6.3.3. Net weight of the packet.
6.3.4. Net weight of canned meat
6.3.5. List of ingredients
6.3.6. Medium of packaging.
6.3.7. Operation number
6.3.8. Production and Expiry dates
6.3.9. "Made in Egypt" if the product is locally -produced. Otherwise, reference must be made on the label to the country of origin.

## 7. Testing

Testing shall follow ES 2760/1994 which indicates methods of physical and chemical testing of fish and fish-products (part II canned fish).

## 8. Technical Terminology

- Blood Clots
- Bonito (Sarda Chiliensis)
- Chunks
- Clostridium Botulinum
- Dark Meat
- Fancy grade
- First grade
- Flakes
- Light meat
- Red muscle (red meat)
- Second grade
- Shredded (grated)
- Solid pack
- White meat

## 9. References

1. Codex Standard No. 70 - 1981
Canned Tuna and Bonito in water or oil
Codex Alimentarius Commission

2. Egan, S Kirk Sawyer 1981
Pearson's "Chemical Analysis of Food," 8th edition, Churchill Livingston Edinburgh, London, Melbourne and New York.

## 10. Participating Agencies

- MOH Laboratories
- Department of Chemistry
- Faculty of Agriculture, Cairo University,
- National Research Center.
- GOIEC
- Chamber of Commerce, Alexandria
- EDFINA Co.
- El-Qana (Suez Canal) company for fish processing
- An Expert from EOSQC
- National Institute for Oceanology and fisheries.
- Institute of Nutrition
- Faculty of Agriculture, Zagazig University,
- Faculty of Agriculture Mansourah University,
- Food Industries' Holding Company.

# EGYPTIAN STANDARDS

# 889 - 1991

# FROZEN FISH

**Egyptian Organization for Standardization and Quality Control (EOSQC)**

# Frozen Fish

## Introduction

These specifications annul and replace ES 889 - 1981 concerning frozen fish.

## 1. Scope

These standards are concerned with the general conditions and specifications of frozen fish and means of inspection and testing.

## 2. Definition

Frozen fish is the result of conserving fresh intact fish fit for human consumption through fast freezing

2.1.Forms of freezing
2.1.1.Intact fish
2.1.2.Fish with chopped head, tail and fins, and intestines removed (with or without scales)
2.1.3.Fish with chopped head and intestines removed.
2.1.4.Fish with chopped head, tail and fins, intestines removed, and cut in pieces (with or without scales)
2.1.5.Boneless fish: longitudinal slices free of spines, bones and skin.
2.1.6.Semi-boneless fish: longitudinal slices free of bones only.

## 3. General conditions

3.1.fresh fish coherent tissues, free of injuries, with adherent scales, if any. In case of fish without scales: intact skin, free of injuries or any abnormal color.

3.2.Fish not caught by explosion methods or from areas contaminated with radioactivity, fertilizers or insecticides.

3.3.Fish free of harmful microbes and parasites affecting human beings, and of poisons resulting therefrom.

3.4.Fish free of mucous substances and suspensions.

3.5.Fish cooling process is directly after washing the fish. It is done at a degree close to 0 $^{0}$C for a maximum of 4 hours, followed by freezing.

3.6.Fast freezing is at -40 $^{0}$C. Freezing is successful only when inner parts of the fish reach -18 $^{0}$C within less than 4 hours.

3.7.Storage is below -18 $^{0}$C. Storage period from freezing up to consumption should not exceed 6months and period from freezing till arrival to Egyptian ports should not exceed 3 months.

3.8.Fish should be transported in refrigerators at -18 $^0$C.

3.9.Fish should be refrozen after melting

3.10.Product should have a normal color and be odourless.

3.11.Product should have a normal constitution and be free of frostbite.

3.12.Product should be of the same kind and equal volume within each package.

**4. Specifications**

4.1.pH should not exceed 6.2

4.2.Histamine should not exceed 10 mgm/100gm of fish flesh.

4.3.Total volatile nitrogen compounds should not exceed 30 mgm/100gm of fish flesh, estimated as nitrogen.

4.4.Tri-amino nitrogen, should not exceed 10 mgm/100gm of fish flesh.

4.5.Ammoniacal nitrogen, should not exceed 20 mgm/100gm of fish flesh.

4.6.Thiobarbituric acid, should not exceed 4.5 melonaldhyd/kg of fish flesh.

4.7.Heavy metals in product should not exceed the following: Pb 1 mgm/kg, Cd 0.1mgm/kg, Hg 0.5 mgm/kg.

4.8.The percentage of radioactivity in product should be within accepted limits, according to what is stated by the concerned authorities.

4.9.Insecticide residues should be within internationally allowed limits, according to FAO and ES in this concern.

4.10.Fish should be free of parasites and harmful worms, whether dead or alive.

4.11.Fish should be completely free from worms or cysts lavn within muscles and other tissues, except for those in intestines and stomach.

4.12.Parasites and worms that can be seen by naked eye in the stomach and intestines should not exceed 100 per fish. The percentage of fish containing such parasites in the examined specimen should not exceed 20%.

4.13.The product should be free of external parasites in all their different phases that attack human beings.

4.14.Total number of colon bacteria should not exceed 100 cells/gm.

4.15. Total number of sarial bacteria should not exceed one million cells/gm.

4.16. Number of staphylococcus aurcus bacteria should not exceed 1000 cells/gm.

4.17. The product should be free of salmonella and sehigella in 25 gm.

4.18. The product be free of vibrio parahacmolyticus microbe.

## 5. Packing and Data

5.1. Fish is packed uniformly in equal sizes in one container in polyethylene bags inside cardboard boxes tied with strong frames to protect contents during handling and transportation.
5.2. In case of big fish that can not be packed in cardboard boxes, any appropriate container is to be used.
5.3. In case of fish slices, they are to be stacked in cardboard boxes after being packed in polyethylene bags of equal weights. The following data should be inserted on packages in Arabic (and possibly any other foreign language) in clear writing that cannot be erased:
5.3.1. Name of product and trademark.
5.3.2. Kind of fish
5.3.3. Net weight after packing
5.3.4. Date of freezing day/month/year
5.3.5. Expiry date
5.3.6. Conditions of handling and storage
5.3.7. "Made in Egypt" tag (if produced locally) and country of origin (if imported).

## 6. Inspection and Testing

Inspection and testing are according to the Egyptian standards issued by the authority in this concern.

## 7. Technical Terms.

Staphylococcus aureus
Vibro parahaemolyticus

## 8. Reference

International commission on microbiological specifications for food (1978)
Microorganisms in Food, Eds ICMSF, Toronto

## Authorities Participating in Setting the Standards

- Central Laboratories of the Ministry of Health
- Faculty of Agriculture - Cairo University
- The National Research Center
- Institute of Nutrition
- Fish Wealth Development Authority
- Dr. Mahmoud Goma'a Ahmed, Ex. General Manager of Chemistry Department

REPUBLIC OF EGYPT

ES : 516 - 1993

UDC 369 . 512 :
664 . 3 . 0

EGYPTIAN STANDARD

516 - 1993

# FROZEN SHRIMP

ES

# Frozen Shrimps

## Introduction

**This standard abrogates and replaces ES 516 of 1969 concerning frozen shrimps.**

## I. SCOPE

**This standard cover the general conditions and specifications of frozen shrimps and methods of inspection and testing thereof.**

## 2. Definitions

**Frozen shrimps are the product of conserving fresh intact shrimps through quick** freezing of any of the following:

**2.1** intact shrimps

2.2 Shrimps with chopped head only

2.3 Shrimps with chopped head. back scale and intestine removed. with or without the tail fin

2.4 Shrimps with chopped head, back scale, intestine removed and without tail fin

2.5 cooked shrimps (could be prepared in the farm of the pre-mentioned farms)

2.6 shrimps prepared in a special farm (shrimps prepared as a butterfly)

## 3. The General Conditions

**3.1 The product is the result of freezing fresh intact shrimps through quick** freezing. It is done at 8°C and should be subject to a higher temprature.

**3.2** It is preferable to chop heads directly after fishing especially for big size

3.3 The product must be prepared from shrimps conserved in ice balls or refrigerator at a degree not exceeding 0℃ followed by adding ice balls to protect them from dry or changes in colour and flesh to keep shrimps in fresh intact.

3.4 The fresh shrimps should be transported to the factory in layers of ice bails and shrimps at 1:1 proportion, or should be transported in refrigerated containers at a degree not exceed 5°C with the addition of ice balls.

3.5 Processing must start as the fresh shrimps arrive to the factory. All processing steps should be done in refrigerated conditions with shrimps to be mixed with ice balls or in refrigerated pool.

3.6 All the processing tools must be clean through preparation. packing. and transportation.

3.7 The product should have normal constitution and free from decomposition.

3.8 In the case of frozen cooked shrimps. the product must maintain the colour of the cooked shrimps and it is allowed to add natural colours.

3.9 It is preferable to cover shrimps by thin ice layer before packing them.

3.10 The product must be free from dry surface. black spots and any unusuai colours.

## 4. Specification

4.1 Edible salt in frozen cooked shrimps must not exceed 1.5% of the final product
4.2 Trimetnyiamine should not exceed 40 mgm/ 100 gm of shrimps flesh
4.3 Total volatile nitrogenous compounds must not exceed 65 mgm/lOOgm of flesh
4.4 Ammonium nitrogen shall not exceed 25 mgm/lOO gm of flesh
4.5 PH should not exceed 5.97 in the sample after treating it with acid
4.6 Heavy metals in product should not exceed the following: Lead mgm/kg. Cadmium 0.1 mgm/kg, Mercury 0.5 mgm/kg
4.7 Radiation should be within accepted limits defined by the concerned authorities
4.8 The total count of bacteria should not exceed 100.000 cells/gm
4.9 Count of staphylococcus aureus must not exceed 500 cells/gm
4.10 The product must be free from E-Coli
4.11 The product should be free from bacteria and toxins
4.12 Frozen shrimps must be classified according to the following grades:

4.12.1 **Specification grades:**

**4.12.1.1 Excellent grade: it includes the following:**

**a)** the excellence of natural characteristics of fresh shrimps according to what is written on the label

**b)** shrimps is packed uniformly in equal sizes in one container

c) the product must be free from intestine (in the case of intestine removed shrimps)

**d)** the product should be free from scales or any other substances such as chopped shrimps

4.12.1.2 **The standard grade:**

**Its** characteristics are similar to the former one with tolerance within 10%

4.12.2 **Size grades:**

Frozen shrimps of all farms must be packed uniformly in equal sizes in one container, and in the way of processing- Grades are set according to number of units in 1 kg or Libra divided by 2.2 (1 Libra = 454g, 1 k-G=2.2 Libra)

**4.12.2.1 Complete frozen shrimps** :

**a) very** big. up to **20** units/kg
**b)** big. from 21-30 units/kg
c) average size from 31-50 units /kg
**d)** small. from 5 l-90 units/kg
e) very small. more than 90 units/kg

4.12.2.2 **Frozen shrimps with heads chopped:**

**a) very** big. from 21-35 units/kg. or up **to** 22 units/kg
**b)** big, from 23-66 units/kg
c) average size. from 67-110 units/kg
**d)** small. from 111-154 units/kg
e) very small. more than 155 units/kg

4.12.2.3 **Frozen shrimps with scales removed:**

**a) very** big, less than 40 units/kg
**b)** big, from 41-66 units/kg
c) average size. from 6-110 units/kg
**d)** small. from 111-220 units/kg
e) very small. from 221-330 units/kg
f) thin. more than 330 units/kg

4.12.2.4 **Frozen shrimps with scales removed and back** open:

**a) very** big, less than 44 units/kg
**b)** big, from 45-66 units/kg
c) average size. from 67-132 units/kg
**d)** small from 133-220 units/kg
e) very small. more than 220 units/kg

4.12.2.5 **Complete frozen cooked shrimps:**

**a) very** big, less than 20 units/kg
**b)** big, from 21-35 units/kg
c) average size, 36-55 unit/kg
**d)** small, from 55-100 units/kg
e) very small. more than 100 units/kg

4.12.2.6 **Frozen cooked shrimps with scales removed:**

**a) very** big, less than 44 units/kg
**b)** big, from 45-110 units/kg
c) average size. from 111-165 units/kg
**d)** small, from 166-330 units/kg
e) very small, from 331-550 units/kg
f) **thin,** more than 550 units/kg

4.12.2.7 **Cooked shrimps with scales and intestine removed:**

**a) very** big, less than 45 units/kg
**b)** big, from 46-120 units/kg
c) average size, from 121-175 units/kg
**d)** small, from 176-350 units/kg
e) very small, more than 350 units/kg

4.12.2.8 **Grades for broken shrimps:**

**It** includes units of shrimps conserved through quick freezing and good for human consumption. Product must conform with the

general conditions of frozen shrimps except for the broken units which require writing (broken) on the label in clear letters

4.12.2.9 It is allowed to state the size on the label according to the number of units in each kg or Libra

**4.13 Frozen shrimps must be stored in a degree not to exceed -18°C and maintain the temperature during transportation an handling.**

## 5. Packing & Data

**5.1 Frozen shrimps is packed in containers suitable for frozen foods stuffs, made of polyethylene bags or similar materials inside cardboard boxes or wood board boxes internally coated with craft paper. Frozen shrimps could also be packed in other packages according to market requirements.**

**5.2 The following information should be written in clear Arabic (that cannot be erased). It is allowed to add another language (country of origin):**

**5.2.1.** producer's name, address and trade mark

5.2.2. name of variety

5.2.3. net weight of shrimps of the pack

5.2.4. number of units in 1 kg, and it is allowed to any other criteria for size upon the client request

5.2.5. production and expiry dates or shelf life

5.2.6. the phrase "Made in Egypt" in case of local production. or the country of origin in case of importation.

5.2.7. the net weight of the pack must coincide with what has been written on the label with a tolerance of 2% (less)

## 6. Inspection & Testing

Inspection and testing must be conducted according to the **ES** issued by the EOS in this respect.

## 7. Technical Terminologies

Cooked shrimps

**E. coli**

**F. Frozen** shrimps

Quick freezing

Trimethylamine

# 8. References

-Codex standard 92-1981
-Shrimps or Prawns, Quick Frozen
-Codex Alimentarius Commission
- Indian standard 2237-1985
- Specification for Frozen Prawns (Shrimp) second revision
- Manak Bhavan. 9 Bahadur Shahzafar Marg
- New Delhi 110002

# EGYPTIAN STANDARDS

# 808 - 1996

# PACKAGED ANCHOVIES

**Egyptian Organization for Standardization**
**and Quality Control (EOSQC)**

# Packaged Anchovies

## Introduction

These specifications annual and replace ES 808 - 1988 concerning packaged anchovies.

## 1. Scope

These standards are concerned with the general conditions and specifications of packaged anchovies prepared for human consumption.

## 2. Definition

It is the result of cutting or chopping the flesh of salted anchovies free of bones and scales. The media of packing is edible oil. Vinegar and spices can be added and packed in suitable packages which are not thermally treated.

## 3. Kinds of fish to be used

- Engraulis encrasicholus.
- Engraulis anchoita
- Engraulis ringens
- Engraulis norda
- Surdinalla anchova

or any similar small size from salmon fish family.

## 4. General Conditions

4.1. All raw materials (inputs) used in processing must conform with their respective standards.

4.2. The product must be made of fresh of frozen fish characterized by firm tissues and totally free from wounds, bruises, mucous substances and unacceptable odour.

4.3. Fish used must be chopped head, having removed the fins, tail, scale, intestine and backbones. The complete small anchovies fish must conform with salted sardine.

4.4. The product must maintain the color, flavor, odour and firm tissues that characterize the anchovies fish.

4.5. The additions must be edible and conform with the specific standards of each kind.

4.6. The products must be canned in any of the following forms.
- Long slices (Anchovy fillets)
- Rolled anchovy

- Anchovy paste

4.7. Fillets in the same can must be uniform in size and length.

4.8. It is permissible to use ascorbic acid or one of its salts (calcium, sodium, potassium).

4.9. The product must be free from all alien or undesirable substances.

**5. Standards**

5.1. Humidity must not exceed 50%.

5.2. Edible sale should not exceed 12% in the flesh.

5.3. The product's PH value should not exceed 6.

5.4. The Percent of the solution formed in the product must not exceed 3% of the net weight of the package if and when oil is used as a media for packing.

5.5. The anchovy's net weight should not be less than 60% of the tin's weight stated on the label.

5.6. The ascorbic acid or one of its salts must not exceed 200 mg/kg of the final product as an ascorbic acid.

5.7. The products should be free from harmful parasites in their various stages of development whether dead or alive.

5.8. The product must be free from pathogenic bacteria and their toxins.

5.9. The product must be free from non-aerial bacteria which produces hydrogen sulfate.

5.10. The product must be free from clostridium botulinum and its toxins.

5.11. The product should be free from E. Coli bacteria.

5.12. The product must be free from staphylococcus aureus.

5.13. Heavy metals in product should conform with standard number 2360 (1993) concerning the maximum limits of heavy metals in food product.

5.14. The percentage of radioactivity in product should be within the accepted limits, according to what is stated by the concerned authorities.

5.15. Pesticidal residues should be within the internationally accepted limits issued by the FAO and the Egyptian Standards issued by EOS in this regard.

5.16. Histamine should not exceed 20 mgm/100gm of the final product.

## 6. Packing and Data

6.1. Anchovies is packed in suitable containers or tubes in the case of paste, to protect the characteristics of the product, according to the Presidential Decree no. 798 (1957) concerning the packing materials used for food products.

6.2. Packs must fulfill the requirements of standard no. 1546 concerning labeling foodstuffs and standard no. 2613 (1994) concerning shelf - life and to be printed in Arabic in addition to the language of the country of origin. The following data should be interested on the packages:

6.2.1. Producer's name, address and trade mark.
6.2.2. Name of product and its variety (fillets, rolled, paste).
6.2.3. Net weight of the pack.
6.2.4. Production and expiration dates or shelf-life.
6.2.5. Kind of edible oil to be used.
6.2.6. List of ingredients and additions.
6.2.7. The phrase "Made in Egypt" in the case of local production or the country of origin in case of importing.

## 7. Inspection and Testing

7.1. Inspection and testing shall be conducted according to the concerned standards of natural and chemical means of fish testing and its products, Chapter 4 (salted fish).
7.2. Micro-biological tests shall be conducted according to ES issued by EOS.

## 8. Technical Terminology

- Rolled anchovy
- Anchovy paste
- Anchovy fillets
- Clostridium botulinum

## 9. References


- John Willey & sons 1989
  Processing Aquatic Food Products
  Fredrich W. Wheaton
  Thomas B. Lawson, New York

- Zaitsev - et - al 1969
  Fish Curing and Processing
  MIR Publish. Moscow

- Donald K.T and James MC. W. C 1957
  "Marine Products of Commerce" II ed

- CL 1991/20 - FFP - August 1991
  Codex Alimentarius Commission

Arab Republic of Egypt

# The Egyptian Standard
# No. 132 - 1990
# Preserved Tomato Products

Egyptian Organization for Standardization and Quality Control.

# The Egyptian Standard
# Preserved Tomato Products

## Introduction

This Standard supersedes and replaces the Egyptian Standard No. 132/1974 “Preserved Tomato Products”

## -l- Scope

This Standard includes the general conditions and particular specifications of the following tomato products and check and testing methods :

Natural tomato juic e - Tomato juic e - Tomato pure e - Tomato concentrate - Concentrated tomato sauc e - Tomato paste - Tomato sou p - Ketchup - Dried tomato - Dried tomato juice

## -2- Definitions

### 2-l Natural Tomato Juice

It is the strained . unconcentrated undiluted natural juice resulting from the fresh. fully ripe and coloure d fruit of the tomat o plant. Salt may be added.

### 2-2 Tomato Juice

It is the strained, diluted juice from fresh fully ripe and coloured fruit of the tomato plant. Salt and spices may be added.

### 2-3 Tomato Puree

It is the strained juice resultin g from the fruit of fresh fully ripe and coloured fruit of the tomato plant, which had been concentrated. Salt may be added.

### 2-4 Tomato Concentrate and Paste

It is th e strained juice resulting from the fresh full y ripe and coloured fruits of the tomato plant which ar e highly concentrated (concentrate or concentrated sauc e "tomato paste”). Salt may be added .

2-5 Tomato soup

It is the juice prepared and processed by heat with the addition of salt. or sugar. or both of them and butter or fat (natural or artificial).

2-6 Ketchup

It is the concentrated product from tomato juice to which sugar, sait. vinegar. and onion or garlic or both of them are added.

2-7 Whole preserved tomato

It is the whole fully ripe and coloured tomato with removed necks peeled or non-peeled which is preserved through one of the suitable methods of preservation and packed in one of the followin g packaging media:

Juice separated from fruit while being prepared and processed.
Tomato Juice
Tomato concentrate
Salty solution

To which acidity matters and one of the following salts which give fruits the required hardness are added provided that they should be in a pure form. Spices may be added:

Calcium Chloride
Calcium Sulfate
Calcium Citrates
Mono calcium phosphate
Calcium lactates
Calcium glutamates
Acetic Acid - Citric Acid - Lactic Acid - Malic Acid - Tartaric Acid

2-8 Dried Tomato

It is the outcome of drying tomato fruit and cutting it in slices. or pieces or as flowing powder.

2-9 Dried Tomato Juice

It is th e outcome of drying tomato juice after separating seeds and skin therefrom and which contains materials available in the juice. It is always in the form of flowing powder.

## -3- General Conditions

3-1 Products should preserve their natural colour.

3-2 Products should be free from bitter and burnt taste.

3-3 Products should be free from filling matters.

3-4 Preservatives and colouring matters should not be used in tomato products except in ketchup, provided they are in conformity with the decisions of the Ministry of Health.

3-5 Used Items should be identical to and in conformity with their standard specifications.

3-6 Residuals of insecticides should not be more than the permitted limits issued by the United Nations Food and Agriculture Organization (F.A.O.)

3-7 Products should be free from microbes causing diseases and decomposition or rottenness.

3-8 Products should be free from pollution by radioactive elements (by pollution it is meant the increase of radioactive elements in the food products more than the permitted limits determined by the concerned authorities)

## -4- Specifications

4-1 The hydrogenic number in all Tomato products should not exceed 4.5 Acidity may be modified in case of its rise by adding a percentage of sodium carbonates or bicarbonates.

4-2 Arsenic should not exceed 0.2 mg/kg

4-3 Lead should not exceed 0.3 mg/kg

4-4 Copper should not exceed 5 mg/kg

4-5 Tin should not exceed 150 mg/kg in case of packing in tin cans.

4-6 Cells of fungus and yeast should not exceed 10

4-7 Natural tomato juice

4-7- Soluble solid matters percentage of tomato should not be less tha n 4% of weight.

4-7-2 Food salt percentage. if added should not excee d 1% of weight.

4-8 Tomato juice

4-8-1 Soluble solid matters of tomato should not be less than 2% of weight.

4-8-2 Salt percentage, if added should not exceed 0.5% of weight.

4-9 Tomato Puree

4-9-1 Total solid matters of tomato should not be less than 10%.

4-9-2 Food salt percentage. if added should not exceed 2% of weight.

4-10 Tomato concentrate

4-10-l Total solid matters percentage of tomato should not be less than 32% of weight.

4 -10-2 Amount of salt, if added should not exceed 3% of weight

4-11 Tomato paste

4-11-1 Total solid matters percentage of tomato should not be less than 28% of weight.

4-11-2 Salt percentage, if added should not exceed 4% of weight.

4-12 Tomato Soup

4-12-1 Total solid matters percentage of tomato should not be less than 8% of weight.

4-12-2 Fat matters percentage should not be less than 8% calculated on dry weight.

4-12-3 Amount of salt and sugar or either of them should not exceed 1.5% of weight.

4-13 Ketchup

4-13-1 Total solid matters should not be less than 25% of weight.

4-13-2 Total added sugars should not exceed 8% of weight.

4-13-3 Acidity percentage should not be less than 1% and not exceed 2.306. calculated as acetic acid.

4-14 Whole preserved tomato

4-14-l Strained weight should not be less than 50% of wate r capacity of the package.

4-14-2 Salt percentage, if added, should nor exceed 0.7% of weight

4-14-3 Calcium salts percentage, if added should not exceed 0.026% of the final weight of preserved tomato , estimated as calcium.

4-15 Dried Tomato

4-15-l Humidity percentag e should not exceed 5% in case of slices. and 3% in case of powder.

4-l5-2 The dried slices passing through a sieve the measurement of its opening is 590 micro n +/- 5 , with wire diameter 390, should not be less than 5% of the weight.

5-15-3 The powder passing through a sieve the measurement of its opening is 590 micron +/- 5, with wire diameter 390, should not be less than 95% of the weight.

5-l6 Dried tomato juice

5-16-1 Humidity percentage should not exceed 3% of weight.

5-16-2 The powder passing through a sieve the measurement of its opening is 590 micron +/- 5, and wire diameter 390, should not be less than 95%.

-5- Packages and Data

5-l Tomato products shall be packed in suitable packages so that the product can keep its distinguishing properties. They should be identical and in conformity with the Presidential Decree No. 798 /1957 concerning containers and packages used for foodstuffs.

5-2 With observing the decisions issued to obligat e local industrial establishments producing frozen packed and canned foodstuffs, to abide by the

data which should be affixed on its packages of food products. and the Egyptian Standards No. 1546 concerning the data on labels of packed foodstuffs. the following data should be written in Arabic language with apparent block letters matching with the package size. They may be written in other foreign languages in addition to the Arabic language.

5-2-1 Name. address. and trademark of the producer

5-2-2 Name of brand.

5-2-3 List of ingredients with mentioning the percentage of added salt.

5-2-4 Percentage of soluble or total solid matters of tomato as provided for in the Standard.

5-2-5 Net weight

5-2-6 Production date and expiry date

5-2-7 The phrase "Made in Egypt" in case of local production, and country of origin for the imported product.

## -6- Methods of Checking and Testing

6-l The following tests and examinations shall be made as provided for in the Standard No. 30 "Standard methods of checking fruit products".

6-l-1 Taking the sample.

6-l-2 External checking of the package and its products.

6-1-3 Measuring the ramification degree.

6-l-4 Estimating the net weight.

6-l-5 Estimating the total acidity degree.

6-l-6 Estimating sugars as transformed sugar.

6-l-7 Estimating arsenic, lead, copper and tin.

6-l-8 Detecting colouring matters.

6-l-9 Detecting preservatives.

6- 1- 10 Detecting fungus and yeast.

6-2 The following examinations and tests shall be carried out as provided for in the standard No. 865 "Dried yellow carrot".

6-2-l Estimating total solid matters by drying under ramification.

6-2-2 Estimating humidity in the products of dried tomato.

6-3 Estimating insoluble solid matters.

6-3-l Apparatus and instruments

Centrifugal apparatus
Bukhner funnel
Plate
Oven
Filtration flask

6-3-2 The Method

An amount of 20 gm of the sample is washed several times in hot water with using the Centrifugal apparatus in each time.

The surface liquid is poured and filtered in Bukhner funnel through a filtration paper previously dried for two hours at temperature of 100° C. and weighed.

Washing is repeated 4 - 5 times in hot distilled water and insoluble matters are moved to the filtration paper.

The paper is dried with its contents in a plate for two hours at 100° C., then the paper is cooled in a dryer and weighed

6-3-3 Calculation

The difference between the two weights of the filtration paper gives the quantity of insoluble solid matters and its percentage is calculated therefrom.

6-4 Estimating soluble solid matters:

It is estimated by subtracting the percentage of the insoluble solid matters from the percentage of total solid matters.

## 6-5 Ash estimation

### 6-5-l Apparatus and instruments

Melting pot having a cover of known weight
Water bath
Oven
Dryer

### 6-5-2 Method

A known weight is taken from the sample in a melting pot with its cover in known weight. It shall be put on a water bath of 100° C. until it dries, then it is put in an oven of moderate temperature which is raised gradually but not exceeding 500° C. The cover is lifted and the meiting pot is put in the dryer and weighed afterwards in order to take the difference between the two weights.

### 6-5-3 Calculation

The difference between the first weight and last weight is the ash from which its percentage is calculated.

## 6-6 Estimating food salt

### 6-6-l The reagents

Nitric Acid
Solution of silver nitrate 0.1
Ammonium ferrous sulfate
Solution of ammonium and potassium theocianate

### 6-6- The Method: One of the two following methods is used:-

### 6-6-2-1 The First Method

Ash is to be dissolved in water with nitric acid, and salt is estimated as follows:

A known volume of silver nitrate 0.1 is added more than is necessary in order to precipitate the salt. It is well stirred up and filtered, then the silver chloride is washed with a diluted solution of nitric acid. 5 ml of ammonium ferrous sulfate and some mls of nitric acid are added to the filtrate and washing. Then the increase of silver nitrate is calibrated with 0.1 solution of ammonium or potassium theocianate until a permanent brown colour appears. By knowing the number of mls of used silver nitrate, the quantity of sodium chloride is calculated.

6-6-2- l- 1 Calculation

Each ml of silver nitrate 0. 1 = 0.00585 gm sodium chloride.

6-6-2-2 The Second Method

1 gm of the prepared sample is carried into a conical cu p of 250 ml capacity.

A known volume of silver nitrate is added thereto which shoul d be more than what is necessary to precipitate the food salt.

20 ml of nitric acid is added. and the solution is boiled on a sand bath until all soiid matters except the precipitate of silver chloride. are dissolved.

The solution i s cooled and 5 ml of ammonium ferrous sulfate is added. The extra volume of silver nitrate is dripped with ammonium or potassium theocianate solution till the appearance of a permanent light brow n colour. The volume of the theocianate is subtracted from the volume of the added silver nitrate in orde r to know the volume of silver nitrate consumed in precipitating the present salt.

6-6-2-2-l Calculation

The percentage of salt is calculated by considering that each:

1 ml of 0.1 silver nitrate = 0.00585 gm of sodium chloride

6-7 Estimating the total solid matters of tomato puree, concentrate and paste:

There are many rapid methods, which render reliable accurate results for estimating the total solid matters indirectly as follows:

6-7-l The method of calculating the specific weight of tomato puree:

There is a relation between the specific weight of tomato puree and the percentage of th e total solid matters estimated by drying under ramification at 70° C. The specific weight is estimated a s follows:

Air bubbles which are usually mixed with the puree should be disposed of before carrying out the estimation process. It is preferable to effect the estimation on cold tomato puree. After filling the density flask, it is put in the

centrifugal apparatu s for that purpose. If sal t was added to the tomato product. it should be chemically estimated and the necessary correction is mad e by subtracting 0.007 from the value of specific weight estimated for each 1% salt in the sample. Estimation of the tomato concentrate can be made up to 20% total solid matters by density flask a t 20/20 m where the sample is cooled at 16 - 18 C. The flask is filled with the puree and run in the centrifugal apparatus for one minute at 1000 rounds. The flask is completed and the centrifuge process is repeated. temperature is estimate d by submerging the thermometer. The flask is completed up t o the mark. and any increase is removed by a straight edge and the flask is cleaned from outside and weighed quickly to the nearest 0.0 1 gm.

Specific weight = $\frac{\text{weight of tomato puree in the flask}}{\text{weight of water at 20° C. which fills the flask}}$

The attached table No . 1indicates the percentage of total solid matters.

6-7-2 Method of examinin g the filtrate:

There i s a relation between the concentration of soluble solid matters in Tomato puree and the total solid matters.

6-7-2-l Method of using specific weight idrometer:

This method is considered of high accuracy level and needs onl y 5-7 minutes to get the filtrate. Thus, small size specific weight idrometers are used to reduce the required filtrate.

a) Apparatus and instruments

Glass funnel of 9 inch diameter

3 specific weight idrometers
1- (1.005 - 1.020)
2- (1.020 - 1.040)
3- (1.040 - 1.060)

Cylindrical tube 4 cm diameter and 20 cm high

Centigrade thermometer

Linen cloth 60 x 60 cm

b) Method: The funnel is filled with sufficient quantity of tomato pure e - The first part of the filtrate is filtered again as it becomes turbid - when filtrate becomes clear it is received in box No. 2 encircled with a larger container

containing iced water. After having a suitable quantity of the filtrate. the temperature is measured and it should be less tha n 20° C. The tube is to be filled and stirred after closing the opening by hand to have a homogenous temperature. The external specific weight is estimated by the suitable idrometer and temperatur e is directly measured with making the necessary correction for the 30° C. degree as per the attached table No. 2, then the specific weight of tomato puree is calculated as per table No.1 and accordingly the percentage of total solid matters.

6-7-3 By determining the filtrate refraction index by refractometer:

6-7-3-l Apparatus and instruments

Abbie refractometer. the temperature of which is modified by making the necessary correction for salt as follows:

a) Reading the refraction index:

0.000 17 is subtracted from its value for each 0.1% salt in the sample

b) Brex reading

0.12 is subtracted for each 0.1% salt in the sample with considering the calibration of the refractometer as follows:

The reading of distilled water is taken time to time.

| Temperature | Reading of distilled refractometer |
|---|---|
| 20 | 1.3330 |
| 22 | 1.3328 |
| 24 | 1.3326 |
| 26 | 1.3324 |

- 10 ml capacity pipette with broad lower end
- Container of chilled water.

6-7-3-2 The method:

About 10 ml of hot tomato puree is drawn by a 10 ml capacity pipette having broad lower end, from the sample container.

Upper opening is closed by hand and the pipette is submerged in a container of lead water for few seconds, then it is taken out and its external surface is dried and some drops of the puree are excluded.

One or two drops are put on the surface of the glass prism of the refractometer which soon acquires the 20° C. temperature of the apparatus.

The reading of the index refraction and Brex are taken. if any.

It is possibl e to take the reading of the refractometer directly in case of tomato concentrates with concentration higher than 20%. then refer to the tables. after deleting what is opposite to salt. But in other previous tests. dilution to known weight is effected with outcome of not more than 20% solid matters to facilitate the filtration process and measuring the specific weight in the density flask.

Note:

The value shall be subtracted from the reading of the apparent index of refraction or Brex whenever the estimated temperature is less than 30 C. and is added in case of its rise over 20 C. as per Table (2).

Table No. 1 Tomato Puree

| Percentage of total solid matters under ramification at 70° c. | Specified Weight | Reading of refractometer at 20° C. | | Filtrate specific weight at 20" C. |
|---|---|---|---|---|
| | | Index of refraction | Brex reading | |
| 4,- | 1,0162 | 1,3384 | 3,7 | 1,0150 |
| 4,5 | 1,0183 | 1.3391 | 4,2 | 1,0170 |
| 5.- | I,0205 | 1,3398 | 1.7 | 1.0190 |
| 5,5 | I,0226 | 1,3405 | 5.2 | 1,0211 |
| 6.- | 1.0247 | 1.3312 | 5.6 | 1.0231 |
| 6.5 | 1,0268 | 1.3419 | 6.1 | 1 0251 |
| 7,- | 1,0290 | 1,3426 | 6.6 | 1,0271 |
| 7,5 | 1.0311 | 1,3433 | 7.- | 1,0291 |
| 8,- | I,0332 | 1,3440 | 75 | 1,0311 |
| 8,5 | 1,0353 | 1,3447 | 7,9 | 1,0331 |
| 9,- | 1,0375 | 1,3454 | 8,4 | 1,0351 |
| 9,5 | 1,0396 | 1,3261 | 8,8 | 1,0371 |
| 10,- | 1,0417 | 1,3468 | 9,3 | 1,0391 |
| 20,- | 1,0856 | 1,3611 | 18,4 | |
| 20,5 | 1,0878 | 1,3619 | 18,8 | - |
| 21,- | 1,0899 | 6,3627 | 19,3 | - |
| 11,5 | 1,0921 | 1,3635 | 19.8 | - |
| 22,- | I,0943 | I,3643 | 20,2 | - |
| 22,5 | 1,0965 | 1,3651 | 20.7 | - |
| 23.- | 1,0986 | 1,3658 | 21,2 | - |
| 23,5 | 1,1008 | 1,3666 | 21,7 | - |
| 24,- | 1,1030 | 1,3674 | 22,1 | - |
| 24,5 | 1,1051 | 1,3682 | 22,6 | - |
| 25,- | 1,1073 | 1,3690 | 23,1 | - |
| 25,5 | 1,1095 | 1,3698 | 23,5 | - |
| 26,- | 1,1116 | 1,3706 | 24,- | - |
| 26,5 | 1,1138 | 1,3715 | 24,5 | - |
| 27,- | 1,1160 | 1,3723 | 25,- | - |
| 27,5 | 1,1182 | 1,3731 | 25,4 | - |
| 28,- | 1,1203 | 1,3739 | 25,9 | - |
| 28,5 | 1,1225 | 1,3747 | 26,4 | - |
| 29,- | 1,1247 | 1,3756 | 26,9 | - |
| 29,5 | 1,1268 | 1,3764 | 27,3 | |
| 30,- | 1,1290 | 1,3772 | 27,8 | - |

Table No. 2

Correction of index of refraction and Brex reading as per different temperatures.

| Temperature (Centigrade) | Amount of correction | |
|---|---|---|
| | Refraction Index | Brex reading |
| 1 | 0.0010 | **0,22** |
| 15,6 | 0.0009 | 0,20 |
| 16,1 | 0.0009 | 0,18 |
| 17,2 | 0,0007 | 0,13 |
| 18,3 | 0,0004 | 0,08 |
| 19.4 | 0.0003 | 0.03 |
| 20,6 | 0,0002 | 0,03 |
| 22,2 | 0,0006 | 0,11 |
| 25,- | 0,0013 | 0,28 |
| 27,8 | 0,0021 | 0,46 |
| 30,- | 0,0027 | 0,62 |

Partial Amendments made on
Egyptian Standard No. 132 / 1990
for Preserved Tomato Products
Approved by the Organization Board of Directors
in its meeting No. 212 dated 21/5/1996

| Item Number | Item before Amendment | Item after Amendment |
|---|---|---|
| 4/3 | lead percentage should not exceed 0.3 gm/kg | lead percentage should not exceed 0.3 gm/kg in Tomato juice. 1.4 gm/kg in all Tomato concentrates (in the highest Tomato concentration 36% or higher)<br>Lead percentage in all Tomato concentrate products shall be calculated as per the following formula:<br>1 part/million<br>the percentage of dry matter in concentrate x lead percentage in juice<br>Percentage of dry matter in juice<br>• Considering that the concentration of dry matter in Tomato juice is 5%. |

## Technical Terms

Tomato Soup
Tomato Paste
Tomato Juice
Natural tomato juice
Dried tomato juice
Tomato concentrate
Ketchup
Canned whole tomato
Dried tomato
Tomato puree
Tomato plant (Lycopersicum eculentum)

## References

- Codex Standards
No. 49-1981
"Tomato juice preserved exclusively by Physical Means"
Volume ( X )
No. 13, 57-1981
"Processed fruits and vegetables and edible fungi"
Volume II- Ed 1
Codex Alimentarius Commission CAC
- Egan, H. Hirk, R.S. Sawyer, R (1976)
"Pearson's Chemical Analysis of Foods"
8th ed., Churchill Livingstone,
London

# THE EGYPTIAN ORGANIZATION FOR **STANDARDIZATION AND QUALITY CONTROL**

Law No. 2/1957 has provided for the establishment of an independent organization to be th e National Competent Authority reference for all affairs of standardization in the country, to undertake the settin g out of standards for all the inputs of industry, such as raw materials, products. technical processes, instruments, machines, gauges and measuring units, and approved references for unified terms and symbols.

For the implementation of thi s law, the Presidential Decree No. 29/1957 was issued to decide the establishment of th e Egyptian Organization for Standardization and Quality Control , with the competence of coordinating work among the departments, authorities and organizations operating in the fields of standardization and directing them to the following purposes:

1- Finding approved references for unified criteria.

2- Issuing standards for raw materials and products, unified classifications. technical terms, definitions and symbols.

3- Providing means and methods capable of realizing the conformity of raw materials and goods to the approved standards.

4- Facilitating the procurement of alternative and mutual pieces and to raise the standard of local production.

5- Coordinating standardizatio n actions in the Republic of Egypt their international Counterparts.

The Organization shall be managed by a board of directors to be chaired by the concerned Under Secretary, including 23 members representing various authorities concerned with standardization, quality control and collaboration.

The Organization has two standing committees one for standards and the other for calibration, and both are concerned with working out and follow up the implementation of technical programmes in the framework of the plan approved by the board of directors.

The Organization follows the system of fixin g quality marks on noods and products conforming to th e Egyptian Standards as a means of protecting consumers and motivating producers to raise the standard of their production to the level of the Egyptian Standards, such system is implemented by the Executive Committee for Quality Mark, formed by a decision of the board of directors.

The quality mark consists of an ornamental shape containing the initials of the term ‘Egyptian Standard” in Arabic and th e English letters ES as an abbreviation of the two words “Egyptian Standard”.

**Arab Republic of Egypt**
**Egyptian Organization for Standardization and Quality Control**

ES 129 - 1986
UDC 664.85

Egyptian Standards
129 - 1986
Partial Amendment 1990

# *FRUIT PRESERVES*

## Introduction:

The following standards abrogate and replaces ES 129/70

### 1. Scope

The following standards cover the general conditions and the special standards of the following fruit preserves:
Fruit juices, natural fruit syrups, fruit syrups rich in natural juices, jam, marmalade, jelly, fruit dough, canned fruits, sugared fruits and dried fruits.
They also cover specifications of the fruits used in manufacturing the above mentioned products.

### 2. Definitions

2.1. Fruit juice is the clean, non fermented liquid extracted from mature fruits through or without the use of heat. It must be totally free from seed residues, fruit skins and hard fibers and may be crystal clear or not, pasteurized or sterilized or frozen. Fruit juices take any of the following forms:

2.1.1. Natural fruit juice without any additives.

2.1.2. Fruit juice resulting from changing the texture of the natural fruit by adding a sugared solution, on condition that natural juice in the final product constitutes no less than 50% of the total content.

2.1.3. Concentrated fruit juice is the natural fruit juic e having concentrated its total soluble solids (TSS) until they constitute no less than 40% of the juice, unless otherwise stipulated in the specific standards. However, sucrose may be added to increase that percentage, provided that this must be stated into the label.

2.2. Natural fruits syrup: is the fruit juice to which an internationally accepted sugar substance and an organic acid are added, and which has been treated for preservation.

2.3. Fruit syrup rich in natural juice: is the fruit juice to which an accepted sugar substance and an organic acid are added, and which is treated with an appropriate preservation technique, provided that treatment with heat become commonplace in all preservation techniques used.

2.4. Jam: is the product resulting from cooking fresh or canned (fruits, some vegetables and petals of some flowers). These fruits, vegetables and petals may be complete, cut into pieces or minced with the accepted sugar substance.

2.5. Jelly: is the product of heating fruit juice or the fruit immer sed in water, having filtered the juice and added the accepted sugar substances to it. The jelly must be quivering and maintain the same shape of the pot.

2.6. Marmalade: is the jelly of crystal clear citrus juice with thin, homogeneously distributed slices of the fruit skin are in suspension. Standards applied to jam are applicable to marmalade.

2.7. Fruit dough: is a homogeneously-textured dough produced from filtering and concentrating fruit core by heating with or without adding water, together with adding accepted sugar substances. However, the fruit dough may be processed with adding sugar to it.

2.8. Canned fruits: are either the complete or sliced fruit, peeled or non- peeled,

preserved in sugared solution whose concentration varies according to descriptive levels. It may, for industrial purposes, preserved in a crushed form or in water inside tins or glassware.

2.9. Sugared fruits: are the complete or sliced, peeled or intact fruits wherein the percentage of allowable sugar increases up to no less than 75% and which contain an accepted organic acid.

2.10. Dried fruits: are the fruits resulting from dehydration of high-quality fruits (be them complete, cut into pieces or crushed) which must be totally free from insect and fungal infestations.

## 3. **General Conditions**

Fruits used in processing fruit preserves must be either fresh or preserved by any of the following preservation techniques:
Freezing, dehydration, heating at high temperatures inside tightly-closed packs, preservation by using the internationally accepted additives. In all cases, the following requirements must be fulfilled in fruits used for making fruit preserves:

3.1. Mature and complete in size and color that characterizes it species. It must be in the stage of maturity that suits the purpose of processing.

3.2. Free from insect, animal or microbiological infections and the undesirable physiological disorders.

3.3. Free pesticide residues. Other metals must not exceed the internationally accepted limits.

3.4. Prepared to fulfill processing requirements such as peeling, removal of seeds and undesirable tissues.

3.5. Sucrose or sucrose and glucose (2:1) are the sugars to be used in processing fruit preserves excepting juices and syrups rich in natural juice, wherein sucrose alone is used. Artificial sweetness are not permitted.

3.6. Allowable natural colors may be used on condition that this is to be stated on the label.

3.7. Flavor and texture-improving agents, antioxidants and spices may be added, provided that they conform with the standards pertaining to each.

3.8. Arsenic must not exceed 0.1 ppm, lead 0.2 ppm, Tin 150 ppm in the final products.

3.9. Fruit preserves must be free from pathogenic micro-organisms.

3.10. Internal pressure of the pack must be less than outer pressure.

3.11. Vacuum inside the pack must not be less than 40mm/mercury.

## 4. **Standards**

4.1. Fruit juice

4.1.1. All or some of the following substances may be added:
Sucrose solution
Ascorbic acid (not less than 200 ppm)
Organic acid (citric, tartaric or malic acid)

4.1.2. Additives in the final product must not exceed 50% of the total content.

4.1.3. In case of pasteurized juices, sodium benzoate may be added within accepted limits; provided that this is clearly written in the label.

4.2. Natural fruit syrup
4.2.1. TSS must not be less than 55%.
4.2.2. Sodium benzoate must be within accepted limits and must not affect natural color, flavor and aroma.
4.2.3. Natural colors, approved by MOH, may be added.

4.3. Fruit syrup rich in natural juice
4.3.1. TSS must not be less than 45%
4.3.2. Sodium benzoate must be within accepted limits and must not affect natural color, flavor and aroma.
4.3.3. Natural colors, approved by MOH, may be added

4.4. Jam and Marmalade
4.4.1. The percent of fruit to sugar should not be less than 9:11 when cooking starts.
4.4.2. Water, pectin and organic acids may be added within permissible limits.
4.4.3. Spices, nuts, natural color and flavors may be added within permissible limits.
4.4.4. TSS in the final product must not be less than 68%.
4.4.5. In case of non-treatment with heat, it is permissible to ad d benzoic or sorbic acid or one of their salts or a mixture of both; provided that the quantity added does not exceed 250 ppm.

4.5. Jelly
4.5.1. Natural fruit juice must not be less than 45% by weight, excluding water, sugar or any other inputs used in production.
4.5.2. Sugar substances must not be less than 55%, calculated as deoxidizing sccarides.
4.5.3. TSS in the final product must not be less than 68%.
4.5.4. An organic acid, pectin and coloring agents may be added within permissible limits.
4.5.5. Maintaining the flavor and aroma that characterize the species of the original fruit from which it was processed. When cut with a knife, it must appear soft, with sharp, sparkling edge.

4.6. Fruit Dough
4.6.1. Promotion of fruit to sugar must not be less than 5:2
4.6.2. TSS must not be less than 43%
4.6.3. Fruit juice, spices and organic acids may be added within permissible limits.

4.7. Canned fruits: Canned fruits are classified into the following descriptive grades:
4.7.1. Fancy grade: The fruits must be mature, having the characteristics of size , color, flavor and aroma of the fruit species. Concentration of sugar solution must be not less than 30% after preservation for one month
4.7.2. Choice grade: Fruits must be mature, having the characteristics of color, flavor and size (which may be smaller than the above-cited grade. Sugar concentration after one month of preservation must not be less than 25%.
4.7.3. Standard grade: Fruits must fulfill the minimum of the following conditions:

Fruit characteristic are a bit less than the above mentioned two grade in as much as maturity, texture, color and size are concerned. Sugar concentration, after one month of preservation, must not be less than 20%.

In case these characteristics are not fulfilled, fruits are graded as sub-standard which category is sub-graded as follows:

4.7.4. Sub-standard grades:

4.7.4.1. Secondary grade:

Fruit characteristics are lesser than the above cited grades. Sugar concentration after one month of preservation should not be less than 15%.

4.7.4.2. Water grade

Fruit characteristic are same as in secondary grade. In stead of a sugar solution, water is added; and the product is used in the production of jam and sweets.

4.7.4.3. Pie grade

Fruits must have the characteristics of the above mentioned substandard grades or a bit less, and should be packed in a crushed form to be used in processing of jam and pies.

4.8. Sugared fruits

4.8.1. They must maintain its soft texture and most of its natural flavor and color.

4.8.2. They must be free from fermentation, bruises and insect, animal or fungal infections.

4.8.1. Sulfur dioxide or any of its salts may be added within 100 ppm.

4.9. Dried fruits:

4.9.1. Humidity must not exceed 24%, unless otherwise stipulated in the specific standard.

4.9.2. Sulfur dioxide or any of its salts must not exceed 1500 ppm.

4.9.3. They must be free from fermentation, bruises and insect, animal or fungal infections.

## 5. **Packing and Labeling**

Fruit preserves must be packed in standard packs to maintain product qualities. Packs have to fulfill the provisions of the Presidential decree 797/1957 concerning packs of food stuffs.
The following data should be clearly stated on packs and cases:

5.1. Name of fruit

5.2. Name, address, and trade mark of the producer.

5.3. Net weight. In case of canned fruits, fruit weight (excluding the sugar solution) must not be less than 60% of net weight.

5.4. Type and proportion of TSS. In case of non-reference to the type of sugar used, it would be considered sucrose only.

5.5. The descriptive grade of canned fruits.

5.6. Preservatives and their percentages, and coloring agents (if any).

5.7. Date of production and expiry date.

5.8. The phrase “Made in Egypt” if the product was locally produced.

## 6. **Examination and Testing**

Examination and testing will be conducted according to ES - 130/61 concerning fruit products.

## 7. **Technical Terminology**

| | |
|---|---|
| Fancy grade | Choice grade |
| Standard grade | Secondary grade |
| Water grade | Pie grade |
| Pectin | Sparkle |
| Spices | Quivering |
| Fruit Syrup | Pasteurized fruit juice |
| Frozen fruit juice | Concentrated fruit juice |
| Sterilized fruit juice | Dried fruit |
| Canned fruit | Fermented |
| Jam | Marmalade |
| Jelly | Cut out test |

**Partial Amendment No (1)**
**ES - 129/1986**
**Fruit Preserves**
**20/7/1988**

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2.1.3. Concentrated fruits juice: amend to read as follows:
"It is the natural fruit juice having concentrated its TSS Until they constitute no less than 40% of the juice, unless otherwise stipulated in the specific standards. However, sucrose or fructose or a mixture of both may be added to increase that percentage provided that this is clearly stated on the label."

3.5. Sugar substances used in processing fruit products are carbohydrate sugars, with the exception of fruit syrup rich in natural juice wherewith sucrose or fructose or a mixture of both are to be used, artificial sweetness are not permitted.

4.1.1. Amended to read as follows:
All or some of the following substances may be added.
A sugar solution
Ascorbic acid (not less than 200 p.p.m)
Organic acid (much as citric or tartaric or malic acid)

4.7.1. Fancy grade: amended to read as follows: the fruits must be mature, having the characteristic properties of the fruit species: size, color, degree of maturity, flavor, aroma and texture. Concentration of the sugar solution must not be less than 30% after the elapse of one month as of the date of preservation.

4.7.1. Choice grade: Amended to read as follows: the fruits must be mature, having all the characteristics of the fruit species such as size, color, and flavor. Concentration of the sugar solution must not be less than 25% after the elapse of one month as of the date of preservation.

5.6. Preservatives:
Name and percent of the preservative substance used.

**Partial Amendments introduced to ES 129/1986**
**Concerning Fruit Preserves**

| Serial no. | Before Amendment | After Amendment |
|---|---|---|
| **4.4.4.** | TSS in the final product must not be less than 68%. | TSS in the final product must not be less than 65%, provided that the following phrase is labelled: "The product must be consumed within one week of opening the pack which must be kept in a cold place." |
| **4.4.5.** | In case of non-treatment with heat, it is permissible to add benzoic or sorbic acid or one of their salts or a mixture of both; provided that the quantity added does not exceed 250 p.p.m. | In case of non-treatment with heat or the treatment with heat of packs whose weight exceeds 2 Kgms, benzoic or sorbic acid or one of their salts provided that the quantity added should not exceed 250 p.p.m., calculated as benzoic or sorbic acid. |
| **3.9.** | Fruit preserves must be free from pathogenic micro-organisms. | The product must be free from micro-organisms capable of growth under normal storage conditions; and must be free from their toxic execrations. |

ARAB REPUBLIC OF EGYPT

ES: 2728 - 1994
UDC 634 . 367

Egyptian Standard
2728 - 1994

# DRY PULSES

EGYPTIAN ORGANIZATION FOR STANDARDIZATION AND QUALITY CONTROL

Egyptian Standard
2728 - 1994

# Dry Pulses

## -1- The Scope

This Egyptian Standard covers the general conditions and specifications relating to the following Dry Pulses: Cow peas. beans. chick peas. lupine. split field beans. and peas. for indirec t alimentary uses.

## -2- Definitions

2/1 Cow Peas (vigna unguiculata):- they are the dry peas extracted from the pea plants and maintain their seed coats.

2/2 Beans (phasealus tipp):- they are the dry beans extracted from the bean plants and maintaining their seed coats.

2/3 Chick Pea s (cicer arientinum):- they are the dry chick peas extracted from the chick pea plants and maintaining their seed coats.

2/4 Lupine Seeds:- they are the dry seeds extracted from the Lupine plant.

2/5 Split field beans:- they are th e split pulses obtaine d from the dry, unbroken field beans after removal of the seed coats.

2/6 Peas (pisum sativum):- they are the dry peas obtained from the pea plants and maintaining their seed coats.

## -3- General Conditions

3/1 Seeds should be whole, ripe and clean.

3/2 Seeds should be homogeneous in size an d colour - subject to species.

3/3 Seeds should maintain their seed coats.

3/4 The whole or split seeds should be free from insects or their parts and Rodents' remnants.

3/5 Dirt. alien substances and other defects should be in conformity with the relevant specification.

3/6 If the product is in the shape of separated halves o f split pulses. it should preserve the living characteristics distinguishing the brand.

3/7 Radiation levels should be within the limits permitte d by competent authorities.

3/8 Ephelatoxin levels should not exceed the limits stipulated in the ES No. 1875

3/9 Residues of pesticides should b e within the limits specified and issued by F.A.O. and the specifications of ES issued in this regard.

-4- Specifications

4/l Humidity should not exceed 11% in case of whole seeds. for one cropping year.

4/2 Humidity should not exceed 13% in case the product was in shape of halves. for one cropping year.

4/3 Percentage of seeds afflicted by blights or fungus or damaged should not exceed 1% of the weight.

4/4 Total percentages of other defects should not exceed 7 % **of** the weight. however. the percentage of each defect should not exceed the limit as specified in the following table:-

| Product / Defects | Maximum Defects | |
|---|---|---|
| | Whole Seeds | Split Seeds |
| Dirt & extraneous materials (mud. stones, metal parts. parts of other plants, other seeds, dead bugs, parts of animal origin) | 2 | 1 |
| Percentage of broken seeds | 2 | 4 |
| Percentage of half seeds with coats | | 2 |
| Percentage of seeds or halves with different size or species | 3 | 3 |
| Percentage of whole seed in halves | | 2 |
| Percentage of seeds with different colour | 2 | 6 |

4/5 The product should be free from fungal growth.

4/6 The product should be free from ishercia culi bacteria.

4/7 The product should b e free from microbes causing diseases and its poisons.

Packages and Data

5/1 Products are to be packed in suitable, and clean package that protects its natural characteristics. and prevents its damage.

5/2 Used packages should be in consistency with its respective Standard.

5/3 In addition to the decrees issued in connection with the data that should be written on foodstuff packages, the following data should be indicated:-

5/3/l Name & species of the product (whole seeds - split halves)

5/3/ Name of producer or agent. his address and trademark if any.

5/3/3 Production date and validity period.

5/3/4 Net & Gross weight.

5/3/5 Storing and handling provisions

5/3/6 The phrase "Product of A.R.E." in case of local product, and the country of origin in case of importation.

-6- Checking and Testing Method

According to the Standard specifications issued in this regard.

-7- Technical Terms

Cow peas (vigna unguiculata)
Beans (phasealus hpp)
Chick peas (cicer arientinum)
peas (pisum sativum)
Field beans (vicia faba)
Lupine

**Seed** coat
shelled pulses
Split pulses

-8- References

Codex Stan. 171-8
for certain pulses
Codex Alimentarius Commission

# THE EGYPTIAN ORGANIZATION FOR STANDARDIZATION AND QUALITY CONTROL

Law No. 2/1957 has provided for the establishment of an independent organization to be th e National Competent Authority reference for all affairs of standardization in the country, to undertake the settin g out of standards for ail the inputs of industry, such a s raw materials, products, technical processes, instruments. machines. gauges and measuring units, and approved references for unified terms and symbols.

For the implementation of this law, the Presidential Decre e No. 29/1957 was issued to decide the establishment of th e Egyptian Organization for Standardization and Quality Control, with the competence of coordinating work among the departments, authorities and organizations operating in the fields of standardization and directing them to the following purposes:

1- Finding approved references for unified criteria.

2- Issuing standards for raw materials and products , unified classifications, technical terms, definitions and symbols.

3- Providing means and methods capable of realizing the conformity of raw materials and goods to the approved standards.

4- Facilitating the procurement of alternative and mutual pieces and to raise the standard of local production.

5- Coordinating standardizatio n actions in the Republic of Egypt with their international Counterparts.

The Organization shall be managed by a board of directors to be chaired by the concerned Under Secretary, including 23 members representing various authorities concerned with standardization , quality control and collaboration.

The Organization has two standing committees one for standards and the other for calibration, and both are concerned with working out and follow up the implementation of technical programmes in the framework of the plan approved by the board of directors.

The Organization follows the system of fixing quality marks on goods and products conforming to the Egyptian Standards as a means of protecting consumers and motivating producers to raise the standard of their production to the level of th e Egyptian Standards, such system is implemented by the Executive Committee for Quality Mark, formed by a decision of the board of directors.

The quality mark consists of an ornamental shape containing the initials of the term “Egyptian Standard” in Arabic and the two English letters ES as an abbreviation of the two words “Egyptian Standard."

Arab Republic of Egypt

Egyptian Standard
No. 517 - 1474 / 1987

# Coffee and its Products

The Egyptian Organization for Standardization and Quality Control

# Coffee and its Products

## Introduction

This Standard supersedes and replaces Standard No. 517/1964 concerning coffee and its products and Standard No. 1474 /1980 concerning: instant coffee powder , and as an amendment of Standard No . 517/1474/1986 concerning coffee and its products.

## -l- The Scope

This Standard includes th e general conditions and the particular specifications of coffee beans , roasted coffee beans , roasted crushed coffee , ground coffee, instant coffee and decaffeinated coffee, and testing and checking methods.

## -2- Definitions

### 2-1 Coffee Beans

It is all kinds of coffee after removing fruit cover.

### 2-2 Roasted Coffee Beans

It is the coffee beans treated with heat for roasting to give it the desired colour and flavour after removing extraneous matters, broken and defective grains therefrom.

### 2-3 Roasted Crushed Coffee

It is the output of crushing the whole beans of roasted coffee. Some allowable spices may be added .

### Ground Coffee

It is the output of grinding the roasted coffee beans. Some allowable spices may be added .

### 2-5 Instant Coffee

It is the output of drying the watery concentrate of recently roasted pure coffee beans. It is in the form of instant powder or granules.

2-6 Decaffeinated Coffee

It is the coffee from which most of caffeine is excluded.

## -3- General Conditions

3-1 Coffee beans should be homogeneous preserving their natural properties which distinguish the brand.

3-2 Roasted coffee beans should have homogeneous colour ranging between light and dark brown

3-3 Roasted coffee beans and its products should be free from extraneous matters.

3-4 Crushed coffee should be homogeneous in size.

3-5 Ground coffee should be of homogeneous smoothness.

3-6 Crushed, ground and instant coffee should be homogeneous in colour and free from filling matters.

3-7 It is not permitted to add any carbohydrates to coffee and its products.

3-8 Ground and instant coffee should be flowing and not agglomerated

3-9 Instant coffee should dissolve completely in hot and cold water.

3-10 It is not permitted to add any colouring matters.

3-11 Coffee beans and its products should be free from extraneous taste and smell, keeping its distinguished smell and flavour.

3-12 Coffee beans should be free from insects, their parts, cycles, secretions and rodent wastes.

3-13 Insecticides residuals should be within the internationally allowable limits.

3-14 Dissolvants used in preparing decaffeinated coffee should be hygienically permitted, and the product should be free from dissolvant residuals.

3-15 Manufacturing instant coffee should be made in factories fulfilling hygiene and health conditions approved by the concerned authorities.

3-1 6 Equipment and machines used in manufacturing instant coffee should be clean and free from any unacceptable smells.

## -4- Specifications

### 4-1 Coffee beans.

#### 4- 1- 1 Excellent Grade.

4-l -1-1 It should be free from any extraneous matters (metals and animal or plant matters) except coffee grains.

4-l-1-2 Defective grains percentage should not excee d 1%. (defective grains mean broken grains an d grains in the form of shell, distorted. dr y cherry, black. semi-black, not ripe , spongy, low density, scarred, scratched puree. grains inside fruit cover or grains with holes made by insects.)

4-1-1-3 Broken grains percentage should not exceed 2% broken grains mean (a part of the coffe e grain in size equals or larger than half grain)

4-1-1-4 Humidity should not exceed 10%.

4-l-1-5 Caffeine should not be less than 1%.

4-l- l-6 Fat matter percentage should not be less than 10%.

#### 4-1-2 Standard grade

4-1-2-1 Extraneous matters should not exceed 2% (metals or animal and plant matters) except coffee grains.

4-l-2-2 Percentage of defective grains should not exceed 5% (they mean broken coffee, grain in the form of a shell, distorted one, cherry shape, black and semi black, not ripe, spongy, low density, scarred, withered, scratched puree, and grain inside fiuit cover or with holes made by insects). By broken (it means that grain size is less than half grain)

4-I-2-3 Percentage **of** broken grains should not exceed 10% (by broken grains. it is meant that a part from grain size equals or more than half grain )

4-1-2-4 Humidity percentage should not exceed 10%

4-1-2-5 Caffeine should not be less than 1%

4-1-2-6 Fat matter should not be less than 10%

4-l-3 Coffee beans used to produce instant coffee

4-1-3-l Percentage of broken grains should not exceed 15% (it means a part of coffee grain in a size equals or more than half grain)

4-l-3-2 Percentage of defective grains and extraneous matters should not exceed 12% provided that extraneous matters should not exceed 3%. Defective grains mean broken grains. grain in the form of a shell. distorted one , dry cherry, black and semi-black , not ripe , spongy, of low density, scarred. withered, scratched puree. and a grain inside fruit cover).

Broken means a part of the grain size which is less than half grain size. Extraneous matters means metals , animal and plant matters except coffee grains.

4-l-3-3 Humidity should not exceed 10%.

4-1-3-4 Caffeine percentage should not be less than 1%.

4-l-3-5 Fat matters should not be less than 10%.

4-2 Whole roasted coffee beans in both excellent and standard grades.

4-2-l Humidity should not exceed 5%.

4-2-1 Fat matter should not be less than 13%.

4-2-3 Caffeine should not be less than 1%.

4-2-4 Burnt coffee grains percentage in excellent grade should not exceed 1% and in standard grade 5%.

4-3 Crushed and ground coffee

4-3-l Humidity should not exceed 8%

4-3-2 Fat matter should not be less than 13%

4-3-3 Caffeine should not be less tha n 1%.

4-3- Total ash percentage should no t exceed 5%

4-3- Insoluble ash in roast shall not excee d 0.5%

4-3-6 Alkaline ash dissolved in water should not be less than 40 ml standard acid to each 100 gm.

4-3-7 Percentage of cold water extract should not be less than 18%

4-3-8 Percentage of hot water extract after 20 minutes should not be less than 23%.

## 4-4 Instant Coffee

4-4-l Humidity should not exceed 3.5%

4-4-2 Caffeine percentage should not be less than 2.8%

4-4-3 Ash percentage should range between 7- 11% calculated on dry matter

4-4-4 Alkaline of ash dissolved in water ranges between 80-120 ml standard acid for each 100 gm.

4-4-5 Coffee dissolves completely in cold water a t 16° C +/-2 by manual stirring within not more than 3 minutes.

4-4-6 Coffee completely dissolves in boiled water by manual stirring within a period not more than 30 seconds.

## 4-5 Decaffeinated Coffee

4-5-l Specifications of decaffeinated coffee should be as per the product from which it is prepared

4-5-2 Caffeine percentage should not exceed 0.2% calculated on the dry matter.

4-5-3 Used dissolvants should be hygienically permitted and product should be free from dissolvant residuals.

4-6 Copper percentage should not exceed 30 parts per million.

4-7 Arsenic percentage should not exceed one part per million.

4-8 Lead percentage should not exceed 0.5 part per million.

4-9 Number of colonic group bacteria in roasted crushed ground and instant coffee should not exceed 10 microbes per one gram.

4-10 Roasted crushed ground and instant coffee should b e free from ideal colon bacteria.

1-l1 Roasted crushed ground and instant coffee should be fre e from salmonella.

4-12 Coffee beans and its products shouid be fre e from fungus and its poisons.

## -5- Packages and Data

5-l Coffee and its products should be packed in suitable packages to protect it from any pollution leading to a change in its properties or its validity and suitability for human consumption . They should be identical to and in compliance with the Presidential Decree No. 798 /1957 concerning containers used in packing foodstuffs, and Standard No . 340/1963 concerning paper packages for foodstuffs.

5-2 The provisions of the Ministerial Decree No . 354/1985 should be followed concerning obligating the local industrial establishments producing canned frozen and packed foodstuffs to abide by the data to b e affixed on their packages of food products.

5-3 The following data should be written on the package in Arabic language in a way not to be effaced or erased, in apparent block letters and matching with the package size, or on a label which is not easy to remove. They may be written also in any other foreign language.

5-3-l Name, address, and trademark of the producer

5-2-2 Type of brand, its grade in case of coffee beans and roasted coffee.

5-3-3 Name of spices if added thereto.

5-3-4 Net weight of package contents.

5-3- Production date and expiry date in month and year.

5-3-6 The phrase "Made in Egypt" for local product, and country of origin for imported product.

## -6- Methods of Checking and Testing

Methods of test and examination shall be effected as per the Standard of methods of testing and checking of coffee and its products.

## -7- Technical Terms

Coffee Beans
Roasted Coffee Beans
Crushed Coffee
Ground Coffee
Decaffeinated Coffee
Instant Coffee

## -8- References

1- International Standards (ISO)
4149/1980 - 4072/1982
3509/1984 - 374611985

2- Coffee Solubilization
Commercial Processes and Techniques
By: Nicholas Pintauro. 1975.

3- Pearson
Chemical Analysis of Foods 1981
Eighth Edition

4- Micheal Sivetz, C.H.E . & Norman W. Oesrosier
Coffee Technology
The Avi Publishing Company, West Port, Connecticut, 1979.

5- Indian Standard
No. 2741.1964
No. 351. 1966

6- Philippe Jobin
The Coffee Produced Throughout the World
P. Jobin et Co, 0 Rve Marecnet
de lattre - deTassigny
Le lavre (TB) France 1980

Authorities which participated in preparing this Standard:

(1) Central Labs - Ministry of Health

(2) Chemistry Department

(3) Ministry of Supply

(4) The National Research Center

(5) Faculty of Agriculture. Cairo University

(6) Misr Coffee Co.

(7) The General Authority for Export and Import Control.

Industrial Control Department.

# THE EGYPTIAN ORGANIZATION FOR STANDARDIZATION AND QUALITY CONTROL

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3- Providing means and methods capable of realizing the conformity of raw materials and goods to the approved standards.

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**Arab Republic of Egypt**
**Ministry of Industry and Mineral Wealth**
**ES 2855 - 1995**

**Egyptian Standards**
**No. 2855 - 1995**

# POLYETHYLENE TEREPHALATE PACKS

# USED IN PACKING FOODSTUFFS

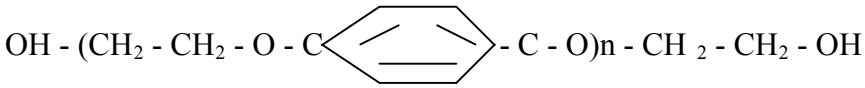
**Egyptian Organization for Standardization**
**and Quality Control**

**Polyethylene Terephalate Packs**
**Used in Packing Foodstuffs**

## 1. Scope

These standards covers the general conditions and the special specifications of plastic packs made of polyethylene terephthalate and used in packaging foodstuffs.

## 2. Chemical Structure



Chemical Symbol: $(OC\ OC_6\ H_4\ C\ CO\ CH_2\ .\ CH_2)n$

## 3. General Conditions

3.1. Provisions of ES 2144/92 shall be observed; in terms of the general conditions to be fulfilled in plastic packs used in packing foodstuffs.
3.2. The raw material used in manufacturing the packs must be of a food packing grade which must be appropriate to the packed food.
3.3. The pack must preserve the product's properties in terms of flavour and odor and must not interact with it.
3.4. The pack must not allow permeability either from within or without.
3.5. It must endure pressures and shocks; and be resistant to outbreak.
3.6. It must keep a vertical position on a horizontal surface.
3.7. In case of using a base beneath a pack, it should not separate under normal circumstances.
3.8. It should have an aperture which can be tightly closed.
3.9. It should be characterized by the least acceptable volumetric expansion under normal handling conditions.
3.10. It should not show any change in colour and appearance during storage under normal conditions.
3.11. The pack's wall should be uniform in terms of thickness and must be free from any deformations.
3.12. Hygienically-permissible colours may be added to the raw material during manufacturing according to the type of product and the client's wish.

## 4. Standards and Specifications

4.1. Raw material from which the pack is made must have the following standards:
4.1.1. Humidity must not exceed 0.005%
4.1.2. Absorption capacity should not exceed 0.02% after soaking in water at $23^0$C for 24 hours; and 0.1% having been soaked in water at $100^0$C for two hours.
4.1.3. Specific weight: 1.37 - 1.40
4.1.4. Elongation: 300% to the point of being torn apart.
4.1.5. Vicat softening:$261^0$C
4.1.6. Melting point: 250 - $265^0$C

4.1.7. Shrinkage at $150^0$C for 30 minutes: 2-3%

4.2. Acetaldehyde released from the pack in the vertical vacuum of a colorless transparent pack - having been filled in with nitrogen and stored at $20^0$C for 24 hours - must not exceed 3 microgram/L (3 Ug/L).
4.3. Allowability in pack's weight is ± 0.3% of official weight.
4.4. Allowability in pack's capacity at $20^0$C for 3 days is ± 0.08%.
4.5. deviation from verticality of an empty pack must not exceed 2.4 mm (0.094 inch)
4.6. Self-viscosity degree is 0.70 - 0.72 mm/10 min. in case of packs used in packaging oils, juices and vinegar. In case of packs to be used in packing mineral water or gaseous water, viscosity degree ranges between 0.80 - 0.82 gm/10 min.

## 5. Packs and Labeling

Units of the foodstuffs shall be into the containing packs, provided that the following data are either printed thereon or on the label:
5.1. Name of the producing company and its trade mark.
5.2. Number of the containing pack.
5.3. Number of units per containing pack
5.4. Weight of unit
5.5. Color of unit
5.6. Date of production
5.7. The phrase "Made in Egypt" in case the product is produced locally.

## 6. Technical Terminology

Polyethylene Terephthalate
Vicat softening

## 7. References

Modernor Plastics Encyclopedia 1976 - 1977

## 8. Participating Agencies

1. Food Research and Development Center
2. El Nasr Glass and Crystal Company
3. National Research Center
4. The Egyptian European Company for Advanced Plastics
5. MISROB
6. Coca Cola International
7. National Plastic Company
8. GOIEC
9. Chemistry Department Central Laboratories - MOH

**Egyptian Standards**

**No. 3019 - 1996**

# GENERAL CONDITIONS FOR DISPOSABLE HARD AND SEMI-HARD PLASTIC GLASSES AND PACKAGES USED FOR PACKING FOOD STUFFS

Arab Republic of Egypt
Ministry of Industry and Mineral Wealth,
Egyptian Organization for Standardization and Quality Control.

**General Conditions for Disposable Hard and Semi-Hard Plastic Glasses and Packages Used for Packing Food Stuffs**

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## 1. Scope

These standards cover the general conditions to be observed in the production of glasses and packs and their lids made of disposable hard and semi-hard plastic used for packing food stuffs.

## 2. Chemical Structure

Cups, packages and their lids are manufactured from suitable plastic materials which must be good for foodstuffs; such as polyethylene and polyesteriarene.

## 3. General Conditions

3.1. The material used in manufacturing must be homogeneous and conferment with its approved standards.
3.2. The pack should be free from defects, deformities and air sacs.
3.3. Surfaces of the glasses and packs must be homogenous in colour and brightness.
3.4. The material used in manufacturing the packs must not affect the composition and properties of the packed stuff.
3.5. The pack should be free from any odour or flavour that may affect properties of the packed stuff.
3.6. The pack's capacity and thickness of wall must suit the purpose for which it was manufactured.
3.7. The pack must be resistant to breaking during transportation and handling.
3.8. Edges of the glasses must be straight and not sharp so that they can be tightly closed for the preservation of the packed stuffs.
3.9. When placed after packing in the appropriate temperature, the pack's shape, dimensions and measurements must remain intact.
3.10. Glasses and packs must be placed above each others in a manner that facilitate their manipulation.
3.11. The pack's lid should be designed in a manner that facilitate tight closure by the following methods:
  3.11.1. A lid that can be tightly closed by heat on the upper surface of the edge.
  3.11.2. A lid that can be closed by pressure.
  3.11.3. A lid that can tightly closed by twisting around the lower surface of the edge.

3.12. The ink used in printing and the plastic's colouring materials must be acceptable nutritionally and in conformity with their respective standards.
3.13. The pack must not break if thrown 3 times randomly from a 75 cm height having been filled in with water and tightly closed.
3.14. when filled in with the product and placed in a reserved position, the pack's lid remains light and no leakage is evident.

3.15. All raw materials used in manufacturing plastic glasses and packs must have a known origin and chemical structure so as to avoid the use of previously used substances.

## 4. Measurements

4.1. Glasses and packages must befit the purpose for which they are manufactured.
4.2. Standard capacities are as follows: 1000, 500, 250, 200 and 100 $cm^3$
4.3. Glasses and packages made of polyesteriarene:
The following table specifies their capacity, weight and thickness:

| **Capacity** | **Weight (gm)** | **Thickness (mm)** |
|---|---|---|
| 1000 $cm^3$ | 25 | 0.25 - 0.45 |
| 500 $cm^3$ | 16 | 0.35 - 0.45 |
| 250 $cm^3$ | 8 - 11 | 0.25 - 0.45 |
| 200 $cm^3$ | 6 - 8 | 0.25 - 0.45 |
| 100 $cm^3$ | 4 - 6 | 0.20 - 0.35 |

with permissible discrepancy of I 0.05

## 5. Packs and Labeling

5.1. Immediately after manufacturing, the empty glasses and packs must be put inside appropriate container packages made according to standards pertaining to them; in order to protect them against dirt and dust and breaking.
5.2. The following data shall either be printed directly on the container package or on a labeling card to affixed to it:
5.2.1. Name, Address and Trade mark of producer.
5.2.2. Country of origin, in case of importing.
5.2.3. Number of units per container package.
5.2.4. Nominal capacity of each pack in $cm^3$.
5.2.5. The phase "Made in Egypt" in case of local production.
5.2.6. Any other conditions relating to use, handling and storage, whenever such information is necessary.

## 6. References


1. Jordanian Standards No. 614/89:
"Disposable Glasses and Packs Made of Hardened and Semi Hardened Plastics for Packing (Bottling) Beverages and Dairy Products and for Similar Purposes"

2. ES - 1516/81:
"Plates of Highly Shock-Resistant Polyesteriarene for Manufacturing Packages".


**Agencies which took part in preparing these standards:**

1. Food Research and Development Center
2. GOEIC
3. Coca Cola International Inc.
4. National Plastic Company

5. Drug Packs Company
6. Central Laboratories of MOH
7. El Nasr Company for Glass and Crystal
8. Abdul Hakim Hashem Plastic Company

## APPENDIX 3

## EOS REVISED FOOD PRODUCT STANDARDS

1. Fruit Juices
2. Tomato Concentrates
3. Canned Tomatoes
4. Tomato Ketchup (Catsup)
5. Canned Fruits
6. Jams (Preserves) and Jellies
7. Citrus Marmalade
8. Dry Pulses
9. Milk Powders
10. Processed Cheese
11. Hard Cheese
12. Hard Cheese-Cheddar
13. Fermented Milks
14. Frozen Meat
15. Frozen Meat Burger
16. Canned Salmon Fish
17. Canned Tuna Fish and Canned Bonito Fish
18. Smoked Fish
19. Frozen Fish
20. Frozen Fish Fillets
21. Frozen Shrimps
22. Packaged Anchovies

**EGYPTIAN ORGANIZATION FOR STANDARDIZATION**

# PROPOSED DRAFT GENERAL STANDARD FOR FRUIT JUICES PRESERVED EXCLUSIVELY BY PHYSICAL MEANS[1]

**STANDARD NO. 129-1986 (Amended, 1990)[Fruit Juice Sections Only]**
**DATE OF REVISION:** March 23, 1998.

Primary references used for the preparation of this draft are: 1) Egyptian Standard 129-1986, Fruit Preserves; and, 2) Codex Alimentarius General Standard for Fruit Juices Preserved Exclusively by Physical Means Not Covered by Individual Standards, Codex Standard 164-1989. Judgment has been used in incorporating, not incorporating or modifying elements of both Standards into this working draft. The Codex Alimentarius General Standard for Fruit Juices was published in 1989. It has not been updated into the format currently being used for revised standards. Currently, there are no known plans for Codex to revise this standard. This draft is prepared, however, based on the revised format.

This Standard is confined to essential provisions relating to public health, food safety and consumer protection. The Annex to this Standard contains voluntary quality and compositional provisions to be used by buyers and sellers as the basis of sales or purchase agreements to facilitate trade. The Annex does not however, form part of the Standard, and acceptance of the Standard by the Egyptian Organization for Standardization or other Egyptian Governmental Bodies does not imply acceptance of the Annex.

## 1.0 SCOPE

**1.1** This standard applies to fruit juices, made from fruit of a single species, as defined in Section 2.0 for which an individual specie fruit juice standard does not exist.

**1.2** The standard does not apply to:

a. Fruit juices prepared from a single specie for which there is a specific standard.
b. Fruit juices prepared from a blend of individual fruit species.
c. Fruit drinks or other fruit juice products in which the fruit juice content is less than specified by this standard.

[1]Prepared by the Egyptian Organization for Standardization in Coordination with the Development Economic Policy Reform and Analysis Project (DEPRA), Nathan Associates Inc., Arlington, VA, USA.

## 2.0 DESCRIPTION

### 2.1 Definition

Fruit juice is the unfermented, but fermentable juice (pulpy, turbid or clear) intended for direct consumption, obtained by a mechanical means from sound ripe fruit or the flesh thereof of a single fruit specie, and preserved exclusively by physical means. The juice many have been concentrated and later reconstituted with water suitable for the purpose of maintaining the essential composition and quality factors of the juice.

### 2.2 Other Definitions

**2.2.1** Concentrated Fruit Juice

Concentrated fruit juice in the unfermentable product, which is capable of fermentation after reconstitution, obtained from the juice of sound, ripe fruits, from which the water has been removed to the extent that the product has a soluble solids content of not less than double the content of the original juice intended for direct consumption. The product may be preserved exclusively by physical means and may be clear or turbid. The addition of sugars or acids is permitted and must be declared on the product label.

## 3.0 ESSENTIAL COMPOSITION AND RELATED FACTORS

### 3.1 Raw Material

1.1.1 Fruit juice as defined in Section 2.0.
1.1.2 Concentrated Fruit Juice as defined in Section 2.2.1.
1.1.3 Water

### 3.2 Composition

3.2.1 Soluble Solids

The soluble solids content of the fruit juice ingredient shall not be less than a value which corresponds to the soluble solids content of the ripe fruit as determined by an appropriate standard methods, uncorrected for acidity and read as ºBrix on the International Sucrose Scales.

3.2.2 Sugars.

One or more sugars permitted by the Egyptian Organization for

Standardization (EOS) may be added to obtain the correct sugar/acid balance.

3.2.3 Ethanol content.

The ethanol content shall not exceed 5 g/kg.

3.2.4 Use of concentrates.

The addition of concentrate to juice is permitted. Only concentrates obtained from the same type of fruit may be used.

### 3.3 Related Factors

3.3.1 The fruit juice product shall be of normal color, aroma taste and flavor for the specific fruit type used in its manufacture. Natural volatile components may be restored to any juice obtained from the same type of fruit from which the natural volatile juice components were removed.

3.3.2 If preservation is by refrigeration or freezing, the product shall be kept continuously and fully refrigerated or frozen as appropriate for the product.

## 4.0 FOOD ADDITIVES

Only food additives permitted by the permitted by the Egyptian Ministry of Health may be used.

## 5.0 CONTAMINANTS

### 5.1 Pesticides

Pesticide residues for the fruit ingredient(s) used for the manufacture fruit juices included in this standard must not exceed Maximum Residue Levels specified by the Egyptian Organization for Standardization (EOS).

### 5.2 Heavy Metals

Heavy metal contaminant levels must not exceed those specified by the Egyptian Organization for Standardization (EOS).

### 5.3 Radionuclides

The level of radioactivity for products included within this Standard shall be within limits proscribed by recognized international standards setting bodies.

## 6.0 HYGIENE

Fruit juices produced under this standard must:

6.1 Be prepared and handled in accordance with: good manufacturing practices [specify Egyptian EOS and MOH regulations including microbiological criteria if applicable ]; Codex Alimentarius Recommended International Code of Practice- General Principles of Food Hygiene and any other applicable Codes of Hygienic Practice (specify).

6.2 To the extent possible in good manufacturing practice, be free from objectionable material (e.g., insect parts, rodent hair/excreta, foreign objects- rock, glass, metal).

6.3 When tested by appropriate methods of samples and examination:

a) Be free from microorganisms in which may represent a hazard to health.
b) Be free from parasites; and,
c) Not contain any substance originating from microorganisms in amounts which may represent a hazard to health.

## 7.0 PACKAGING

**7.1** Fruit juices manufactured or offered for sale under this Standard shall be packaged in containers that will safeguard the hygienic, nutritional, and organoleptic properties of the food.

**7.2** The containers, including packaging and wrapping material, shall be made from substances that are safe and suitable for their intended use. They shall not impart any toxic substance or undesirable odor or flavor to the product.

## 8.0 LABELING

Prepackaged products covered by this Standard shall be labeled in accordance with the Codex General Standard for the Labeling of Prepackaged Foods.

**8.1** Name of the Food.

8.1.1 The name of the food shall be "x" juice or pulpy "x" juice where "x" is the common name of the fruit.

8.1.2 If the quantity of added sugar or sugars exceeds 15 gr./kg the words "x added" shall plainly and conspicuously accompany the name of the product where "x" represents the name or names of the sugar or sugars added.

8.1.3 In the case of fruit juice made from concentrate, the fact of reconstitution shall be declared as follows: "x juice made from concentrate" or "x juice made from concentrated "x" juice", where "x" represents the name of the fruit from which the juice has been obtained. The information shall be given in close proximity to the name of the food or in another prominent position on the label.

**8.2** Mandatory Declarations

The following items must appear in Arabic (and other languages as appropriate) on the label of the product in conformity, as appropriate, with the Codex General Standard for the Labeling of Prepackaged Foods.

**8.2.1** Name of the product.
**8.2.2** Name and address of the manufacturer.
**8.2.3** Net weight or volume.
**8.2.4** List of ingredients in descending order of predominance including all direct additives and preservatives.
**8.2.5** Production date and date of durability.
**8.2.6** Country of origin. Products manufactured in Egypt must use the phrase "Made in Egypt".

**8.3** Country of Origin.

Country of origin is the country in which the juice product was manufactured.

**8.5** Date Marking (Date of Durability).

**[**The date of durability shall be determined by the manufacturer taking into consideration the nature of the product and its manufacturing and storage conditions, and the climatic, distribution and retail sale characteristics of Egypt. **]**

Note: information in brackets (**[ ]**) should be further discussed.

**8.6** Labeling of Non-retail Containers.

The name of the product, lot identification and the name and address of the manufacturer or packer must appear on the container. Other required labeling information, if not provided on the container, must be provided in accompanying shipping documents.

## 9.0 METHODS OF ANALYSIS

[To be specified.]

**ANNEX**
**STANDARD NO. 129-1986**
**FRUIT JUICES PRESERVED EXCLUSIVELY BY PHYSICAL MEANS**

This Annex is not intended as a standard, guideline recommendation, or technical regulation within the meaning of the Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) Agreements. Provisions provided within this Annex are not considered as essential for public health, food safety or consumer protection. These provisions are of a voluntary advisory nature intended to assist users; they reflect quality factors and criteria that may be used by commerce to define or describe the quality of the product and which may form part of contracts between buyers and sellers. Individual merchandisers should independently determine their product quality needs. Provisions of this annex do not constitute regulatory provisions of the Egyptian Organization for Standardization or any other Egyptian Governmental Body.

## 1.0 OTHER COMPOSITION OR QUALITY FACTORS

### 1.1 Formulation

### 1.2 Other Quality Factors

## 2.0 WEIGHTS AND MEASURES

Fill of container information should be given here.

## 3.0 OTHER LABELING FACTORS

**EGYPTIAN ORGANIZATION FOR STANDARDIZATION**

# PROPOSED DRAFT GENERAL STANDARD FOR PROCESSED TOMATO CONCENTRATES[1]

**STANDARD NO. 132-1990 [Concentrated Tomato Sections Only]**
**DATE OF REVISION: March 23, 1998.**

Primary references used for the preparation of this draft are: 1) Egyptian Standard 132-1990-Preserved Tomato Products; and 2) Codex Draft Revised Standard for Processed Tomato Concentrates, ALINORM CL 1997/1-PVF, Appendix XXXVII. Judgment has been used in incorporating, not incorporating or modifying elements of both Standards into this working draft.

This Standard is confined to essential provisions relating to public health, food safety and consumer protection. The Annex to this Standard contains voluntary quality and compositional provisions to be used by buyers and sellers as the basis of sales or purchase agreements to facilitate trade. The Annex does not however, form part of the Standard, and acceptance of the Standard by the Egyptian Organization for Standardization or other Egyptian Governmental Bodies does not imply acceptance of the Annex.

## 1.0 SCOPE

This standard applies to processed concentrated tomato products as defined in Section 2.0. The standard does not include the products commonly known as, chili sauce and ketchup (catsup), or similar products which are highly seasoned products of varying concentrations containing characterizing ingredients such as pepper, onions, vinegar, sugar, etc., in quantities that materially alter the flavor, aroma and taste of the tomato component.

## 2.0 DESCRIPTION

### 2.1 Definition

**2.1.1** Processed tomato concentrate is the product:

a) Prepared by concentrating the juice obtained from washed, ripened tomatoes, conforming to the characteristics of the fruit of *Lycopersicum esulentum* P. Mill, of red or reddish varieties (cultivars), which are clean and substantially sound. The juice is strained or otherwise prepared to

[1]Prepared by the Egyptian Organization for Standardization in Coordination with the Development Economic Policy Reform and Analysis Project (DEPRA), Nathan Associates Inc., Arlington, VA, USA.

exclude skins, seeds and other course or hard substances in the finished product.

b) Preserved by physical means.

**2.1.2** Tomato Sauce is tomato concentrate that contains more than 4% but less than 10% natural tomato solids.

**2.1.3** Tomato Puree is tomato concentrate that contains not less than 8% but less than 18% of natural tomato solids.

**2.1.4** Concentrated Tomato Puree is tomato concentrate that contains more than 18% but less than 24% of natural tomato solids.

**2.1.5** Tomato Salsa is tomato concentrate that contains not less than 22% but not more than 28% natural tomato solids.

**2.1.6** Tomato Paste is tomato concentrate that contains 28% or more of natural tomato solids.

## 3.0 ESSENTIAL COMPOSITION AND RELATED FACTORS

### 3.1 Raw Material

- Concentrated tomato products as defined in Section 2.0 above.

### 3.2 Other Permitted Ingredients

- Salt
- Seasonings (permitted in tomato sauce only)

### 3.2 Related Factors

**3.2.1.** Preserved tomatoes shall have normal flavor, odor, and color and shall possess a consistency characteristic of the product.

**3.2.2** The pH of concentrated tomato products shall not exceed 4.5.

## 4.0 FOOD ADDITIVES

Only food additives permitted by the Egyptian Ministry of Health may be used.

## 5.0 CONTAMINANTS

### 5.1 Pesticides

Pesticide residues for the tomato and other ingredients used for the manufacture of preserved tomato products included in this standard must not exceed Maximum Residue Levels specified by the Egyptian Organization for Standardization (EOS).

### 5.2 Heavy Metals

Heavy metals shall not exceed limits specified by the Egyptian Organization for Standardization.

### 5.3 Radionuclides

The level of radioactivity for products included within this Standard shall be within limits proscribed by recognized international standards setting bodies.

## 6.0 HYGIENE

Preserved tomato products must:

**6.1** Be prepared and handled in accordance with: good manufacturing practices [specify Egyptian EOS and MOH regulations including microbiological criteria if applicable]; Codex Alimentarius Recommended International Code of Practice- General Principles of Food Hygiene, Code of Hygienic Practice for Low-Acid and Acidified Low-Acid Canned Foods, and any other applicable Codes of Hygienic Practice (specify).

**6.2** To the extent possible in good manufacturing practice, be free from objectionable material (e.g. insect parts, rodent hair/excreta, foreign material- rock, glass, metal).

**6.3** When tested by appropriate methods of samples and examination:

c) Be free from microorganisms in which may represent a hazard to health.
d) Be free from parasites; and,
e) Not contain any substance originating from microorganisms in amounts which may represent a hazard to health.

**6.4** Viable yeast and mold count shall not exceed 10 organisms per gram of product.

## 7.0 PACKAGING

**7.1** Preserved tomato concentrate products manufactured or offered for sale under these Standards shall be packaged in containers that will safeguard the hygienic, nutritional, and organoleptic properties of the food.

**7.2** The containers, including packaging and wrapping material, shall be made from substances that are safe and suitable for their intended use. They shall not impart any toxic substance or undesirable odor or flavor to the product.

## 8.0 LABELING

Prepackaged tomato concentrate products covered by this Standard shall be labeled in accordance with the Codex General Standard for the Labeling of Prepackaged Foods.

**8.1** Name of the Food.

**8.1.1** The name of the food shall be "tomato sauce", "tomato puree", "concentrated tomato puree", "tomato salsa", or "tomato paste" as appropriate." Information on the style of the product (e.g., seasonings used in tomato sauce) shall be given to the extent necessary to inform consumers as to the specific nature of the product.

**8.2** Mandatory Declarations

The following items must appear in Arabic (and other languages as appropriate) on the label of the product in conformity, as appropriate, with the Codex General Standard for the Labeling of Prepackaged Foods.

**8.2.1** Name of the product.
**8.2.2** Name and address of the manufacturer.
**8.2.3** Net weight.
**8.2.4** Total natural tomato solids.

[Note: the Technical Advisor does not concur that information should be a mandatory labeling item.]

**8.2.5** List of ingredients in descending order of predominance including

all direct additives and preservatives.

**8.2.6** Production date and date of durability.

**8.2.7** Country of origin. Products manufactured in Egypt must use the phrase “Made in Egypt”.

**8.3** Country of Origin.

Country of origin is the country in which the concentrate product was manufactured.

**8.4** Date Marking (Date of Durability).

**[**The date of durability shall be determined by the manufacturer taking into consideration the nature of the product and its manufacturing and storage conditions, and the climatic, distribution and retail sale characteristics of Egypt. **]**

Note: information in brackets (**[ ]**) should be further discussed.

**8.5** Labeling of Non-retail Containers.

The name of the product, lot identification and the name and address of the manufacturer or packer must appear on the container. Other required labeling information, if not provided on the container, must be provided in accompanying shipping documents.

## 9.0 METHODS OF ANALYSIS

[To be specified.]

**ANNEX**
**STANDARD NO. 132-1990**
**PRESERVED TOMATO PRODUCTS - PROCESSED TOMATO CONCENTRATES**

This Annex is not intended as a standard, guideline recommendation, or technical regulation within the meaning of the Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) Agreements. Provisions provided within this Annex are not considered as essential for public health, food safety or consumer protection. These provisions are of a voluntary advisory nature intended to assist users; they reflect quality factors and criteria that may be used by commerce to define or describe the quality of the product and which may form part of contracts between buyers and sellers. Individual merchandisers should independently determine their product quality needs. Provisions of this annex do not constitute regulatory provisions of the Egyptian Organization for Standardization or any other Egyptian Governmental Body.

## 1.0 OTHER COMPOSITION OR QUALITY FACTORS

Criteria relating to color, flavor, consistency, and defects should appear in this section.

Reference should be made to the Proposed Draft Revised Codex Standard for Processed Tomato Concentrates for additional information that may be contained in this section.

## 2.0 WEIGHTS AND MEASURES

Fill of container information including minimum fill should be specified here.

Reference should be made to the Proposed Draft Revised Codex Standard for Processed Tomato Concentrates for additional information that may be contained in this section.

## 3.0 OTHER LABELING FACTORS

Reference should be made to the Proposed Draft Revised Codex Standard for Processed Tomato Concentrates for information that may be contained in this section.

**EGYPTIAN ORGANIZATION FOR STANDARDIZATION**

# PROPOSED DRAFT GENERAL STANDARD FOR CANNED TOMATOES[1]

**STANDARD NO. 132-1990 [Canned Tomato Sections Only]**
**DATE OF REVISION: March 23, 1998**

Primary references used for the preparation of this draft are: 1) Egyptian Standard 132-1990-Preserved Tomato Products; and 2) Codex Draft Revised Standard for Canned Tomatoes, ALINORM CL 1997/1-PVF, Appendix XXXVI. Judgment has been used in incorporating, not incorporating or modifying elements of both Standards into this working draft.

This Standard is confined to essential provisions relating to public health, food safety and consumer protection. The Annex to this Standard contains voluntary quality and compositional provisions to be used by buyers and sellers as the basis of sales or purchase agreements to facilitate trade. The Annex does not however, form part of the Standard, and acceptance of the Standard by the Egyptian Organization for Standardization or other Egyptian Governmental Bodies does not imply acceptance of the Annex.

## 1.0 SCOPE

This standard applies to tomatoes, peeled or unpeeled, whole or in pieces, with or without seeds, packed, as appropriate in a packing media and preserved by heat in hermetically sealed containers.

## 2.0 DESCRIPTION

### 2.1 Definition

Canned tomatoes is the product:

a) Prepared from washed, ripened tomatoes, conforming to the characteristics of the fruit of *Lycopersicum esulentum* P. Mill, of red or reddish varieties (cultivars), which are clean and substantially sound;
b) Packed with or without a suitable liquid packing media (other than added water) and seasoning ingredients appropriate to the product; and
c) Heat processed in an appropriate manner before and/or after being hermetically sealed in containers so as to prevent spoilage. The tomatoes shall have the stems and calices removed and shall have been cored, except where the internal core is insignificant as to texture and appearance.

[1]Prepared by the Egyptian Organization for Standardization in Coordination with the Development Economic Policy Reform and Analysis Project (DEPRA), Nathan Associates Inc., Arlington, VA, USA.

## 3.0 ESSENTIAL COMPOSITION AND RELATED FACTORS

### 3.1 Raw Material

3.1.1 Tomatoes as described in Section 2.0 and packing medium appropriate to the product.

3.1.2 Packing media.

Canned tomatoes may be packed in the following packing media.

- Juice: the unconcentrated , undiluted liquid from ripened tomatoes.
- Residual material: the liquid strained from the residue from preparing tomatoes for preservation.
- Puree or pulp: tomato puree or pulp (concentrated tomato juice).
- Paste: tomato paste (highly concentrated tomato juice).

3.1.3 Other Permitted Ingredients

- spices, spice oils;
- seasoning;
- natural vegetable products not exceeding in total 10% m/m of the product;
- salt
- firming agents: calcium chloride, calcium sulfate, calcium citrates, mono-calcium phosphate, calcium lactates, calcium glutamates.
- acidifying agents: acetic acid, citric acid, lactic acid, malic acid, sodium carbonate, sodium bicarbonate, tartaric acid.
- sucrose, dextrose and dried glucose syrup (when acidifying agents are used).

### 3.2 Related Factors

**3.2.1** Canned tomatoes shall have normal flavor, odor, taste and color and shall possess textural characteristics of the product.

**3.2.2** The pH of canned tomato products shall not be higher than 4.5.

Note: The EOS Technical Committee for Fruits and Vegetables indicated the need to incorporate provisions for defects and blemishes, net and drained and other elements currently placed in the Annex to this Standard. The Technical Advisor believes these inclusions are inappropriate as they are non-essential quality elements.

## 4.0 FOOD ADDITIVES

Only food additives permitted by the Egyptian Ministry of Health may be used.

## 5.0 CONTAMINANTS

### 5.1 Pesticides

Pesticide residues for the tomato and other ingredients used for the manufacture of canned tomato products included in this standard must not exceed Maximum Residue Levels specified by the Egyptian Organization for Standardization (EOS).

### 5.2 Heavy Metals

Heavy metals shall not exceed levels specified by the Egyptian Organization for Standardization (EOS).

### 5.3 Radionuclides

The level of radioactivity for products included within this Standard shall be within limits proscribed by recognized international standards setting bodies.

## 6.0 HYGIENE

Canned tomato products must:

**6.1** Be prepared and handled in accordance with: good manufacturing practices [ specify Egyptian EOS and MOH regulations including microbiological criteria if applicable]; Codex Alimentarius Recommended International Code of Practice- General Principles of Food Hygiene, Code of Hygienic Practice for Low-Acid and Acidified Low-Acid Canned Foods, and any other applicable Codes of Hygienic Practice (specify).

**6.2** To the extent possible in good manufacturing practice, be free from objectionable material (e.g., insect fragments, rodent hair, excreta, foreign objects- rock, glass, metal).

**6.3** When tested by appropriate methods of samples and examination:

a) Be free from microorganisms in which may represent a hazard to health.
b) Be free from parasites, and,
c) Not contain any substance originating from microorganisms in amounts which may represent a hazard to health.

## 7.0 PACKAGING

**7.1** Canned tomato products manufactured or offered for sale under these Standards shall be packaged in containers that will safeguard the hygienic, nutritional, and organoleptic properties of the food.

**7.2** The containers, including packaging and wrapping material, shall be made from substances that are safe and suitable for their intended use. They shall not impart any toxic substance or undesirable odor or flavor to the product.

## 8.0 LABELING

Prepackaged products covered by this Standard shall be labeled in accordance with the Codex General Standard for the Labeling of Prepackaged Foods.

**8.1** Name of the Food.

**8.1.1** The name of the food shall be "tomatoes". Information on the style of the product and packing media should be given to the extent necessary to inform consumers as to the specific nature of the product.

**8.2** Mandatory Declarations

The following items must appear in Arabic (and other languages as appropriate) on the label of the product in conformity, as appropriate, with the Codex General Standard for the Labeling of Prepackaged Foods.

**8.2.1** Name of the product.
**8.2.2** Name and address of the manufacturer.
**8.2.3** Net weight.
**8.2.4** Drained weight.
**8.2.5** List of ingredients in descending order of predominance including all direct additives and preservatives.
**8.2.6** Production date and date of durability.
**8.2.7** Country of origin. Products manufactured in Egypt must use the

phrase “Made in Egypt”.

**8.3** Country of Origin.

Country of origin is the country in which the canned tomato product was manufactured.

**8.5** Date Marking (Date of Durability).

**[**The date of durability shall be determined by the manufacturer taking into consideration the nature of the product and its manufacturing and storage conditions, and the climatic, distribution and retail sale characteristics of Egypt. **]**

Note: information in brackets (**[ ]**) should be further discussed.

**8.6** Labeling of Non-retail Containers.

The name of the product, lot identification and the name and address of the manufacturer or packer must appear on the container. Other required labeling information, if not provided on the container, must be provided in accompanying shipping documents.

## 9.0 METHODS OF ANALYSIS

[To be specified.]

**ANNEX**
**STANDARD NO. 132-1990 PRESERVED TOMATO PRODUCTS- CANNED TOMATOES**

This Annex is not intended as a standard, guideline recommendation, or technical regulation within the meaning of the Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) Agreements. Provisions provided within this Annex are not considered as essential for public health, food safety or consumer protection. These provisions are of a voluntary advisory nature intended to assist users; they reflect quality factors and criteria that may be used by commerce to define or describe the quality of the product and which may form part of contracts between buyers and sellers. Individual merchandisers should independently determine their product quality needs. Provisions of this annex do not constitute regulatory provisions of the Egyptian Organization for Standardization or any other Egyptian Governmental Body.

## 1.0 OTHER COMPOSITION OR QUALITY FACTORS

Guidelines for the following should appear in this section.

Varietal types.
Styles- whole, diced, sliced, wedges, etc. Also seasoned, flavored, stewed, etc.
Packing media.
Salt when used as a flavor enhancer.
Solids content.
Defects and blemishes, including residual peel.

Reference should be made to the Proposed Draft Revised Codex Standard for Canned Tomatoes for additional information that may be contained in this section.

## 2.0 WEIGHTS AND MEASURES

Fill of container information including minimum fill, and minimum drain weight should be specified here.

Reference should be made to the Proposed Draft Revised Codex Standard for Canned Tomatoes for additional information that may be contained in this section.

## 3.0 OTHER LABELING FACTORS

Reference should be made to the Proposed Draft Revised Codex Standard for Canned Tomatoes for information that may be contained in this section.

**EGYPTIAN ORGANIZATION FOR STANDARDIZATION**

# PROPOSED DRAFT GENERAL STANDARD FOR TOMATO KETCHUP (CATSUP)[1]

**STANDARD NO. 132-1990 [Tomato Ketchup Sections Only]**
**DATE OF REVISION: March 23, 1998.**

There is no Codex Standard for Ketchup. The Primary references used for the preparation of this draft are: 1) Egyptian Standard 132-1990-Preserved Tomato Products; and 2) Codex Draft Revised Standard for Tomato Concentrates, ALINORM CL 1997/1-PVF, Appendix XXXVII. Judgment has been used in incorporating, not incorporating or modifying elements of both Standards into this working draft.

This Standard is confined to essential provisions relating to public health, food safety and consumer protection. The Annex to this Standard contains voluntary quality and compositional provisions to be used by buyers and sellers as the basis of sales or purchase agreements to facilitate trade. The Annex does not however, form part of the Standard, and acceptance of the Standard by the Egyptian Organization for Standardization or other Egyptian Governmental Bodies does not imply acceptance of the Annex.

## 1.0 SCOPE

This standard applies to processed tomato ketchup (catsup) products.

## 2.0 DESCRIPTION

### 2.1 Definition

**2.1.1** Tomato Ketchup is the product:

a) Prepared by concentrating the liquid obtained from washed, ripened tomatoes, conforming to the characteristics of the fruit of *Lycopersicum esulentum* P. Mill, of red or reddish varieties ( cultivars), which are clean and substantially sound, to which are added one or more characterizing ingredients including spices, garlic, onion, lemon juice, vinegar, natural flavorants, sugars and acidulants. The liquid is strained or otherwise prepared to exclude skins, seeds and other course or hard substances in the finished product.

b) Preserved by physical means such as heat pasteurization.

[1]Prepared by the Egyptian Organization for Standardization in Coordination with the Development Economic Policy Reform and Analysis Project (DEPRA), Nathan Associates Inc., Arlington, VA, USA.

## 3.0 ESSENTIAL COMPOSITION AND RELATED FACTORS

### 3.1 Raw Material

- Concentrated tomato product as defined in Section 2.0 above.

### 3.2 Other Permitted Ingredients

- Salt .
- Sugar or other nutritive carbohydrate sweetener.
- Spices, flavorings, onions, or garlic.
- Vinegar, lemon juice.
- Natural flavorants.
- Permitted food additives including flavorants and acidulants.

### 3.2 Composition

Total solids shall not be less than 25%.

### 3.3 Related Factors

Ketchup shall have normal flavor, odor, taste and color and shall possess a consistency characteristic of the product.

## 4.0 FOOD ADDITIVES

Only food additives permitted by the Egyptian Ministry of Health may be used.

## 5.0 CONTAMINANTS

### 5.1 Pesticides

Pesticide residues for the tomato and other ingredients used for the manufacture of ketchup products included in this standard must not exceed Maximum Residue Levels specified by the Egyptian Organization for Standardization (EOS).

### 5.2 Heavy Metals

Heavy metals shall not exceed levels specified by the Egyptian Organization for Standardization (EOS).

### 5.3 Radionuclides

The level of radioactivity for products included within this Standard shall be within limits proscribed by recognized international standards setting bodies.

## 6.0 HYGIENE

Ketchup must:

**6.1** Be prepared and handled in accordance with: good manufacturing practices [specify Egyptian EOS and MOH regulations including microbiological criteria if applicable]; Codex Alimentarius Recommended International Code of Practice- General Principles of Food Hygiene, Code of Hygienic Practice for Low-Acid and Acidified Low-Acid Canned Foods, and any other applicable Codes of Hygienic Practice (specify).

**6.2** To the extent possible in good manufacturing practice, be free from objectionable material (e.g. insect parts, rodent hair/excreta, foreign material- rock, glass, metal).

**6.3** When tested by appropriate methods of samples and examination:

a) Be free from microorganisms in which may represent a hazard to health;
b) Be free from parasites; and,
c) Not contain any substance originating from microorganisms in amounts which may represent a hazard to health.

## 7.0 PACKAGING

**7.1** Ketchup products manufactured or offered for sale under this Standard shall be packaged in containers that will safeguard the hygienic, nutritional, and organoleptic properties of the food.

**7.2** The containers, including packaging and wrapping material, shall be made from substances that are safe and suitable for their intended use. They shall not impart any toxic substance or undesirable odor or flavor to the product.

## 8.0 LABELING

Ketchup covered by this Standard shall be labeled in accordance with the Codex General Standard for the Labeling of Prepackaged Foods.

**8.1** Name of the Food.

**8.1.1** The name of the food shall be "tomato ketchup" or "tomato catsup".

**8.2** Mandatory Declarations

The following items must appear in Arabic (and other languages as appropriate) on the label of the product in conformity, as appropriate, with the Codex General Standard for the Labeling of Prepackaged Foods.

**8.2.1** Name of the product.
**8.2.2** Name and address of the manufacturer.
**8.2.3** Net weight.
**8.2.4** Total solids.
**8.2.5** List of ingredients in descending order of predominance including all direct additives and preservatives.
**8.2.6** Production date and date of durability.
**8.2.7** Country of origin. Products manufactured in Egypt must use the phrase "Made in Egypt".

**8.3** Country of Origin.

Country of origin is the country in which the ketchup product was manufactured.

**8.4** Date Marking (Date of Durability).

**[**The date of durability shall be determined by the manufacturer taking into consideration the nature of the product and its manufacturing and storage conditions, and the climatic, distribution and retail sale characteristics of Egypt. **]**

Note: information in brackets (**[ ]**) should be further discussed.

**8.5** Labeling of Non-retail Containers.

The name of the product, lot identification and the name and address of the manufacturer or packer must appear on the container. Other required labeling information, if not provided on the container, must be provided in accompanying shipping documents.

## 9.0 METHODS OF ANALYSIS

[To be specified.]

**ANNEX**
**STANDARD NO. 132-1990**
**PRESERVED TOMATO PRODUCTS - KETCHUP**

This Annex is not intended as a standard, guideline recommendation, or technical regulation within the meaning of the Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) Agreements. Provisions provided within this Annex are not considered as essential for public health, food safety or consumer protection. These provisions are of a voluntary advisory nature intended to assist users; they reflect quality factors and criteria that may be used by commerce to define or describe the quality of the product and which may form part of contracts between buyers and sellers. Individual merchandisers should independently determine their product quality needs. Provisions of this annex do not constitute regulatory provisions of the Egyptian Organization for Standardization or any other Egyptian Governmental Body.

## 1.0 OTHER COMPOSITION OR QUALITY FACTORS

Criteria relating to color, flavor, taste, consistency, sweetness, and defects should appear in this section.

## 2.0 WEIGHTS AND MEASURES

Fill of container information including minimum fill should be specified here.

## 3.0 OTHER LABELING FACTORS

**EGYPTIAN ORGANIZATION FOR STANDARDIZATION**

# PROPOSED DRAFT GENERAL STANDARD FOR CANNED FRUITS[1]

**STANDARD NO. 129-1986 (Amended, 1990)[Canned Fruit Sections Only]**
**DATE OF REVISION: March 25, 1998**

There is no Codex general standard for canned fruit. Primary references used for the preparation of this draft are: 1) Egyptian Standard 129-1986, Fruit Preserves; 2) Proposed Revised Draft Canned Fruit Standards presented in ALINORM CX5/5, CL 1997/1-PVC; and, 3) Codex Alimentarius Proposed Draft Revised Standard for Jam (Fruit Preserves) and Jellies, CX 5/5, CL 1997/1-PFV, Appendix X. Judgment has been used in incorporating, not incorporating or modifying elements of both Standards into this working draft.

This Standard is confined to essential provisions relating to public health, food safety and consumer protection. The Annex to this Standard contains voluntary quality and compositional provisions to be used by buyers and sellers as the basis of sales or purchase agreements to facilitate trade. The Annex does not however, form part of the Standard, and acceptance of the Standard by the Egyptian Organization for Standardization or other Egyptian Governmental Bodies does not imply acceptance of the Annex.

## 1.0 SCOPE

1.1 This standard applies to whole, sliced, diced, crushed or otherwise prepared fruit, peeled or unpeeled, packed in a sugar, water or other appropriate packing media and preserved by appropriate heat treatment in appropriate containers where there is no named canned fruit standard.

## 2.0 DESCRIPTION

### 2.1 Definition

Canned fruits are the whole, sliced, diced, crushed or otherwise prepared fruit products:

a. Prepared from washed, clean, sound and wholesome fruit which may be peeled or unpeeled.

b. Packed in an appropriate carbohydrate sweetener solutions or in water, and seasoning ingredients as appropriate.

[1]Prepared by the Egyptian Organization for Standardization in Coordination with the Development Economic Policy Reform and Analysis Project (DEPRA), Nathan Associates Inc., Arlington, VA, USA.

c. Heat processed in an appropriate manner after being hermetically sealed in containers so as to prevent spoilage.

### 2.2 Other Definitions

2.2.1 "Fruit" means all of the recognized fruits and those vegetables commonly termed fruit including but not limited to chestnuts, rhubarb and ginger.

## 3.0 ESSENTIAL COMPOSITION AND RELATED FACTORS

### 3.1 Raw Materials

Fruit ingredient as defined in Section 2.0.

The fruit ingredient shall be substantially sound, wholesome, of suitable ripeness and clean; not deprived of any of its main constituents except that it may be sorted, peeled, trimmed, and otherwise treated to remove stems, toppings, tailings, cores, pits, and objectionable bruises.

### 3.2 Other Permitted Ingredients

3.2.1 Packing media.

a) Aqueous solution of one or more permitted carbohydrate sweeteners.

b) Water

c) Fruit juice in which one or more fruit juice(s) from the specified fruits, which may be strained or filtered, is the sole liquid packing medium.

d) Water and fruit juice in which water and one or more fruit juice(s) from the specified fruits, which may be strained or filtered, is the sole liquid packing medium.

3.2.2 Seasonings

### 3.3 Related Factors

Canned fruits shall have normal flavor, odor, taste and color and shall possess textural characteristics characteristic of the product.

Information on normal net weights, drain weights, packing media, product

styles, and acceptable defect levels shall be provided by the manufacturer to the appropriate control authorities who shall use this information to assess the product(s). [Note: The Technical Advisor did not concur with inclusion of this provision.]

## 4.0 FOOD ADDITIVES

Only food additives permitted by the Egyptian Ministry of Health may be used.

## 5.0 CONTAMINANTS

### 5.1 Pesticides

Pesticide residues for the fruit ingredient(s) used for the manufacture of canned fruits included in this standard must not exceed Maximum Residue Levels specified by the Egyptian Organization for Standardization (EOS).

### 5.2 Heavy Metals

Heavy metal contaminant levels must not exceed those specified by the Egyptian Organization for Standardization (EOS).

### 5.3 Radionuclides

The level of radioactivity for products included within this Standard shall be within limits proscribed by recognized international standards setting bodies.

## 6.0 HYGIENE

Canned fruits must:

6.1 Be prepared and handled in accordance with: good manufacturing practices [specify Egyptian EOS and MOH regulations including microbiological criteria if applicable]; Codex Alimentarius Recommended International Code of Practice- General Principles of Food Hygiene, Code of Hygienic Practice for Low-Acid and Acidified Low-Acid Canned Foods, and any other applicable Codes of Hygienic Practice (specify).

6.2 To the extent possible in good manufacturing practice, be free from objectionable material (e.g., insect parts, rodent hair/excreta, foreign objects- rock, glass, metal).

6.3 When tested by appropriate methods of samples and examinatio n:

a) Be free from microorganisms which may represent a hazard to health.
b) Be free from parasites; and,
c) Not contain any substance originating from microorganisms in amounts which may represent a hazard to health.

## 7.0 PACKAGING

**7.1** Canned fruits manufactured or offered for sale under these Standards shall be packaged in containers that will safeguard the hygienic, nutritional, and organoleptic properties of the food.

**7.2** The containers, including packaging and wrapping material, shall be made from substances that are safe and suitable for their intended use. They shall not impart any toxic substance or undesirable odor or flavor to the product.

## 8.0 LABELING

Prepackaged products covered by this Standard shall be labeled in accordance with the Codex General Standard for the Labeling of Prepackaged Foods.

**8.1** Name of the Food.

**8.1.1** The name of the food shall be "x" fruit where "x" is the common name of the fruit. Information on the style of the product and packing media should be given to the extent necessary to inform consumers as to the specific nature of the product.

**8.2** Mandatory Declarations

The following items must appear in Arabic (and other languages as appropriate) on the label of the product in conformity, as appropriate, with the Codex General Standard for the Labeling of Prepackaged Foods.

**8.2.1** Name of the product.
**8.2.2** Name and address of the manufacturer.
**8.2.3** Net weight.
**8.2.4** Drained weight for products packed in a liquid packing medium.
**8.2.5** List of ingredients in descending order of predominance including all direct additives and preservatives.
**8.2.6** Production date and date of durability.
**8.2.7** Country of origin. Products manufactured in Egypt must use the phrase "Made in Egypt".

**8.3** Country of Origin.

Country of origin is the country in which the canned fruit product was manufactured.

**8.4** Date Marking (Date of Durability).

**[**The date of durability shall be determined by the manufacturer taking into consideration the nature of the product and its manufacturing and storage conditions, and the climatic, distribution and retail sale characteristics of Egypt. **]**

Note: information in brackets (**[ ]**) should be further discussed.

**8.5** Labeling of Non-retail Containers.

The name of the product, lot identification and the name and address of the manufacturer or packer must appear on the container. Other required labeling information, if not provided on the container, must be provided in accompanying shipping documents.

## 9.0 METHODS OF ANALYSIS

[To be specified.]

**ANNEX**
**STANDARD NO. 129-1986**
**CANNED FRUITS**

**NOTE: The EOS Technical Committee for Fruits and Vegetables decided to delete this Voluntary Annex from the Standard and move its contents to the main body of the Standard as mandatory provisions. The Technical Advisor did not concur with this decision.**

This Annex is not intended as a standard, guideline recommendation, or technical regulation within the meaning of the Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) Agreements. Provisions provided within this Annex are not considered as essential for public health, food safety or consumer protection. These provisions are of a voluntary advisory nature intended to assist users; they reflect quality factors and criteria that may be used by commerce to define or describe the quality of the product and which may form part of contracts between buyers and sellers. Individual merchandisers should independently determine their product quality needs. Provisions of this annex do not constitute regulatory provisions of the Egyptian Organization for Standardization or any other Egyptian Governmental Body.

## [1.0 OTHER COMPOSITION OR QUALITY FACTORS

All guidelines relating to varietal types, styles, packing media type (e.g., heavy syrup, extra heavy syrup, quality grades (e.g., fancy, choice, substandard, pie packs, water packs, etc.) and levels of defects, additional descriptions relating to color, flavor, and texture, descriptions relating to uniformity of size and shape and other quality related factors should be given in this section. Refer to annexes of standards presented in Codex document CL 1997/1-PFV for specific examples.

## 2.0 WEIGHTS AND MEASURES

All guidelines relating to fill of container and minimum drain weights should be given in this section. Refer to annexes of standards presented in Codex document CL 1997/1-PFV for specific examples.

## 3.0 OTHER LABELING FACTORS

Information regarding placement of verbiage relating to style and packing medium with the product name, and other labeling factors should occur in this section. Refer to annexes of standards presented in Codex document CL 1997/1-PFV for specific examples.**]**

**EGYPTIAN ORGANIZATION FOR STANDARDIZATION**

# PROPOSED DRAFT STANDARD FOR JAMS (PRESERVES) AND JELLIES[1]

**STANDARD NO. 129-1986 (Amended, 1990) [Jam/Jelly Sections Only]**
**DATE OF REVISION: March 25, 1998**

Primary references used for the preparation of this draft are: 1) Egyptian Standard 129-1986, Fruit Preserves; and, 2) Codex Alimentarius Proposed Draft Revised Standard for Jam (Fruit Preserves) and Jellies, CX 5/5, CL 1997/1-PFV, Appendix X. Judgment has been used in incorporating, not incorporating or modifying elements of both Standards into this working draft.

This Standard is confined to essential provisions relating to public health, food safety and consumer protection. The Annex to this Standard contains voluntary quality and compositional provisions to be used by buyers and sellers as the basis of sales or purchase agreements to facilitate trade. The Annex does not however, form part of the Standard, and acceptance of the Standard by the Egyptian Organization for Standardization or other Egyptian Governmental Bodies does not imply acceptance of the Annex.

## 1.0 SCOPE

1.1 This standard applies to a products commonly known as jams (fruit preserves) and jellies, which may be prepared from single fruits or from two or more fruits.

1.2 The distinguishing characteristics of the product are:

a) A substantial amount of fruit ingredient is required in the formulation; and
b) The end product has a relatively high soluble solids content.

1.3 The terms “jams” and “preserves” are frequently used interchangeably. “Jellies” are differentiated from jams in that the fruit ingredient consists of the juice that has been extracted from whole fruits and clarified by filtration or other means.

1.4 This Standard does not apply to:

a) Products prepared with non-carbohydrate sweeteners and which are clearly intended or labeled as intended for diabetic or dietetic use;
b) Products with a low sugar content;, or
c) Products prepared from citrus fruit, commonly referred to as marmalade.

[1]Prepared by the Egyptian Organization for Standardization in Coordination with the Development Economic Policy Reform and Analysis Project (DEPRA), Nathan Associates Inc., Arlington, VA, USA.

## 2.0 DESCRIPTION

### 2.1 Product Definition

2.1.1 "Jam" or "Preserve" or "Conserve", is the product prepared from a suitable fruit ingredient (see Section 2.2.2.1 below):

a) which may be whole fruit, pieces of fruit, fruit pulp, or fruit puree; and,
b) with or without fruit juice or concentrated fruit juice as optional ingredient(s); and,
c) mixed with a carbohydrate sweetener, with or without water; and
d) processed to a suitable consistency.

2.1.2 "Jelly" is the product prepared from a suitable fruit ingredient (see Section 2.2.2.2 below):

a) which is practically free from suspended fruit particles; and
b) mixed with a carbohydrate sweetener, with or without water; and
c) processed to semi-solid consistency.

### 2.2 Other Definitions

2.2.1 "Fruit" means all of the recognized fruits and those vegetables recognized as suitable in making jams, including but not limited to chestnuts, ginger, melon, rhubarb, and tomato

2.2.2 "Fruit ingredient" means:

2.2.2.1 In the case of jams, preserves, or conserves, the product:

a) prepared from fruit which is fresh, frozen, canned, concentrated or otherwise processed or preserved;
b) prepared from fruit which is substantially sound, wholesome, of suitable ripeness and clean; not deprived of any of its main constituents, except that it is trimmed, sorted and otherwise treated to remove objectionable bruises, stems, toppings, tailings, cores, pits, and may or may not be peeled. In the case of ginger, rhubarb, and melon, it means respectively the drained edible and cleaned root of ginger (*Zingiber officinale*) preserved in syrup, trimmed rhubarb stems, and melons with seeds, stems and rind removed *;* and,
c) containing all natural soluble solids (extractives) except for those lost during preparation under good manufacturing practices.

2.2.2.2 In the case of jelly, the juice or aqueous extract:

a) obtained from fruit which is fresh, frozen, canned, concentrated, or otherwise processed or preserved; and,
c) prepared from fruit which is substantially sound, wholesome, clean and which is trimmed, sorted and otherwise treated to remove objectionable material; and,
c) prepared by removal of all the insoluble solids and may be concentrated by removal of water.

2.2.3 "Fruit pulp" means the edible portions of the fruit, mashed, or cut into pieces, but not reduced to a puree.

2.2.4 "Fruit puree" means fruit ingredient finely divided by sieving, screening, or other mechanical means.

2.2.5 "Soluble Solids" means percent by weight of soluble solids as determined by refractometric method corrected to 20ºC using the International Sucrose Scale but making no correction for insoluble solids or acids.

## 3.0 ESSENTIAL COMPOSITION AND RELATED FACTORS

### 3.1 Raw Materials

3.1.1 Fruit ingredient as defined in Section 2.2.2.
3.1.2 One or more permitted carbohydrate sweeteners.

### 3.2 Other Permitted Ingredients.

3.2.1 Herbs, spices, seasonings.
3.2.2 Nuts
3.2.3 Pectin
3.2.4 Gelatin

### 3.3 Product Specifications.

The soluble solids value of the finished product shall not be less than 65%.

### 3.4 Related Factors

Jams and jellies shall have normal flavor, odor and color and shall posses textural characteristics characteristic of the product.

Note: specification information on the original fruit content of jams and jellies shall be included in this section. This information shall be based on,

but not necessarily be limited to information in the Codex Standard for Jams and Jellies. [Also note that the Technical Advisor recommended that this information be kept in the Voluntary Annex.]

## 4.0 FOOD ADDITIVES

Only food additives permitted by the Egyptian Ministry of Health may be used (to include preservatives, acidulants, colorants and flavorants).

## 5.0 CONTAMINANTS

### 5.1 Pesticides

Pesticide residues for the fruit ingredient(s) used for the manufacture of jams and jellies jams and jellies included in this standard must not exceed Maximum Residue Levels specified by the Egyptian Organization for Standardization (EOS).

### 5.2 Heavy Metals

Heavy metal contaminant levels must not exceed those specified by the Egyptian Organization for Standardization.

### 5.3 Radionuclides

The level of radioactivity for products included within this Standard shall be within limits proscribed recognized by international standards setting bodies.

## 6.0 HYGIENE

Jams and jellies must:

6.1 Be prepared and handled in accordance with: good manufacturing practices [specify Egyptian EOS and MOH regulations including microbiological criteria if applicable]; Codex Alimentarius Recommended International Code of Practice- General Principles of Food Hygiene and any other applicable Codes of Hygienic Practice (specify).

6.2 To the extent possible in good manufacturing practice, be free from objectionable material (e.g., insect parts, rodent hair/excreta, foreign objects- rock, glass, metal).

6.3 When tested by appropriate methods of samples and examination:

a) Be free from microorganisms which may represent a hazard to health.
b) Be free from parasites; and,
c) Not contain any substance originating from microorganisms in amounts which may represent a hazard to health.

## 7.0 PACKAGING

**7.1** Jams and jellies manufactured or offered for sale under these Standards shall be packaged in containers that will safeguard the hygienic, nutritional, and organoleptic properties of the food.

**7.2** The containers, including packaging and wrapping material, shall be made from substances that are safe and suitable for their intended use. They shall not impart any toxic substance or undesirable odor or flavor to the product.

## 8.0 LABELING

Prepackaged products covered by this Standard shall be labeled in accordance with the Codex General Standard for the Labeling of Prepackaged Foods.

**8.1** Name of the Food.

**8.1.1** The name of the food shall "jam", jelly, "preserve", or "conserve" as appropriate, and, as appropriate qualified by the name(s) of the fruit(s).

**8.2** Mandatory Declarations

The following items must appear in Arabic (and other appropriate languages as appropriate) on the label of the product in conformity, as appropriate, with the Codex General Standard for the Labeling of Prepackaged Foods.

**8.2.1** Name of the product.
**8.2.2** Name and address of the manufacturer.
**8.2.3** Net weight.
**8.2.4** List of ingredients in descending order of predominance including all direct additives and preservatives.
**8.2.5** Production date and date of durability.
**8.2.6** Country of origin. Products manufactured in Egypt must use the phrase "Made in Egypt".

**8.3** Country of Origin.

Country of origin is the country in which the jam or jelly product was

manufactured.

**8.4** Date Marking (Date of Durability).

**[**The date of durability shall be determined by the manufacturer taking into consideration the nature of the product and its manufacturing and storage conditions, and the climatic, distribution and retail sale characteristics of Egypt. **]**

Note: information in brackets (**[ ]**) should be further discussed.

**8.5** Labeling of Non-retail Containers.

The name of the product, lot identification and the name and address of the manufacturer or packer must appear on the container. Other required labeling information, if not provided on the container, must be provided in accompanying shipping documents.

## 9.0 METHODS OF ANALYSIS

[To be specified.]

**ANNEX**
**STANDARD NO. 129-1986**
**JAMS AND JELLIES**

This Annex is not intended as a standard, guideline recommendation, or technical regulation within the meaning of the Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) Agreements. Provisions provided within this Annex are not considered as essential for public health, food safety or consumer protection. These provisions are of a voluntary advisory nature intended to assist users; they reflect quality factors and criteria that may be used by commerce to define or describe the quality of the product and which may form part of contracts between buyers and sellers. Individual merchandisers should independently determine their product quality needs. Provisions of this annex do not constitute regulatory provisions of the Egyptian Organization for Standardization or any other Egyptian Governmental Body.

## 1.0 OTHER COMPOSITION OR QUALITY FACTORS

### 1.1 Formulation

Consideration should be given to including the Codex provisions in the Annex of Codex document CL1997/1-PFV, Appendix X, relating to:

- Mixtures of fruit.

### 1.2 Other Quality Factors

Consideration should be given to including the Codex provisions in the Annex of Codex document CL1997/1-PFV, Appendix X, relating to:

- Viscosity and jelly transparency.
- Allowances for defects (harmless extraneous material, pits, pit fragments.
- Damaged (blemished, discolored, bruised, etc.) fruit.
- Mineral impurities.

## 2.0 WEIGHTS AND MEASURES

Consideration should be given to including the Codex provisions in the Annex of Codex document CL1997/1-PFV, Appendix X, relating to:

- Fill of container.

## 3.0 OTHER LABELING FACTORS

Consideration should be given to including to the Codex provisions in the

Annex of Codex document CL1997/1-PFV, Appendix X, relating to:

- Descriptive product names and other product nomenclature items.
- Clarification of the use of ascorbic acid.

**WORKING DRAFT ONLY**

**EGYPTIAN ORGANIZATION FOR STANDARDIZATION**

# PROPOSED DRAFT STANDARD FOR CITRUS MARMALADE[1]

**STANDARD NO. 129-1986 (Marmalade Portions Only)**
**DATE OF REVISION: March 25, 1998**

**[**Drafting Notes:

1. This draft standard is intended as an initial guideline only. Technical experts in preserved fruit technology must revise the standard based on specific knowledge of the product(s).

2. EOS Standard 129-1986 incorporates many preserved fruit products. Since the Codex Alimentarius separates theses products into multiple standards, it is recommended that consideration be given to using the Codex model in the revision of this Standard; that is, the separation of the products in EOS Standard 129-1986 into several standards.

3. Primary references used for the preparation of this draft are: 1) Egyptian Standard 129-1986, Fruit Preserves; and, 2) Codex Alimentarius Proposed Draft Revised Standard for Citrus Marmalade, CX 5/5, CL 1997/1-PFV, Appendix V. Judgment has been used in incorporating, not incorporating or modifying elements of both Standards into this working draft.**]**

This Standard is confined to essential provisions relating to public health, food safety and consumer protection. The Annex to this Standard contains voluntary quality and compositional provisions to be used by buyers and sellers as the basis of sales or purchase agreements to facilitate trade. The Annex does not however, form part of the Standard, and acceptance of the Standard by the Egyptian Organization for Standardization or other Egyptian Governmental Bodies does not imply acceptance of the Annex.

## 1.0 SCOPE

1.1 This standard applies to the product prepared from citrus fruit and commonly referred to as “Marmalade”.

1.2 This Standard does not apply to:

[1]Prepared by the Egyptian Organization for Standardization in Coordination with the Development Economic Policy Reform and Analysis Project (DEPRA), Nathan Associates Inc., Arlington, VA, USA.

a) Products prepared from fruits other than citrus, including fruit jams and jellies.
b) Products made from foods such as ginger, pineapple, or figs which may contain citrus which often are described as marmalades but which conform to the requirements for jams and jellies.
c) Products prepared with non-carbohydrate sweeteners and which are clearly intended or labeled as intended for diabetic or dietetic use.
d) Products with a low sugar content, which do not comply with the minimum requirement of this standard and which in some countries are commonly described as marmalade.

## 2.0 DESCRIPTION

### 2.1 Definition

2.1.1 "Marmalade" is the product obtained by processing prepared citrus fruit (as defined in Section 2.2.1 below).

a) which may be whole fruit, fruit pulp, or fruit puree with some or all of the peel removed; and,
b) with or without citrus juice and extraction of peel, and,
c) mixed with a carbohydrate sweetener, with or without water; and
d) processed to a suitable consistency.

2.1.2 "Jelly Marmalade" is the product described in Section 2.1.1 from which all of the insoluble solids, or all of the insoluble solids except for a small proportion of thinly cut peel, have been removed.

### 2.2 Other Definitions

2.2.1 "Prepared citrus fruit ingredient" means the product:

a) prepared from fruit which is fresh, processed, or preserved other than by drying; and,

b) prepared from substantially sound, clean and wholesome citrus fruit from which stems, calyces, and seeds have been removed and includes pulps, juices, concentrated juices, extractives and preserved peels; and,

c) containing all natural soluble solids (extractives) except for those lost during preparation under good manufacturing practices.

## 3.0 ESSENTIAL COMPOSITION AND RELATED FACTORS

### 3.1 Raw Material

3.1 Prepared citrus fruit ingredient as defined in Section 2.2.1 above.

3.2 One or more permitted carbohydrate sweeteners.

### 3.3 Other permitted Ingredients

3.1.1 Herbs, spices.
3.1.2 Nuts.

Notes:
1. Codex lists a variety of other ingredients that may wish to be considered.
2. Subject to Egyptian food additive regulations, natural flavorants and colorants, if they are extractives, may be considered here.

### 3.3 Composition

The soluble solids value of the finished product shall not be less than 65%. [Note: the requirement for consumption within one week of opening and storage under refrigeration requires justification].

### 3.3 Related Factors

Marmalades shall have normal flavor, odor and color and shall posses textural characteristics characteristic of the product.

Note: specification information on the original fruit content of citrus marmalades shall be included in this section. This information shall be based on, but not necessarily be limited to information in the Codex Standard for Citrus Marmalades. [Also note that the Technical Advisor recommended that this information be kept in the Voluntary Annex.]

## 4.0 FOOD ADDITIVES

Only food additives permitted by the Egyptian Ministry of Health may be used.

The use of pectin, organic acids, colorants, and preservatives including benzoates and sorbates should be included here. The Codex standard includes a listing of additives that may wish to be considered.

## 5.0 CONTAMINANTS

### 5.1 Pesticides

Pesticide residues for the fruit ingredient(s) used for the manufacture of marmalades included in this standard must not exceed Maximum Residue Levels specified by the Egyptian Organization for Standardization (EOS).

[Specify or reference regulation.]

### 5.2 Heavy Metals

[Heavy metal criteria if applicable should be included here.]

### 5.3 Radionuclides

Testing for radioactivity will be undertaken when the origin of milk used to manufacture products covered under this Standard is from a region in which agricultural products are known to be exposed to excessive levels of radiation or when it is not possible to verify that the origin of milk used to manufacture products covered under this standard is obtained from a region free of excessive radiation. Products tested for radiation shall be free of excessive radioactivity.

## 6.0 HYGIENE

Marmalades must:

6.1 Be prepared and handled in accordance with: good manufacturing practices [ specify Egyptian EOS regulations if applicable]; Codex Alimentarius Recommended International Code of Practice- General Principles of Food Hygiene and any other applicable Codes of Hygienic Practice (specify).

6.2 To the extent possible in good manufacturing practice, be free from objectionable material.

6.3 When tested by appropriate methods of samples and examination:

a) Be free from microorganisms in amounts which may represent a hazard to health.
b) Be free from parasites which may represent a hazard to health; and,
c) Not contain any substance originating from microorganisms in amounts which may represent a hazard to health.

## 7.0 PACKAGING

**7.1** Marmalades manufactured or offered for sale under these Standards shall be packaged in containers that will safeguard the hygienic, nutritional, and organoleptic properties of the food.

**7.2** The containers, including packaging and wrapping material, shall be made from substances that are safe and suitable for their intended use. They shall not impart any toxic substance or undesirable odor or flavor to the product.

## 8.0 LABELING

Prepackaged products covered by this Standard shall be labeled in accordance with the Codex General Standard for the Labeling of Prepackaged Foods.

**8.1** Name of the Food.

**8.1.1** The name of the food shall be "Marmalade" or "Jelly Marmalade" as appropriate, and, as appropriate qualified by the name(s) of the citrus fruit(s).

**8.2** Mandatory Declarations

The following items must appear in Arabic on the label of the product in conformity, as appropriate, with the Codex General Standard for the Labeling of Prepackaged Foods.

**8.2.1** Name of the product.
**8.2.2** Name and address of the manufacturer.
**8.2.3** Net weight.
**8.2.4** List of ingredients in descending order of predominance including all direct additives and preservatives.
**8.2.5** Production date and date of maximum durability.
**8.2.6** Country of origin. Products manufactured in Egypt must use the phrase "Made in Egypt".

**8.3** Country of Origin.

Country of origin is the country in which the marmalade product was manufactured.

**8.5** Date Marking (Date of Maximum Durability).

The date of maximum durability shall be determined by the manufacturer taking

into consideration the nature of the product and its manufacturing conditions, and the climatic, distribution and retail sale characteristics of Egypt.

**8.6** Labeling of Non-retail Containers.

The name of the product, lot identification and the name and address of the manufacturer or packer must appear on the container. Other required labeling information, if not provided on the container, must be provided in accompanying shipping documents.

## 9.0 METHODS OF ANALYSIS

[To be specified.]

**ANNEX**
**STANDARD NO. 129-1986**
**MARMALADES**

This Annex is not intended as a standard, guideline recommendation, or technical regulation within the meaning of the Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) Agreements. Provisions provided within this Annex are not considered as essential for public health, food safety or consumer protection. These provisions are of a voluntary advisory nature intended to assist users; they reflect quality factors and criteria that may be used by commerce to define or describe the quality of the product and which may form part of contracts between buyers and sellers. Individual merchandisers should independently determine their product quality needs. Provisions of this annex do not constitute regulatory provisions of the Egyptian Organization for Standardization or any other Egyptian Governmental Body.

## 1.0 OTHER COMPOSITION OR QUALITY FACTORS

### 1.1 Formulation

Consideration should be given to including the Codex provisions in the Annex of Codex document CL1997/1-PFV, Appendix V, relating to:

- Mixtures of fruit.

### 1.2 Other Quality Factors

Consideration should be given to including the Codex provisions in the Annex of Codex document CL1997/1-PFV, Appendix V, relating to:

- Viscosity
- Allowances for defects (harmless extraneous material, pits, pit fragments.
- Damaged (blemished, discolored, bruised, etc.) fruit.

## 2.0 WEIGHTS AND MEASURES

Consideration should be given to including the Codex provisions in the Annex of Codex document CL1997/1-PFV, Appendix V, relating to:

- Fill of container.

## 3.0 OTHER LABELING FACTORS

Consideration should be given to including to the Codex provisions in the Annex of Codex document CL1997/1-PFV, Appendix V, relating to:

- Descriptive product names and other product nomenclature items.
- Clarification of the use of ascorbic acid.

**EGYPTIAN ORGANIZATION FOR STANDARDIZATION**

# PROPOSED DRAFT GENERAL STANDARD FOR DRY PULSES[1]

**STANDARD NO. 2728-1984**
**DATE OF REVISION: March 23, 1998**

References used in the preparation of this draft working standard are: 1) EOS Standard 2728-1994; and 2) Codex Revised Standard for Certain Pulses (at Step 5/8), ALINORM 95/29, Appendix XI. Judgment has been used in incorporating, not incorporating or modifying elements of both Standards into this working draft. **]**

This Standard is confined to essential provisions relating to public health, food safety and consumer protection. The Annex to this Standard contains voluntary quality and compositional provisions to be used by buyers and sellers as the basis of sales or purchase agreements to facilitate trade. The Annex does not however, form part of the Standard, and acceptance of the Standard by the Egyptian Organization for Standardization or other Egyptian Governmental Bodies does not imply acceptance of the Annex.

## 1.0 SCOPE

This standard applies to whole, shelled or split pulses defined below which are intended for direct human consumption. The Standard does not apply to the following.

- Pulses intended for non-food industrial purposes.
- Pulses intended for animal feeding.

## 2.0 DESCRIPTION

### 2.1 Definition

Pulses are dry seeds of leguminous plants which are distinguished from leguminous oil seeds by their low fat content. The pulses covered by this Standard are the following.

- Cow peas (*Vigna unguiculata*)
- Beans (*Phaeolus* spp)
- Chick Peas (*Cicer arientinum*)
- Lupine Seeds (*Lupinis termis*)
- Field beans (split) ( *Vicia faba* L.)
- Peas (*Pisum sativum* L.)

[1]Prepared by the Egyptian Organization for Standardization in Coordination with the Development Economic Policy Reform and Analysis Project (DEPRA), Nathan Associates Inc., Arlington, VA, USA.

## 3.0 ESSENTIAL COMPOSITION AND RELATED FACTORS

### 3.1 Raw Material

Dried beans of species designated above.

### 3.2 Composition

3.2.1 Pulses shall have a moisture content not to exceed 14% for whole seeds and 13% for seeds without seed coats.

### 3.3 Related Factors

3.3.1 Pulses covered by this Standard shall be safe and suitable for human consumption.

3.3.2 Pulses covered by this Standard shall be free from filth (impurities of animal origin, including dead insects) in amounts which may represent a hazard to human health.

3.3.3 Pulses covered by this Standard shall be free from toxic or noxious weeds in amounts which may represent a hazard to human health.

3.3.4 Extraneous matter is mineral or organic matter (dust, twigs, seed coats, seeds of other species, dead insects, fragments, or remains of insects, and other impurities of animal origin). Pulses shall not have more than 1% extraneous matter of which not more than 0.25% shall be mineral matter and not more than 0.10% shall be dead insects, fragments or remains of dead insects, and/or other impurities of animal origin..

3.3.5 Pulses shall have normal odors and flavors.

## 4.0 FOOD ADDITIVES

No food additives are permitted in dry pulses.

## 5.0 CONTAMINANTS

### 5.1 Pesticides

Pesticide residues for the pulses specified in this Standard must not exceed Maximum Residue Levels specified by the Egyptian Organization for Standardization.

### 5.2 Heavy Metals

Heavy metal levels shall not exceed the levels specified by EOS.

### 5.4 Mycotoxins

Mycotoxin levels shall not exceed the levels specified by the Ministry of Health.

### 5.5 Radionuclides

Testing for radioactivity will be undertaken when the origin of dry pulses is from a region in which agricultural products are known to be exposed to excessive levels of radiation or when it is not possible to verify that the origin of milk used to manufacture products covered under this standard is obtained from a region free of excessive radiation. Radionuclide levels must be within the limits adopted by the Codex Alimentarius.

## 6.0 HYGIENE

Pulses specified in this Standard must:

6.1 Be prepare and handled in accordance with MOH good manufacturing practices, the Codex Alimentarius Recommended International Code of Practice- General Principles of Food Hygiene, and any other applicable Codes of Hygienic Practice (specify).

6.2 To the extent possible in good manufacturing practice, be free from objectionable material.

6.3 When tested by appropriate methods of samples and examination:

a) Be free from microorganisms in amounts which may represent a hazard to health.
b) Be free from parasites which may represent a hazard to health; and,
c) Not contain any substance originating from microorganisms in amounts which may represent a hazard to health.

## 7.0 PACKAGING

**7.1** Pulses offered for sale under these Standards shall be packaged in containers that will safeguard the hygienic, nutritional, and organoleptic properties of the food.

**7.2** The containers, including packaging and wrapping material, shall be made from substances that are safe and suitable for their intended use. They shall not impart any toxic substance or undesirable odor or flavor to the product.

## 8.0 LABELING

Prepackaged products covered by this Standard shall be labeled in Arabic (and other languages as appropriate) in accordance with the Codex General Standard for the Labeling of Prepackaged Foods.

**8.1** Name of the Food.

**8.1.1** The name of the product shall be the commercial type of pulse.

**8.2** Mandatory Declarations

The following items must appear in Arabic on the label of the product in conformity, as appropriate, with the Codex General Standard for the Labeling of Prepackaged Foods.

**8.2.1** Name of the product.
**8.2.2** Name and address of the manufacturer.
**8.2.3** Net weight.
**8.2.4** List of ingredients if different from the name of product in descending order of predominance including all direct additives and preservatives.
**8.2.5** Production date and date of durability.
**8.2.6** Country of origin. Products manufactured in Egypt must use the phrase "Made in Egypt".

**8.3** Country of Origin.

Country of origin is the country in which the product was manufactured.

**8.5** Date Marking (Date of Durability).

**[**The date of durability shall be determined by the manufacturer taking into consideration the nature of the product and its manufacturing and storage conditions, and the climatic, distribution and retail sale characteristics of Egypt. **]**

Note: information in brackets (**[ ]**) should be further discussed.

**8.6** Labeling of Non-retail Containers.

The name of the product, lot identification and the name and address of the

manufacturer or packer must appear on the container. Other required labeling information, if not provided on the container, must be provided in accompanying shipping documents.

## 9.0 METHODS OF ANALYSIS

[To be specified.]

**ANNEX**
**STANDARD NO. 2728-1994**
**DRY PULSES**

This Annex is not intended as a standard, guideline recommendation, or technical regulation within the meaning of the Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) Agreements. Provisions provided within this Annex are not considered as essential for public health, food safety or consumer protection. These provisions are of a voluntary advisory nature intended to assist users; they reflect quality factors and criteria that may be used by commerce to define or describe the quality of the product and which may form part of contracts between buyers and sellers. Individual merchandisers should independently determine their product quality needs. Provisions of this annex do not constitute regulatory provisions of the Egyptian Organization for Standardization or any other Egyptian Governmental Body.

## 1.0 OTHER COMPOSITION OR QUALITY FACTORS

Quality guidelines for defects, seed discoloration, presentation, and storage and handling should be given in this section. [Refer to Codex ALINORM 95/29, Appendix XI.]

## 2.0 WEIGHTS AND MEASURES

No items specified.

## 3.0 OTHER LABELING FACTORS

No items specified.

**EGYPTIAN ORGANIZATION FOR STANDARDIZATION**

**DRAFT STANDARD FOR MILK POWDER(S)**

**STANDARD NO. 1648**
**DATE OF REVISION: 16 March 1998**

This Standard is confined to essential provisions relating to public health, food safety and consumer protection. The Annex to this Standard contains voluntary quality and compositional provisions to be used by buyers and sellers as the basis of sales or purchase agreements to facilitate trade. The Annex does not however, form part of the Standard, and acceptance of the Standard by the Egyptian Organization for Standardization or other Egyptian Governmental Bodies does not imply acceptance of the Annex.

## 1.0 SCOPE

This standard applies to milk powder(s) intended for direct consumption or further processing in conformity with the product definition given in Section 2 of this Standard.

## 2.0 DESCRIPTION

Milk Powder(s) are milk products which can be obtained by the partial removal of water from milk. The fat and/or protein content of the milk may have been adjusted , only to comply with the compositional requirements given in Section 3 of this Standard, by the addition and/or withdrawal of milk constituents in such a way as not to alter the whey protein to casein ratio of the milk being adjusted.

## 3.0 ESSENTIAL COMPOSITION AND QUALITY FACTORS

### 3.1 Raw Materials

- Milk

The following milk products are allowed for protein adjustment purposes:

- Milk retentate. Milk retentate is the product obtained by concentrating milk protein by ultrafiltration of milk, partly skimmed milk, or skimmed milk.

- Milk permeate. Milk Permeate is the product obtained by removing milk proteins and milkfat from milk, partly skimmed milk, or skimmed milk by ultrafiltration.

- Lactose[1]

### 3.2 Composition

**3.2.1** Whole milk powder.

- milkfat: minimum 26%.
- moisture: not to exceed 5%[2].

[1] For specification, see the relevant Egyptian Standard.

- milk protein in milk solids-not-fat: at least 34%.
- lactose: not more than 38%.
- ash: not more than 6%.

**3.2.2** Partly skimmed milk powder.

- milkfat: minimum 1.5% but not to exceed 26%.
- moisture: not to exceed 5%[2].
- milk protein in milk solids-not-fat: at least 34%
- lactose: must be within the range 38% - 53%.
- ash: between 6% and 8%.

**3.2.3** Skimmed (nonfat) milk powder.

- milkfat: not to exceed 1.5%.
- moisture: not to exceed 5%[2].
- milk protein in milk solids-not-fat: at least 34%.
- lactose: not to exceed 53%.
- ash: not more than 8%.

### 3.3 Quality Factors

**3.3.1** Product characteristics.

All milk powders must be readily dispersible in water, and should be of normal color, odor and flavor. Milk powders must be free of any rancidity.

**3.3.2** Solubility.

Percentage of solubility should be at least 85% when drum dryers are used and 98.5 percent when spray dryers are used.

**3.3.3** Acidity.

Acidity should not exceed 1.2% in whole milk powder, 1.4% in partially skimmed milk powder and 1.5% in skimmed milk powder.

## 4.0 FOOD ADDITIVES

Only food additives permitted by the Egyptian Ministry of Health and EOS may be used.

## 5.0 CONTAMINANTS

### 5.1 Pesticides

Pesticide residues for milk powder(s) included in this standard must not exceed Maximum Residue Levels specified by the Egyptian Organization for Standardization (EOS).

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[2] The moisture (or water) content does not include water of crystallization of lactose.

### 5.2 Heavy Metals

Residues of heavy metals should not exceed levels specified by the Egyptian Organization for Standardization.

### 5.3 Mycotoxins

Residues of mycotoxins should not exceed levels specified by the Ministry of Health.

### 5.4 Veterinary Drug Residues

Veterinary drug residues in milk powder(s) included in this standard must not exceed Maximum Residue Levels specified by the Egyptian Ministry of Agriculture.

### 5.5 Radionuclides

Radioactivity levels in milk powder(s) included in this Standard must not exceed maximum levels specified by the Egyptian competent authority.

## 6.0 HYGIENE

**6.1** It is recommended that the products covered by the provisions of this standard be prepared and handled in accordance with the appropriate sections of the Recommended International Code of Practice - General Principles of Food Hygiene (CAC/RCP 1-1969, Rev. 3-1997), and other relevant Codex texts such as Codes of Hygienic Practice and Codes of Practice.

**6.2** From raw material production to the point of consumption, the products covered by this standard should be subject to a combination of control measures, which must include pasteurization, and these shall be shown to achieve the appropriate level of public health protection.

**6.3** The products should comply with any microbiological criteria established in accordance with the Principles for the Establishment and Application of Microbiological Criteria for Foods (CAC/GL 21-1997).

#### 6.3.1 Microbiological Criteria

The product shall be free from pathogenic bacteria and their toxins, and in particular the following:

| | |
|---|---|
| Aerobic plate count at 37$^{o}$ C for 48 h | <50 000 cfu/g |
| Coliforms | <10 cfu/g |
| *Escherichia coli* | Not detected in 1 g |
| *Staphylococcus aureus* | Not detected in 1 g |
| *Listeria monocytogenes* | Not detected in 25 g |

#### 6.3.2 Phosphatase

All milk powders manufactured under this Standard must be phosphatase negative.

**6.4** To the extent possible in good manufacturing practice, the product must be free from objectionable matter (impurities).

## 7.0 PACKAGING

**7.1** Powdered milk products manufactured or offered for sale under these Standards shall be packaged in containers that will safeguard the hygienic, nutritional, and organoleptic properties of the food and which comply with Republican Decree No. 798/1957 concerning containers for packaging foodstuffs.

**7.2** The containers, including packaging and wrapping material, shall be made from substances that are safe and suitable for their intended use. They shall not impart any toxic substance or undesirable odor or flavor to the product.

## 8.0 LABELING

The product name or names used in this Standard shall be used only in accordance with the Codex Alimentarius Code of Principles Concerning Milk and Milk Products.

**8.1** Name of the Food.

**8.1.1** The name of the food shall be:

- Whole milk powder;
- Partly skimmed milk powder;
- Skimmed milk powder:

according to the compositional product specifications given in Section 3.2 above.

Partly skimmed milk powder may be designated "Semi-skimmed milk powder" provided that the content of milkfat does not exceed 16% m/m and is not less than 14% m/m.

"Whole milk powder" may be designated "full cream milk powder" and "skimmed milk powder" may be designated "low fat milk powder".

**8.1.2** If milk other than cows' milk is used, a word or words denoting the animal, or the case of a mixture, animals from which the milk has been derived should be inserted immediately before or after the designation of the product.

**8.2** Mandatory Declarations

The following items should be printed clearly in Arabic on the label of both prepackaged product and non-retail containers in conformity, as appropriate, with the Egyptian General Standard for the Labeling of Packaged Foods, Ministerial Decree No. 354/1985 and Egyptian Specification No. 1546. They may also be printed in a second language in addition to Arabic.

**8.2.1** Name of the product.
**8.2.2** Name and address of the manufacturer.
**8.2.3** Net weight.
**8.2.4** List of ingredients including food additives and percentage of preservatives. Milk products used only for protein adjustment purposes do not have to be declared.
**8.2.5** Production date and date of maximum durability.
**8.2.6** List of constituents content as a percentage of the product by weight.
**8.2.7** Country of origin. "Country of origin" is the country in which the milk powder was manufactured. Products manufactured in Egypt must use the phrase "Made in Egypt".
**8.2.8** Storage conditions according to Egyptian Standard 2613.
**8.2.9** Lot identification or batch number.
**8.2.10** The words "Standard No. 1648/1998".

## 9.0 METHODS OF ANALYSIS

Inspection and testing methods should conform to the Egyptian Standard Specification No. 155 concerning natural and chemical methods of testing milk and milk products as well as the Egyptian Standard Specification concerning microbiological testing methods (issued by the Organization in this respect).

**ANNEX**

**STANDARD NO. 1648**
**MILK POWDERS**

This Annex is not intended as a standard, guideline recommendation, or technical regulation within the meaning of the Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) Agreements. Provisions provided within this Annex are not considered as essential for public health, food safety or consumer protection. These provisions are of a voluntary advisory nature intended to assist users; they reflect quality factors and criteria that may be used by commerce to define or describe the quality of the product and which may form part of contracts between buyers and sellers. Individual merchandisers should independently determine their product quality needs. Provisions of this annex do not constitute regulatory provisions of the Egyptian Organization for Standardization or any other Egyptian Governmental Body.

## 1.0 OTHER QUALITY FACTORS

**1.1** Labeling information on method of dehydration.
**1.2** Labeling information on method of rehydration.

**EGYPTIAN ORGANIZATION FOR STANDARDIZATION**

# DRAFT STANDARD FOR PROCESS(ED) CHEESE, SPREADABLE PROCESS(ED) CHEESE AND PROCESS(ED) CHEESE PREPARATION

## PART I: PROCESS(ED) CHEESE

**STANDARD NO. 999/1**
**DATE OF REVISION: 19 March 1998**

## 1.0 SCOPE

This standard applies to process(ed) cheese intended for direct consumption, in conformity with the Description in Section 2 of this Standard. However the Labeling section of this Standard provides additionally for the designation of process(ed) cheese with flavouring foods, spices, herbs, natural flavours, and nature identical flavours. The name of the product may be used exclusively for products complying with this Standard.

## 2.0 DESCRIPTION

Process(ed) cheese is the milk product made from one or more varieties of cheese in combination with one or more optional dairy ingredients by grinding, mixing, melting and emulsifying with the aid of heat and emulsifying agents to form a smooth homogeneous mass which is suitable for cutting and/or slicing.

Cheese constitutes the largest single dairy ingredient used as raw material on a product basis.

## 3.0 ESSENTIAL COMPOSITION AND QUALITY FACTORS

### 3.1 Raw Materials

- cheese (any type)
- cream, butter, and butteroil.

### 3.2 Permitted Ingredients

- sodium chloride
- potable water
- starter cultures of harmless lactic acid and/or flavour-producing bacteria and cultures of other harmless microorganisms
- harmless and suitable enzymes
- flavouring foods, spices and herbs[1]

[1] These ingredients should comply with Egyptian Standards.

### 3.3 Composition

| | Minimum milkfat in dry matter (% m/m) | Maximum moisture (% m/m) | Maximum lactose (% m/m) | Maximum ash (% m/m) |
|---|---|---|---|---|
| High fat products | >60 | 48 | 5 | 8 |
| Full fat products | 45 | 52 | 5 | 8 |
| Medium fat products | 35 | 56 | 5 | 8 |
| Low fat products | 25 | 60 | 5 | 8 |
| Skim products | <10 | 66 | 5 | 8 |

### 3.4 Other Quality Factors

Process(ed) cheese should be of a color and flavor characteristic for this type of product.

## 4.0 FOOD ADDITIVES

Only food additives permitted by the Egyptian Ministry of Health and EOS may be used.

## 5.0 CONTAMINANTS

### 5.1 Pesticides

Pesticide residues for process(ed) cheese products included in this standard must not exceed Maximum Residue Levels specified by the Egyptian Organization for Standardization(EOS).

### 5.2 Heavy Metals

Heavy metals contaminants in process(ed) cheese products included in this Standard must not exceed levels specified by the Egyptian Organization for Standardization (EOS).

### 5.3 Veterinary Drug Residues

Veterinary drug residues in process(ed) cheese products included in this standard must not exceed Maximum Residue Limits specified by the Egyptian Ministry of Agriculture.

### 5.4 Mycotoxins

Mycotoxins must not exceed levels specified by the Ministry of Health.

### 5.5 Radionuclides

Radioactivity levels in process(ed) cheese products included in this standard

must not exceed maximum levels specified by the Egyptian competent authority.

## 6.0 HYGIENE

**6.1** It is recommended that the products covered by the provisions of this standard be prepared and handled in accordance with the appropriate sections of the Recommended International Code of Practice - General Principles of Food Hygiene (CAC/RCP 1-1969, Rev. 3-1997), and other relevant Codex texts such as Codes of Hygienic Practice and Codes of Practice.

**6.2** From raw material production to the point of consumption, the products covered by this standard should be subject to a combination of control measures, which must include pasteurization, and these shall be shown to achieve the appropriate level of public health protection.

**6.3** The products should comply with any microbiological criteria established in accordance with the Principles for the Establishment and Application of Microbiological Criteria for Foods (CAC/GL 21-1997).

### 6.3.1 Microbiological Criteria

The product shall be free from pathogenic bacteria and their toxins, and in particular the following:

| | |
|---|---|
| Coliforms | <10 cfu/g |
| *Escherichia coli* | Not detected in 1 g |
| *Staphylococcus aureus* | Not detected in 1 g |
| *Listeria monocytogenes* | Not detected in 25 g |

### 6.3.1 Phosphatase

When tested for phosphatase, the phenol equivalent of 0.25 g of the product must not exceed 3 micrograms.

**6.4** To the extent possible in good manufacturing practice, the product must be free from objectionable matter (impurities).

## 7.0 PACKAGING

**7.1** Process(ed) cheese food products manufactured or offered for sale under these Standards shall be packaged in containers that will safeguard the hygienic, nutritional, and organoleptic properties of the food and which comply with Republican Decree No. 798/1957 concerning containers for packaging foodstuffs.

**7.2** The containers, including packaging and wrapping material, shall be made from substances that are safe and suitable for their intended use. They shall not impart any toxic substance or undesirable odor or flavor to the product.

## 8.0 LABELING

The product name or names used in this Standard shall be used only in accordance with the Codex Alimentarius Code of Principles Concerning Milk and Milk Products.

### 8.1 Name of the Food.

**8.1.1** The name of the food shall be process(ed) cheese. The qualifying term "sliceable" shall accompany the designation unless the consumer would not be misled by its omission. The designation and any other qualifying terms should be translated into other languages in a meaningful way and not necessarily word for word.

A product, subject of this standard with the addition of flavouring foods, spices, herbs, natural flavours, and nature identical flavours (refer Egyptian Standard ...) may be named "Process(ed) Cheese" with a clear description of the added characteristic ingredients (or group of ingredients) provided that such ingredients are not intended to take the place of any milk constituent and the process(ed) cheese remains the essential part of the product.

**8.1.2** 1) Process(ed) Cheese may be designated "Process(ed) _____" or "_____ Process(ed) Cheese", the blank being filled with the name(s) of a cheese variety(ies) provided that:

- the cheese variety(ies) are defined in an international or Egyptian Standard;
- the cheese blend from which the product is made contains at least 75% of the cheese varieties claimed;
- other dairy ingredients are not added, except the addition of butter and milkfat products for the adjustment of fat in dry matter content to the content of the variety(ies) claimed, as appropriate.

2) The variety name(s) may also be claimed by designating the product "Process(ed) Cheese with _____", the blank being filled with the name(s) of the varieties provided that at least 5% of the dry matter content of the final product is derived from the cheese variety(ies) claimed.

**8.1.3** If milk other than cows' milk is used, a word or words denoting the animal, or the case of a mixture, animals from which the milk has been derived should be inserted immediately before or after the designation of the product.

### 8.2 Mandatory Declarations

The following items should be printed clearly in Arabic on the label of both

prepackaged product and non-retail containers in conformity, as appropriate, with the Egyptian General Standard for the Labeling of Packaged Foods, Ministerial Decree No. 354/1985 and Egyptian Specification No. 1546. They may also be printed in a second language in addition to Arabic.

**8.2.1** Name of the product.
**8.2.2** Name and address of the manufacturer.
**8.2.3** Net weight.
**8.2.4** List of ingredients including food additives and percentage of preservatives.
**8.2.5** Production date and date of maximum durability.
**8.2.6** Milkfat content as a percentage of fat in the dry matter.
**8.2.7** Country of origin. "Country of origin" is the country in which the process(ed) cheese was manufactured. Products manufactured in Egypt must use the phrase "Made in Egypt".
**8.2.8** Storage conditions according to Egyptian Standard 2613.
**8.2.9** Lot identification or batch number.
**8.2.10** The words "Standard No. 999, Part I/1998".

## 9.0 METHODS OF ANALYSIS

Inspection and testing methods should conform to the Egyptian Standard Specification No. 155 concerning natural and chemical methods of testing milk and milk products as well as the Egyptian Standard Specification concerning microbiological testing methods (issued by the Organization in this respect).

**EGYPTIAN ORGANIZATION FOR STANDARDIZATION**

# DRAFT STANDARD FOR HARD CHEESES

## PART 1: GENERAL STANDARD FOR HARD CHEESE

**STANDARD NO. 1007**
**DATE OF REVISION: 19 March 1998**

## 1.0 SCOPE

This standard applies to ripened hard cheeses which have no individual standard intended for direct consumption or further processing in conformity with the product definition given in Section 2 of this Standard. However the Labeling section of this Standard provides additionally for the designation of ripened hard cheese with flavouring foods, spices, herbs, natural flavours, and nature identical flavours.

Standards for individual varieties of ripened hard cheese are given in subsequent parts of Standard No. 1007.

## 2.0 DESCRIPTION

**2.1** **Hard cheese** is the ripened solid product in which the whey protein/casein ratio does not exceed that of milk, obtained by:

a) coagulating the following raw materials: milk, skimmed milk, partly skimmed milk, cream, whey cream, buttermilk, or any combination of these materials, through the action of rennet or other suitable coagulating enzymes, and by partially draining the whey resulting from such coagulation; and/or

b) processing techniques involving coagulation of milk and/or materials obtained from milk which give an end-product with similar physical, chemical and organoleptic characteristics as the product defined under (a).

**2.2** Ripened hard cheese is cheese which is not ready for consumption shortly after manufacture but which must be held for such time, at such temperature, and under such other conditions as will result in the necessary biochemical and physical changes characterizing the cheese in question.

## 3.0 ESSENTIAL COMPOSITION AND QUALITY FACTORS

### 3.1 Raw Materials

Only raw materials specified in Section 2 of this Standard are permitted.

### 3.2 Permitted Ingredients

- Starter cultures of harmless lactic acid and/or flavor producing bacteria

and cultures of other harmless microorganisms.

- Rennet or other safe and suitable coagulating enzymes. Enzymes from porcine sources are prohibited.
- Sodium chloride
- Calcium chloride (processing aid)
- Carbon dioxide ($CO_2$) (processing aid)
- Flavouring foods, spices and herbs.[1]

### 3.3 Composition

| | Fat in dry matter (% m/m) | Moisture (% m/m) |
|---|---|---|
| High fat | Minimum 55% | Maximum 36% |
| Full fat | Minimum 45% and less than 55% | Maximum 40% |

### 3.4 Product Organoleptic Characteristics.

Cheese products covered under this Standard should be of a color, flavor, taste and texture typical and characteristic for the type of cheese. The products should not present excessive levels of manufacturing defects (e.g., late gas production).

## 4.0 FOOD ADDITIVES

Only food additives permitted by the Egyptian Ministry of Health and EOS may be used.

## 5.0 CONTAMINANTS

### 5.1 Pesticides

Pesticide residues for hard cheeses included in this standard must not exceed Maximum Residue Levels specified by the Egyptian Organization for Standardization (EOS).

### 5.2 Heavy Metals

Heavy metals contaminants in hard cheeses included in this Standard must not exceed levels established by the Egyptian Organization for Standardization (EOS).

### 5.3 Veterinary Drug Residues

Veterinary drug residues in hard cheeses included in this Standard must not exceed Maximum Residue Limits specified by the Egyptian Ministry of Agriculture.

### 5.4 Mycotoxins

[1] These ingredients should comply with Egyptian Standards.

Residues of mycotoxins should not exceed levels specified by the Ministry of Health.

### 5.5 Radionuclides

Radioactivity levels in hard cheeses included in this standard must not exceed maximum levels specified by the Egyptian competent authority.

## 6.0 HYGIENE

**6.1** It is recommended that the products covered by the provisions of this standard be prepared and handled in accordance with the appropriate sections of the Recommended International Code of Practice - General Principles of Food Hygiene (CAC/RCP 1-1969, Rev. 3-1997), and other relevant Codex texts such as Codes of Hygienic Practice and Codes of Practice.

**6.2** From raw material production to the point of consumption, the products covered by this standard should be subject to a combination of control measures, which must include pasteurization, and these shall be shown to achieve the appropriate level of public health protection.

**6.3** The products should comply with any microbiological criteria established in accordance with the Principles for the Establishment and Application of Microbiological Criteria for Foods (CAC/GL 21-1997).

#### 6.3.1 Microbiological Criteria

The product shall be free from pathogenic bacteria and their toxins, and in particular the following:

| | |
|---|---|
| Coliforms | <10 cfu/g |
| *Escherichia coli* | Not detected in 1 g |
| *Staphylococcus aureus* | Not detected in 1 g |
| *Listeria monocytogenes* | Not detected in 25 g |

**6.4** To the extent possible in good manufacturing practice, the product must be free from objectionable matter (impurities).

## 7.0 PACKAGING

**7.1** Cheeses manufactured or offered for sale under this Standard, when packaged, shall be packaged in containers that will safeguard the hygienic, nutritional, and organoleptic properties of the food and which comply with Republican Decree No. 798/1957 concerning containers for packaging foodstuffs.

**7.1.1** Packaging shall include, as appropriate, approved cheese coatings.

**7.2** The containers, including packaging and wrapping material, shall be made from substances that are safe and suitable for their intended use. They shall not impart any toxic substance or undesirable odor or flavor to the product.

## 8.0 LABELING

The product name or names used in this Standard shall be used only in accordance with the Codex Alimentarius Code of Principles Concerning Milk and Milk Products.

### 8.1 Name of the Food.

**8.1.1** Products which have no international or national standard shall be designated "hard cheese".

**8.1.2** A product subject to this Standard that contains flavoring foods, spices, herbs, permitted flavors (natural, nature identical) may be named for the specific cheese to which it conforms with a clear description of the added characteristics ingredients (or group of ingredients) provided that such ingredients are not intended to take the place of any milk constituent and the cheese remains the essential part of the product.

**8.1.3** If milk other than cows' milk is used, a word or words denoting the animal, or the case of a mixture, animals from which the milk has been derived should be inserted immediately before or after the designation of the product.

**8.2** Mandatory Declarations

The following items should be printed clearly in Arabic on the label of both prepackaged product and non-retail containers in conformity, as appropriate, with the Egyptian General Standard for the Labeling of Packaged Foods, Ministerial Decree No. 354/1985 and Egyptian Specification No. 1546. They may also be printed in a second language in addition to Arabic.

**8.2.1** Name of the product.
**8.2.2** Name and address of the manufacturer.
**8.2.3** Net weight.
**8.2.4** List of ingredients including food additives and percentage of preservatives.
**8.2.5** Production date and date of maximum durability.
**8.2.6** Milkfat content as a percentage of fat in the dry matter.
**8.2.7** Country of origin. "Country of origin" is the country in which the hard cheese was manufactured. Products manufactured in Egypt must use the phrase "Made in Egypt".
**8.2.8** Storage conditions according to Egyptian Standard 2613.
**8.2.9** Lot identification or batch number.
**8.2.10** The words "Standard No.1007/1998".

## 9.0 METHODS OF ANALYSIS

Inspection and testing methods should conform to the Egyptian Standard Specification No. 155 concerning natural and chemical methods of testing milk and milk products as well as the Egyptian Standard Specification concerning microbiological testing methods (issued by the Organization in this respect).

**EGYPTIAN ORGANIZATION FOR STANDARDIZATION**

# DRAFT STANDARD FOR HARD CHEESE

**STANDARD NO. 1007**
**DATE OF REVISION: 23 March 1998**

[Drafting note:
The following version of Parts 2 to 5 of Standard 1007 are presented here in short form for the sake of saving space. They should be completed by using generic sections from Part 1. Points where sections that are omitted are marked with ellipses (...)]

## PART 2: CHEDDAR

This Standard is confined to essential provisions relating to public health, food safety and consumer protection. The Annex to this Standard contains voluntary quality and compositional provisions to be used by buyers and sellers as the basis of sales or purchase agreements to facilitate trade. The Annex does not however, form part of the Standard, and acceptance of the Standard by the Egyptian Organization for Standardization or other Egyptian Governmental Bodies does not imply acceptance of the Annex.

### 1.0 SCOPE

This Standard applies to Cheddar intended for direct consumption or for further processing in conformity with the description in Section 2 of this Standard. However the labelling section of this standard provides additionally for the designation of Cheddar with flavouring foods, spices, herbs, natural flavours, and nature identical flavours.

### 2.0 DESCRIPTION

Cheddar is a ripened hard pressed cheese in conformity with the Egyptian Standard for Hard Cheese. The body has a uniform, pale straw through dark straw to orange colour and a firm, smooth and waxy texture, with none to few mechanical openings, and no gas holes or free moisture. The cheese is sold with or without rind and may be coated. The minimum ripening time for the cheese to be ready for consumption is normally 5 weeks.

### 3.0 ESSENTIAL COMPOSITION AND QUALITY FACTORS

#### 3.1 Raw Materials

Cows' milk or buffaloes' milk, or their mixtures, and products obtained from these milks.

### 3.2 Other Permitted Ingredients

- Starter cultures of harmless lactic acid and/or flavor producing bacteria and cultures of other harmless microorganisms.
- Rennet or other safe and suitable coagulating enzymes. Enzymes from porcine sources are prohibited.
- Sodium chloride
- Calcium chloride (processing aid)
- Carbon dioxide ($CO_2$) (processing aid)
- Potable water (processing aid)
- Flavouring foods, spices and herbs.[1]

### 3.3 Composition

| | Fat in dry matter (% m/m) | Moisture (% m/m) |
|---|---|---|
| High fat | Minimum 55% | Maximum 36% |
| Full fat | Minimum 45% and less than 55% | Maximum 40% |

### 3.4 Product Organoleptic Characteristics.

Cheese products covered under this Standard should be of a color, flavor, taste and texture typical and characteristic for the type of cheese.

…

### 8.1 Name of the Food

**8.1.1** Only products in conformity with this Standard may be designated Cheddar.

…

[1] These ingredients should comply with Egyptian Standards.

**ANNEX**

**STANDARD NO. 1007, PART 2**
**CHEDDAR**

This Annex is not intended as a standard, guideline recommendation, or technical regulation within the meaning of the Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) Agreements. Provisions provided within this Annex are not considered as essential for public health, food safety or consumer protection. These provisions are of a voluntary advisory nature intended to assist users; they reflect quality factors and criteria that may be used by commerce to define or describe the quality of the product and which may form part of contracts between buyers and sellers. Individual merchandisers should independently determine their product quality needs. Provisions of this annex do not constitute regulatory provisions of the Egyptian Organization for Standardization or any other Egyptian Governmental Body.

## 1.0 APPEARANCE CHARACTERISTICS

| | |
|---|---|
| 1.1 Shape: | Cylindrical or block (cuboid). The cheese may be sold cut, sliced, shredded or grated. |
| 1.2 Dimensions and weights: | Various |
| 1.3 Rind: | Hard and smooth, of pale straw through dark straw to orange colour.<br><br>May be coated with wax or cloth wrapped.<br><br>Rindless blocks may be in air-tight flexible film. |

## 2. METHOD OF MANUFACTURE

2.1 Lactic acid starter is added to the milk which may be ripened for up to 2 hours before coagulation using rennet or other suitable coagulating enzymes.

2.2 After coagulation, the curd is cut and scalded at up to 42 C. The curd is separated from the whey and cheddared. When the desired acidity is reached the curd is milled and salted. The curd and salt are then mixed and moulded. Following pressing the cheese is wrapped and matured, with typical maturation times varying from 5 to 52 or more weeks, depending on the temperature of maturation and the degree of maturity required.

## PART 3: SWISS CHEESES

This Standard is confined to essential provisions relating to public health, food safety and consumer protection. The Annex to this Standard contains voluntary quality and compositional provisions to be used by buyers and sellers as the basis of sales or purchase agreements to facilitate trade. The Annex does not however, form part of the Standard, and acceptance of the Standard by the Egyptian Organization for Standardization or other Egyptian Governmental Bodies does not imply acceptance of the Annex.

### 1.0 SCOPE

This Standard applies to Swiss Cheese, Emmental and Gruyere intended for direct consumption or for further processing in conformity with the description in Section 2 of this Standard. However the labelling section of this standard provides additionally for the designation of Swiss Cheeses with flavouring foods, spices, herbs, natural flavours, and nature identical flavours.

### 2.0 DESCRIPTION

Swiss cheeses are ripened hard cheeses in conformity with the Egyptian Standard for Hard Cheese, with a sliceable texture and regular, scarce to plentiful, distributed, mat to brilliant holes from 1 to 3 cm. The colour is ivory to light yellow. The minimum ripening time for the cheese to be ready for consumption is normally 6 weeks. The cheese is sold with or without rind and may be coated.

### 3.0 ESSENTIAL COMPOSITION AND QUALITY FACTORS

#### 3.1 Raw Materials

Cows' milk or buffaloes' milk, or their mixtures, and products obtained from these milks.

#### 3.2 Other Permitted Ingredients

- Starter cultures of harmless lactic acid and/or flavor producing bacteria and cultures of other harmless microorganisms.
- Rennet or other safe and suitable coagulating enzymes. Enzymes from porcine sources are prohibited.
- Sodium chloride
- Calcium chloride (processing aid)
- Carbon dioxide ($CO_2$) (processing aid)
- Potable water (processing aid)
- Flavouring foods, spices and herbs.[2]

[2] These ingredients should comply with Egyptian Standards.

### 3.3 Composition

| | Fat in dry matter (% m/m) | Moisture (% m/m) |
|---|---|---|
| High fat | Minimum 55% | Maximum 36% |
| Full fat | Minimum 45% | Maximum 40% |

### 3.4 Product Organoleptic Characteristics.

Cheese products covered under this Standard should be of a color, flavor, taste and texture typical and characteristic for the type of cheese.

...

### 8.1 Name of the Food

Only cheeses in conformity with this Standard may be designated Swiss or Emmental or Gruyere.

...

**ANNEX**

**STANDARD NO. 1007, PART 3**
**SWISS CHEESES**

This Annex is not intended as a standard, guideline recommendation, or technical regulation within the meaning of the Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) Agreements. Provisions provided within this Annex are not considered as essential for public health, food safety or consumer protection. These provisions are of a voluntary advisory nature intended to assist users; they reflect quality factors and criteria that may be used by commerce to define or describe the quality of the product and which may form part of contracts between buyers and sellers. Individual merchandisers should independently determine their product quality needs. Provisions of this annex do not constitute regulatory provisions of the Egyptian Organization for Standardization or any other Egyptian Governmental Body.

## 1.0 APPEARANCE CHARACTERISTICS

1.1 Rind: Hard, dry and yellow to golden brown.

1.2 Dimensions:

| Shape: | Wheel | Block |
|---|---|---|
| Height | 12-30 cm | 12-30 cm |
| Diameter: | 70-100 cm | - |
| Weight | Min. 60 kg | Min. 40 kg |

The cheese may be sold cut, sliced, shredded or grated.

## 2. METHOD OF MANUFACTURE

2.1 Fermentation procedure: Lactic acid fermentation and propionic acid fermentation.

2.2 Maturation procedure: Proteolysis due to action of microbial enzymes at successive temperatures up to 25 C.

2.3 Other characteristics: Treatment with cooking salt; the cheeses are salted by immersion in salt solution and/or dry salted on the surface.

## PART 4: ROMI

This Standard is confined to essential provisions relating to public health, food safety and consumer protection. The Annex to this Standard contains voluntary quality and compositional provisions to be used by buyers and sellers as the basis of sales or purchase agreements to facilitate trade. The Annex does not however, form part of the Standard, and acceptance of the Standard by the Egyptian Organization for Standardization or other Egyptian Governmental Bodies does not imply acceptance of the Annex.

### 1.0 SCOPE

This Standard applies to Romi, Cashcaval and Balqan Cheeses intended for direct consumption or for further processing in conformity with the description in Section 2 of this Standard. However the labelling section of this standard provides additionally for the designation of Romi with black pepper.

### 2.0 DESCRIPTION

Romi cheese is a ripened hard cheese in conformity with the Egyptian Standard for Hard Cheese. It has a pliable, elastic, laminar and very close texture, with visible layers and occasional slits but no gas holes, almost free from mechanical openings, with a smooth amber-coloured rind. The colour is creamy yellow. The minimum ripening time for the cheese to be ready for consumption is normally 2 months.

### 3.0 ESSENTIAL COMPOSITION AND QUALITY FACTORS

#### 3.1 Raw Materials

Cows' milk or buffaloes' milk, or their mixtures, and products obtained from these milks.

#### 3.2 Other Permitted Ingredients

- Starter cultures of harmless lactic acid and/or flavor producing bacteria and cultures of other harmless microorganisms.
- Rennet or other safe and suitable coagulating enzymes. Enzymes from porcine sources are prohibited.
- Sodium chloride
- Calcium chloride (processing aid)
- Carbon dioxide ($CO_2$) (processing aid)
- Potable water (processing aid)
- Black pepper.[3]

[3] These ingredients should comply with Egyptian Standards.

### 3.3 Composition

| Fat in dry matter (% m/m) | Moisture (% m/m) |
|---|---|
| Minimum 45% | Maximum 38% |

### 3.4 Product Organoleptic Characteristics.

Cheese products covered under this Standard should be of a color, flavor, taste and texture typical and characteristic for the type of cheese.

...

### 8.1 Name of the Food

**8.1.1** Only cheeses in conformity with this Standard may be designated Romi, Cashcaval, or Balqan.

**8.1.2** A product, subject of this Standard with the addition of black pepper may be named "Romi", "Cashcaval" or "Balqan" with a clear description of the added spice.

...

---

## ANNEX

## STANDARD NO. 1007, PART 4
## ROMI

This Annex is not intended as a standard, guideline recommendation, or technical regulation within the meaning of the Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) Agreements. Provisions provided within this Annex are not considered as essential for public health, food safety or consumer protection. These provisions are of a voluntary advisory nature intended to assist users; they reflect quality factors and criteria that may be used by commerce to define or describe the quality of the product and which may form part of contracts between buyers and sellers. Individual merchandisers should independently determine their product quality needs. Provisions of this annex do not constitute regulatory provisions of the Egyptian Organization for Standardization or any other Egyptian Governmental Body.

### 1.0 APPEARANCE CHARACTERISTICS

The cheese may be sold cut, sliced, shredded or grated.

## PART 5: RASS

This Standard is confined to essential provisions relating to public health, food safety and consumer protection. The Annex to this Standard contains voluntary quality and compositional provisions to be used by buyers and sellers as the basis of sales or purchase agreements to facilitate trade. The Annex does not however, form part of the Standard, and acceptance of the Standard by the Egyptian Organization for Standardization or other Egyptian Governmental Bodies does not imply acceptance of the Annex.

### 1.0 SCOPE

This Standard applies to Rass and Rivalutiri Cheeses intended for direct consumption or for further processing in conformity with the description in Section 2 of this Standard. However the labelling section of this standard provides additionally for the designation of Rass with black pepper.

### 2.0 DESCRIPTION

Rass is a ripened hard cheese in conformity with the Egyptian Standard for Hard Cheese. It has a firm, dry and fragile texture, containing none to few irregular mechanical openings and no gas holes or free moisture. It has a sharp flavour. The minimum ripening time for the cheese to be ready for consumption is normally 2 months.

### 3.0 ESSENTIAL COMPOSITION AND QUALITY FACTORS

#### 3.1 Raw Materials

Cows' milk or buffaloes' milk, or their mixtures, and products obtained from these milks.

#### 3.2 Other Permitted Ingredients

- Starter cultures of harmless lactic acid and/or flavor producing bacteria and cultures of other harmless microorganisms.
- Rennet or other safe and suitable coagulating enzymes. Enzymes from porcine sources are prohibited.
- Sodium chloride
- Calcium chloride (processing aid)
- Carbon dioxide ($CO_2$) (processing aid)
- Potable water (processing aid)
- Black pepper.[4]

[4] These ingredients should comply with Egyptian Standards.

### 3.3 Composition

| Fat in dry matter (% m/m) | Moisture (% m/m) |
|---|---|
| Minimum 45% | Maximum 40% |

### 3.4 Product Organoleptic Characteristics.

Cheese products covered under this Standard should be of a color, flavor, taste and texture typical and characteristic for the type of cheese.

...

### 8.1 Name of the Food

**8.1.1** Only cheeses in conformity with this Standard may be designated Rass or Rivalutiri.

**8.1.2** A product, subject of this Standard with the addition of black pepper may be named "Rass" or "Rivalutiri" with a clear description of the added spice.

...

---

## ANNEX

## STANDARD NO. 1007, PART 4
## ROMI

This Annex is not intended as a standard, guideline recommendation, or technical regulation within the meaning of the Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) Agreements. Provisions provided within this Annex are not considered as essential for public health, food safety or consumer protection. These provisions are of a voluntary advisory nature intended to assist users; they reflect quality factors and criteria that may be used by commerce to define or describe the quality of the product and which may form part of contracts between buyers and sellers. Individual merchandisers should independently determine their product quality needs. Provisions of this annex do not constitute regulatory provisions of the Egyptian Organization for Standardization or any other Egyptian Governmental Body.

### 1.0 APPEARANCE CHARACTERISTICS

The cheese may be sold cut, sliced, shredded or grated.

**EGYPTIAN ORGANIZATION FOR STANDARDIZATION**

# PROPOSED DRAFT GENERAL STANDARD FOR FERMENTED MILKS[1]

**STANDARD NO. [....]**
**DATE OF DISCUSSION: 24 MARCH 1998**

**[**Drafting Notes:

1. This draft standard is intended as an initial guideline only. Technical experts in the manufacture of fermented milks must review and/or revise the standard based on specific knowledge of the products. The Egyptian Standards under study were those for Yoghurt (ES 1000) and Sweetened Flavoured Yoghurt (ES 1650).

2. The current Codex Alimentarius model for commodity standards was used in the preparation of the proposed draft standard. The primary references used for the preparation of this draft are: 1) Egyptian Standards 1000 and 1650; and 2) the Codex Alimentarius Proposed Draft Standard for Fermented Milks (at Step 3).]

## 1.0 SCOPE

This standard applies to Fermented Milk including Products Obtained from Fermented Milks Heat Treated After Fermentation, and composite fermented milk products based on these products, for direct consumption or further processing in conformity with the product definition given in Section 2 of this Standard.

Standards for individual varieties of fermented milks are given in Egyptian Standard Nos. 1000, 1650, ...

## 2.0 DESCRIPTION

**2.1** **Fermented Milk** is a milk product obtained by fermentation of milk, which milk may have been manufactured from the raw materials listed in Section 3.1, by the action of specific micro-organisms and resulting in reduction of pH and coagulation. These specific micro-organisms shall be viable, active and abundant in the product to the date of maximum durability.

Certain Fermented Milks are characterized by the specific micro-organism(s) used for fermentation as follows:

**Acidophilus milk:** *Lactobacillus acidophilus*

**Bifighurt (Bifidus milk):** Bifidobacteria

[1] Prepared by the Egyptian Organization for Standardization in Coordination with the Development Economic Policy Reform and Analysis Project (DEPRA), Nathan Associates Inc., Arlington, VA, USA, and the New Zealand Ministry of Agriculture and Forestry.

| | |
|---|---|
| **Bioghurt:** | *Streptococcus thermophilus* and *Lactobacillus acidophilus* |
| **Biogard:** | *Streptococcus thermophilus, Lactobacillus acidophilus* and Bifidobacteria. |
| **Kefir:** | Starter culture prepared from kefir grains, *Lactobacillus kefir*, species of the genera *Leuconostoc, Lactococcus* and *Acetobacter* growing in a strong specific relationship. Kefir grains constitute both lactose-fermenting yeasts (*Kluyveromyces marxianus*) and non-lactose-fermenting yeasts (*Saccharomyces omnisporus, Saccharomyces cerevisae* and *Saccharomyces exiguus*). |
| **Kumys:** | *Lactobacillus delbrueckii* subsp. *bulgaricus* and species of *Kluyveromyces marxianus.* |

**2.2 Composite fermented milk products** are the plain products to which nutritive carbohydrate sweeteners, flavouring foods (such as fruits and vegetables as well as juices, purees, pulps, preparations and preserves derived therefrom, cereals, honey, chocolate, nuts, coffee, spices and other harmless natural flavouring foods) and/or natural or nature-identical flavours have been added.

**2.3 Products Obtained from Fermented Milks Heat-Treated After Fermentation** are the products described in 2.1 and 2.2 above and which have been subject to heat treatment after fermentation.

## 3.0 ESSENTIAL COMPOSITION AND QUALITY FACTORS

### 3.1 Raw Materials

Milk and products obtained from milk.

### 3.2 Permitted Ingredients

- Starter cultures of harmless microorganisms, including those mentioned in Section 2.
- Sodium chloride

In composite products only:

- Gelatine and starch, added either before or after the flavourings
- Flavouring foods, spices and herbs[2]
- Safe and suitable nutritive carbohydrate sweeteners.

[2] These ingredients should comply with Egyptian Standards.

### 3.3 Composition

| | | |
|---|---|---|
| Acidity, expressed as lactic acid | | Maximum 1.5% m/m |
| Specific microorganisms defined in Section 2.1 | Minimum $10^7$(cfu/g, in total) | |
| Milkfat | Full fat products | Minimum 3% m/m |
| | Partially skimmed products | Less than 3% m/m |
| | Skimmed products | Maximum 0.5% m/m |
| Total solids in composite fermented milk products | | Minimum 27% m/m |

| | Milk protein in milk-solids-not-fat (% m/m) | Milk protein (% m/m) | Ethanol (% vol/m) | Labeled additional microorganisms (optional) (cfu/g, in total) | Yeasts (cfu/g) |
|---|---|---|---|---|---|
| Fermented Milk | Min. 34% | Min. 3% | - | - | - |
| Fermented Milk with additional microorganisms | Min. 34% | Min. 3% | - | Min. $10^7$ | - |
| Acidophilus milk | Min. 34% | Min. 3% | - | Min. $10^7$ | - |
| Bifighurt | Min. 34% | Min. 3% | - | Min. $10^7$ | - |
| Bioghurt | Min. 34% | Min. 3% | - | Min. $10^7$ | - |
| Biogard | Min. 34% | Min. 3% | - | Min. $10^7$ | - |
| Kefir | Min. 34% | Min. 3% | - | - | Min. $10^4$ |
| Kumys | - | - | Min.0.5% | - | Min. $10^4$ |

Products heat-treated after fermentation need not comply with the above specified microbiological criteria after they have been subjected to heat treatment.

### 3.4 Product Organoleptic Characteristics.

Fermented milks must be free of colour, taste and odour defects.

## 4.0 FOOD ADDITIVES

Only food additives permitted by the Egyptian Ministry of Health and EOS may be used.

Preservatives are not permitted in fermented milks, except benzoic and sorbic acids and their salts, singly or in combination not exceeding 50 mg/kg, in flavouring foods used as ingredients.

## 5.0 CONTAMINANTS

### 5.1 Pesticides

Pesticide residues for fermented milks included in this standard must not exceed Maximum Residue Levels specified by the Egyptian Organization for Standardization (EOS).

### 5.2 Heavy Metals

Heavy metals contaminants in fermented milks included in this Standard must not exceed levels established by the Egyptian Organization for Standardization (EOS).

### 5.3 Veterinary Drug Residues

Veterinary drug residues in fermented milks included in this Standard must not exceed Maximum Residue Limits specified by the Egyptian Ministry of Agriculture.

### 5.4 Mycotoxins

Residues of mycotoxins should not exceed levels specified by the Ministry of Health.

### 5.5 Radionuclides

Radioactivity levels in fermented milks included in this standard must not exceed maximum levels specified by the Egyptian competent authority.

## 6.0 HYGIENE

**6.1** It is recommended that the products covered by the provisions of this standard be prepared and handled in accordance with the appropriate sections of the Recommended International Code of Practice - General Principles of Food Hygiene (CAC/RCP 1-1969, Rev. 3-1997), and other relevant Codex texts such as Codes of Hygienic Practice and Codes of Practice.

**6.2** From raw material production to the point of consumption, the products covered by this standard should be subject to a combination of control measures, which must include pasteurization, and these shall be shown to achieve the appropriate level of public health protection.

**6.3** The products should comply with any microbiological criteria established in accordance with the Principles for the Establishment and Application of Microbiological Criteria for Foods (CAC/GL 21-1997).

#### 6.3.1 Microbiological Criteria

The product shall be free from pathogenic bacteria and their toxins, and in particular the following:

| | |
|---|---|
| Coliforms | <10 cfu/g |
| *Escherichia coli* | Not detected in 1 g |
| *Staphylococcus aureus* | Not detected in 1 g |
| *Listeria monocytogenes* | Not detected in 25 g |

**6.4** To the extent possible in good manufacturing practice, the product must be free from objectionable matter (impurities).

## 7.0 PACKAGING

**7.1** Fermented milks manufactured or offered for sale under these Standards shall be packaged in containers that will safeguard the hygienic, nutritional, and organoleptic properties of the food and which comply with Republican Decree No. 798/1957 concerning containers for packaging foodstuffs.

**7.2** The containers, including packaging and wrapping material, shall be made from substances that are safe and suitable for their intended use. They shall not impart any toxic substance or undesirable odor or flavor to the product.

## 8.0 LABELING

The product name or names used in this Standard shall be used only in accordance with the Codex Alimentarius Code of Principles Concerning Milk and Milk Products.

**8.1** Name of the Food.

**8.1.1** The name of the food shall be Fermented Milk or the specified names in accordance with Sections 2 and 3.

**8.1.2** The designation of Composite Fermented Milk Products shall include the name(s) of the principal flavouring substance(s) or flavour(s) used, and shall include the word "sweetened" if nutritive carbohydrate sweeteners are used.

**8.1.3** If milk other than cows' milk is used, a word or words denoting the animal, or the case of a mixture, animals from which the milk has been derived should be inserted immediately before or after the designation of the product.

**8.2** Mandatory Declarations

The following items should be clearly printed in Arabic (and other languages as appropriate) on the label of the product in Arabic in conformity, as appropriate, with the Codex General Standard for the Labeling of Prepackaged Foods.

The following items should be printed clearly in Arabic on the label of both prepackaged product and non-retail containers in conformity, as appropriate, with the Egyptian General Standard for the Labeling of Packaged Foods Ministerial Decree No. 354/1985 and Egyptian Specification No. 1546. They may also be printed in a second language in addition to Arabic.

**8.2.1** Name of the product.
**8.2.2** Name and address of the manufacturer.
**8.2.3** Net weight.
**8.2.4** List of ingredients including food additives and percentage of preservatives.
**8.2.5** Production date and date of maximum durability.

**8.2.6** Milkfat content as a percentage of fat in the dry matter.

**8.2.7** Country of origin. "Country of origin" is the country in which the fermented milk was manufactured. Products manufactured in Egypt must use the phrase "Made in Egypt".

**8.2.8** Storage conditions according to Egyptian Standard 2613.

**8.2.9** Lot identification or batch number.

**8.2.10** The words "Standard No...../1998".

## 9.0 METHODS OF ANALYSIS

Inspection and testing methods should conform to the Egyptian Standard Specification No. 155 concerning natural and chemical methods of testing milk and milk products as well as the Egyptian Standard Specification concerning microbiological testing methods (issued by the Organization in this respect).

**EGYPTIAN ORGANIZATION FOR STANDARDIZATION**

# PROPOSED DRAFT STANDARD FOR FROZEN MEAT[1]

**STANDARD NO. 1522**
**DATE OF REVISION: 30 September, 1997**[1]

This Standard is confined to essential provisions relating to public health, food safety and consumer protection. The Annex to this Standard contains voluntary quality and compositional provisions to be used by buyers and sellers as the basis of sales or purchase agreements to facilitate trade. The Annex does not however, form part of the Standard, and acceptance of the Standard by the Egyptian Organization for Standardization or other Egyptian Governmental Bodies does not imply acceptance of the Annex.

The requirements of this standard shall be administered by the competent authorities.

## 1.0 SCOPE

This standard applies to frozen meat obtained from species of slaughtered animals that are permitted to be used for human consumption.

Permitted species includes:
Bovine animals (e.g. bull, cow, steer, heifer, veal), ovine animals (e.g. ram, mutton, lamb), Buffalo, goats, camel, deer.

This standard includes all meat permitted to be imported into the Arab Republic of Egypt.

## 2.0 DESCRIPTION

### 2.1 Definition

Frozen meat is the carcass and cuts prepared from permitted slaughtered animals and includes the whole muscle tissue, fat, tendons, blood vessels, nerves, bone and cartilage in their natural proportions.

[1]Prepared by the Egyptian Organisation for Standardization and in Coordination with the Development Economic Policy Reform and Analysis Project (DEPRA). Nathan and Associates Inc. Arlington. VA. USA

## 3.0 ESSENTIAL COMPOSITION AND RELATED FACTORS

### 3.1 Raw Materials

Only raw materials specified in Section 2 (above) of this Standard are permitted.

### 3.2 Composition

3.2.1 Fat

(i) Table cuts for direct consumption when presented for retail sale should not contain more than 7% fat.
(ii) Manufacturing meat should not contain more than 20% fat.

[The Technical Expert did not agree to the standard including compositional criteria for fat. The Technical Committee stipulated that the above criteria which are applied under the current standard should be retained.]

3.2.2 Decomposition
Volatile nitrogen, pH, drip and lipid oxidation levels can be given, if desired.

[The Technical Expert pointed out that scientific evidence did not support mandatory application of these criteria and suggested that these should only be applied as confirmation of organoleptic evidence. Furthermore the Technical Expert did not agree that drip levels had any relevance to public health or wholesomeness and that the public interest was unlikely to be served due to the low specificity of test in this regard]

### 3.3 Related Factors

Meat as defined in this standard shall:

3.3.1 Shall be processed according to the requirements of the competent authority.

3.3.2 Be slaughtered and processed in an establishment licensed by the competent authority.

3.3.3 Be obtained from animals that were determined to be healthy at the time of slaughter. Animals slaughtered for the purposes of disease control or eradication shall not be used for meat.

3.3.4 Be slaughtered according to Islamic legislation (Halal).

3.3.5 After slaughter and before further processing of the carcass, shall not contain any diseased tissues or defects that are injurious to public health and are fit for human consumption.

3.3.6 Be preserved by freezing.

3.3.7 The date of durability shall be determined according to standard 2613 of the Egyptian Organization for Standardization taking into account the following recommendation:
The date of durability shall be determined by the manufacturer taking into consideration the nature of the product and its manufacturing and storage conditions, and the climatic, distribution and retail sale characteristics of Egypt.

## 4.0 FOOD ADDITIVES

No food additives are permitted in frozen meat.

## 5.0 CONTAMINANTS

### 5.1 Pesticides and Hazardous Organic Compounds

Residues of pesticide or hazardous organic compounds for frozen meat included in this standard must not exceed Maximum Residue Levels specified by the Egyptian Organization of Standardization (EOS). In the absence of an Egyptian standard the relevant Codex recommendation shall apply.

### 5.2 Heavy Metals

Heavy metals contaminants in frozen meat included in this standard shall meet the requirements of the EOS. In the absence of an Egyptian standard the relevant Codex recommendation shall apply.

### 5.3 Veterinary Drug Residues and Hormones

Veterinary drug residues and hormones for meat included in this standard must not exceed Maximum Residue Limits specified by Egyptian standards. In the absence of an Egyptian standard the relevant Codex recommendation shall apply.

### 5.4 Radionuclides

The residues of radionuclides for products included within this Standard shall be within limits proscribed by recognized national or international standards setting bodies.

## 6.0 HYGIENE

**6.1** The products covered by the provisions of this standard should be prepared and handled in accordance with good manufacturing practices [specify Egyptian EOS and MOH regulations including microbiological criteria if applicable]; the Codex Alimentarius Recommended International Code of Practice- General Provisions of Food Hygiene and other relevant Codex Codes of Practices relevant to these products.

**6.2** Frozen meat products should comply with any microbiological criteria established in accordance with the Principles for the Establishment and Application of Microbiological Criteria for Foods (CAC/GL 21-1997).

**6.3** To the extent possible in good manufacturing practice, be free from objectionable material.

**6.4** The meat must be reduced to, and maintained at, a temperature not exceeding -18°C in all parts of the meat.

[The Technical committee initially agreed that -12 °C was acceptable but later changed back to the temperature requirements stipulated in the current standard].

**6.5** At all times, the meat must be handled and stored in the frozen state in a manner that avoids deterioration and spoilage.

## 7.0 PACKAGING

**7.1** Packaging shall conform to all requirements of the Egyptian Organization for Standardization for packaging materials.

## 8.0 LABELING

Prepackaged products, including bulk packages and their subunits, covered by this Standard shall be labeled in accordance with the requirements of the Egyptian Organizations for Standardization.

**8.1 Name of the Product.**

The name of the product shall be frozen (species of meat) meat either with or without bones, designated as to the species of the animal from which it is obtained. If the frozen meat product is cut into parts, then the common and usual name for the cut or part shall also be used in naming the product.

**8.2 Mandatory Declarations**

The following items must appear on the label of the product in Arabic (or other languages as appropriate):

8.2.1 Name of the product.
8.2.2 Name and address and license (establishment) number of the slaughterer/manufacturer.
8.2.3 Name and address of the importer and exporter.
8.2.4 Net weight.
8.2.5 Production date and date of durability.
8.2.6 Country of origin.
8.2.7 The expression Slaughtered according to Islamic Legislation (Halal).
8.2.8 Keep Frozen.at -18°C
[The temperature specification for labelling does not appear in the original text of standard ES 1522 - 1991 viewed by the Technical Expert].

**8.3 Country of Origin.**

Country of origin is the country in which the frozen meat was slaughtered and manufactured.

**8.5 Date Marking (Date of Durability).**

The date should be the date of slaughter.

**8.6 Labeling of Non-retail Containers.**

The name of the product, lot identification and the name and address of the manufacturer or packer must appear on the container. Other required labeling information, if not provided on the container, must be provided in accompanying shipping documents.

## 9.0 METHODS OF ANALYSIS

[To be specified by the Egyptian Organization for Standardization]

**ANNEX**
STANDARD NO. 1522
**FROZEN MEAT**

This Annex is not intended as a standard, guideline recommendation, or technical regulation within the meaning of the Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) Agreements. Provisions provided within this Annex are not considered as essential for public health, food safety or consumer protection. These provisions are of a voluntary advisory nature intended to assist users; they reflect quality factors and criteria that may be used by commerce to define or describe the quality of the product and which may form part of contracts between buyers and sellers. Individual merchandisers should independently determine their product quality needs. Provisions of this annex do not constitute regulatory provisions of the Egyptian Organization for Standardization or any other Egyptian Governmental Body.

## 1.0 OTHER COMPOSITION OR QUALITY FACTORS

### 1.1 Sensory evaluation

Recommendations for acceptable colour, odour, texture and presence of blood clots may be given if necessary.

## 2.0 WEIGHTS AND MEASURES

none stated

**EGYPTIAN ORGANIZATION FOR STANDARDIZATION**

# PROPOSED DRAFT STANDARD FOR FROZEN MEAT BURGER[1]

**STANDARD NO. 1688**
**DATE OF REVISION: 30 September, 1997**

This Standard is confined to essential provisions relating to public health, food safety and consumer protection. The Annex to this Standard contains voluntary quality and compositional provisions to be used by buyers and sellers as the basis of sales or purchase agreements to facilitate trade. The Annex does not however, form part of the Standard, and acceptance of the Standard by the Egyptian Organization for Standardization or other Egyptian Governmental Bodies does not imply acceptance of the Annex.

The requirements of this standard shall be administered by the competent authorities.

## 1.0 SCOPE

This standard applies to frozen meat burger products and includes all frozen meat burgers produced in and imported into the Arab Republic of Egypt.

## 2.0 DESCRIPTION

### 2.1 Definition

Frozen meat burger is the frozen formed product prepared from chopped (minced) fresh or frozen meat obtained from species of animals permitted to be used for human consumption. Frozen meat burger may contain filling agents and permitted additives.

## 3.0 ESSENTIAL COMPOSITION AND RELATED FACTORS

### 3.1 Raw Materials

**3.1.1** Frozen meat produced in accordance with the standard 1522 (1991), Egyptian Organization for Standardization.

[1] Prepared by the Egyptian Organization for Standardization in Coordination with the Development Economic Policy Reform and Analysis Project (DEPRA), Nathan Associates Inc., Arlington, VA, USA.

**3.1.2** Fresh meat produced in accordance with standards for Good Manufacturing Practice laid down by the Egyptian Organization for Standardization.

**3.1.3** The following are prohibited in frozen meat burgers:

(i) meat obtained from swine (pork).

(ii) tissues of any species obtained from head, nose, ear, lips, mucous membrane, reproductive system parts, lungs, esophagus, intestines, bladder, skin, hide and hair, bones and cartilage, and apparent blood vessels

## 3.2 Other Permitted Ingredients

All food and food ingredients must be of a suitable quality. Food ingredients shall comply with the requirements of the appropriate Egyptian standard.

3.2.1 Filling agents to include soy flour, soy protein concentrate, starch and other permitted filling agents.

3.2.2 Salt.

3.2.3 Food additives as specified below.

## 3.3 Composition

**3.3.1** Fat content is not to exceed 20%.

**3.3.2** Red meat content of at least 60%.

**3.3.3** Total protein content of at least 15%.

**3.3.4** Moisture should not exceed 60%.

**3.3.5** Filling agents should not exceed 20%

**3.3.6** Salt: the amount of salt used should be according to Good Manufacturing Practice.

## 3.4 Related Factors

3.4.1 Frozen meat burgers as defined in this standard shall be obtained from the meat of only one species of animal.

3.4.2 Shall be processed according to the requirements of the competent authority.

3.4.3 Be slaughtered and processed in an establishment licensed by the competent authority.

3.4.4 Be obtained from animals that were determined to be healthy at the time of slaughter. Animals slaughtered for the purposes of disease control or eradication shall not be used for meat.

3.4.5 Be slaughtered according to Islamic legislation (Halal).

3.4.6 After slaughter and before further processing of the carcass, shall not contain any diseased tissues or defects that are injurious to public health and are fit for human consumption.

3.4.7 After production, the meat burger must be reduced to, and maintained at, a temperature not exceeding -18°C in all parts of the meat.
[The Technical committee initially agreed that -12 °C was acceptable but later changed to -18°C. The text of the original standard for frozen beef burgers, ES 1688-1991,viewed by the Technical Expert does not stipulate any storage temperature].

3.4.8 The date of durability shall be determined according to standard 2613 of the Egyptian Organization for Standardization taking into account the following recommendation:

(i) The date of durability should be determined by the manufacturer taking into consideration the nature of the product and its manufacturing and storage conditions, and the climatic, distribution and retail sale characteristics of Egypt.

(ii) The shelf life of frozen meat burgers should not exceed 3 months from the date of manufacture but, in any event, the shelf life should not exceed the shelf life of the meat ingredients.

[The Technical Expert pointed out that the second part contradicted the general principles for establishing shelf life.]

## 4.0 FOOD ADDITIVES

Food additives are which are permitted by the Ministry of Health (MOH) may be used in frozen meat burger at the levels specified by the MOH.

[Additives previously specified in the text of the standard 1688 - 1991 were removed from this draft by the Technical Committee]

## 5.0 CONTAMINANTS

### 5.1 Pesticides

Pesticide residues for the frozen meat ingredient and other ingredients used to manufacture meat products included in this standard must not exceed Maximum Residue Levels specified by the Egyptian Organization for Standardization (EOS).

**5.2 Heavy Metals**

Heavy metals contaminants in the frozen meat ingredient and other ingredients used to manufacture meat product in this standard shall meet the requirements of the Egyptian Organization for Standardization (EOS).

**5.3 Veterinary Drug Residues and Hormones**

Veterinary drug residues and hormones for the frozen meat ingredient used in this standard must not exceed Maximum Residue Limits specified by the Egyptian Ministry of Agriculture.

**5.4 Radionuclides**

The level of radioactivity for products included within this Standard shall be within limits proscribed by recognized international standards setting bodies.

## 6.0 HYGIENE

Meat and other ingredients used in the preparation of frozen meat burger, and the frozen meat burger product included in this standard must:

**6.1** Be prepared and handled in accordance with good manufacturing practices [specify Egyptian EOS and MOH regulations including microbiological criteria if applicable]; the Codex Alimentarius Recommended International Code of Practice- General Provisions of Food Hygiene and other Codex Codes of Practices relevant to these products.

**6.2** Frozen meat burgers should comply with any microbiological criteria established in accordance with the Principles for the Establishment and Application of Microbiological Criteria for Foods (CAC/GL 21-1997).

**6.3** To the extent possible in good manufacturing practice, be free from objectionable material.

**6.4** At all times, meat burgers must be handled and stored in a frozen state in a manner that avoids deterioration and spoilage.

## 7.0 PACKAGING

**7.1** Packaging and wrapping materials shall conform to all requirements of the Egyptian Organization for Standardization for packaging materials.

## 8.0 LABELING

Prepackaged products covered by this Standard shall be labeled in accordance with the requirements of the Egyptian Organization for Standardization for labeling of pre-packaged foods.

### 8.1 Name of the Product.

The name of the food is frozen "x" meat burger where "x" is the name of the animal used to manufacture the product (e.g., from beef meat).

### 8.2 Mandatory Declarations.

The following items must appear on the label of the product in Arabic (and other languages as appropriate):.

8.2.1 Name of the product.
8.2.2 Name and address and license (establishment) number of the manufacturer.
8.2.3 Name and address of the importer and exporter (for imported products).
8.2.4 Net weight.
8.2.5 List of ingredients in descending order of predominance including all direct additives and preservatives.
8.2.6 Statement "Must be kept frozen at -18°C"
[The temperature specification for labeling does not appear in the original text of standard ES 1688 - 1991 viewed by the Technical Expert]
8.2.7 Production date and date of durability.
8.2.8 Country of origin. Products manufactured in Egypt must use the phrase "Made in Egypt"
8.2.9 The expression "Produced according to Islamic Legislation" (Halal).
8.2.10 Statement "Not less than 60% lean meat"

### 8.3 Country of Origin.

Country of origin is the country in which the meat burger was manufactured and the animal was slaughtered.

[The Technical Committee insisted on the country of origin in addition to the country of manufacturer. Technical Expert pointed out the practical difficulties for Egyptian manufacturers of frozen burgers using imported frozen meat who will now need separate labels for each country from which they are likely to purchase frozen meat.]

### 8.4 Origin of frozen meat ingredient.

On the public health certificate accompanying imported product as required by governmental authority, an additional declaration must be

made on the origin(s) of the meat used to manufacture the meat burger product.

**8.5 Date Marking (Date of Durability).**

The date should be the date of manufacture.

**8.6 Labeling of Non-retail Containers.**

The name of the product, lot identification and the name and address of the manufacturer or packer must appear on the container. Other required labeling information, if not provided on the container, must be provided in accompanying shipping documents.

## 9.0 METHODS OF ANALYSIS

[To be specified by the Egyptian Organization for Standardization]

**ANNEX**
**STANDARD NO. 1688**
**[FROZEN MEAT BURGER]**

This Annex is not intended as a standard, guideline recommendation, or technical regulation within the meaning of the Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) Agreements. Provisions provided within this Annex are not considered as essential for public health, food safety or consumer protection. These provisions are of a voluntary advisory nature intended to assist users; they reflect quality factors and criteria that may be used by commerce to define or describe the quality of the product and which may form part of contracts between buyers and sellers. Individual merchandisers should independently determine their product quality needs. Provisions of this annex do not constitute regulatory provisions of the Egyptian Organization for Standardization or any other Egyptian Governmental Body.

## OTHER COMPOSITION OR QUALITY FACTORS

non stated

## WEIGHTS AND MEASURES

none stated.

# EGYPTIAN ORGANIZATION FOR STANDARDIZATION

## PROPOSED DRAFT STANDARD

FOR

# CANNED SALMON FISH

## STANDARD NO. ES 288

Date of Proposed Revision: 1998

[Drafting Notes:
1. This proposed draft standard is intended as an initial guideline only. Technical experts in fish and fishery products technology must revise the standard based on specific knowledge of the product(s).

2. Draft Proposed EOS Standard No. 288-1998 incorporates many species of salmon. Since the Codex Alimentarius also incorporates many species of salmon into it's Standard for Canned Salmon, it is recommended that consideration be given to using the Codex Standard in the revision of this Standard.

3. Primary references used for the preparation of this draft are: 1) Egyptian Standard ES 288-1996; 2) Codex Alimentarius Standard for Canned Salmon. ]

This standard addresses essential provisions relating to public health, food safety, and consumer protection. The Annex to this Standard contains quality and compositional provisions which producers and importers must comply with.[1] Provisions of this standard and of the annex may be used by buyers and sellers as the basis of sales or purchase agreements to facilitate trade.

Preamble

These standards abrogate and replace ES 288 of 1996 concerning canned salmon fish.

## 1. SCOPE

These standards apply to canned salmon fish for direct human consumption in conformity with the product definition given in Section 2 of this Standard.

[1] The text shown here is that agreed upon by the Committee. The text proposed by the Technical Advisory Team is shown at the end of the Annex.

## 2. DESCRIPTION

2.1 Product Definition

Canned salmon fish is the product of preserving the flesh of salmon fish having been prepared and packed in suitable medium, in tightly closed metal cans treated thermally for preservation purposes.

2.2 Species used in Canned Salmon:

- Oncorhynchus nerka
- Oncorhynchus kisutch
- Oncorhynchus tshawytscha
- Oncorhynchus gorbuscha
- Oncorhynchus keta
- Oncorhynchus masou
- Salmo salar

2.3 Process Definition

Canned salmon is packed in hermetically sealed containers and shall have received a thermal processing treatment sufficient to ensure commercial sterility.

2.4 It is recommended that the products covered by the provisions of this Standard be prepared in accordance with the following codes:

(i) the appropriate sections of the Recommended International Code of Practice - General Principles of Food Hygiene.

(ii) the Recommended International Code of Practice for Canned Fish.

(iii) the Recommended International Code of Hygienic Practice for Low-Acid and Acidified Low-Acid Canned Foods.

(iv) the Recommended International Code of Hygienic Practice for the Products of Aquaculture.

## 3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 Salmon

The product shall be prepared from sound fresh, frozen or smoked fish of the species in Section 2.2 and of a quality fit to be sold fresh for human consumption. The fish must be from harvest or

growing waters that are free of chemical, biological and radiological contamination in levels that may result in residues in violation of section 5 of this standard.

3.2 Other Permitted Ingredients

All other ingredients used shall be of food grade quality and confrom to all applicable EOS Standards.
The media of packing must either be an edible oil or saline solution. Salmon oil may be used as a media for packing, provided that it has proved good for human consumption.

## 4. FOOD ADDITIVES

4.1 No additives are permitted in this product unless it consists of smoked salmon.

4.2 Permitted smoking fluids resulting from wood smoke dilution may be used in smoked salmon in accordance with the Egyptian Organization for Standardization standard for smoked fish.

## 5. CONTAMINANTS

5.1 Pesticides

Pesticide residues for the ingredients used for the manufacture of Canned Salmon included in this standard must not exceed Maximum Residue Levels specified by the EOS or the Codex Committee on Pesticide Residues in Food.

5.2 Heavy Metals

Heavy metal contaminant levels for the ingredients used for the manufacture of Canned Salmon included in this standard must not exceed the levels specified by the Egyptian Organization for Standardization (EOS) in ES 2630/1993..

5.3 Radio nuclides

The level of radioactivity for products included within this Standard shall be within limits proscribed by recognized concerned authorities.

5.5 Veterinary Drug residues and Hormone Residues.

Veterinary drug residues and hormone residues for fish included in this Standard must not exceed Maximum Residue Limits specified by the Egyptian Organization for Standardization or Egyptian Ministry of Agriculture.

## 6.0 HYGIENE

6.1 Canned Salmon shall be prepared and handled in accordance with Egyptian Organization for Standardization and Egyptian Ministry of Health requirements and any other applicable Codes of Hygienic Practice relevant to this product.

6.2 The product, when tested using methods specified by the Egyptian Organization for Standardization for samples and examination, the product shall:

A) Be free from pathogenic microorganisms which may represent a hazard to health.
B) Be free from viable parasites and diseases that represent a hazard to health.
C) Not contain any substance originating from microorganisms or their actions or presence in amounts which may represent a hazard to health.

6.3 The final product shall be free from any foreign material or objects that pose a threat to human health.

## 7. PACKAGING

7.1 Products manufactured or offered for sale under this Standard shall be packaged in containers that will safeguard the hygienic, nutritional, and organoleptic properties of the food. Containers shall have a negative pressure on the inside and be free of defects which may compromise the hermetic seal of the container..

7.2 The containers, including packaging and wrapping material, shall be made from substances that are safe and suitable for their intended use. They shall not impart any toxic substance or undesirable odor or flavor to the product.

7.3 Packs must fulfill the requirements stipulated in the Presidential Decree No. 798 of 1957 and ES 153 regarding tins for packing foodstuffs.

## 8.0 LABELING

Prepackaged products, including bulk packages and their subunits, covered by this Standard shall be labeled in accordance with the provisions of Ministerial Decree No. 354/1985 and the provisions of ES 1546 and the applicable provisions of the Codex General Standard for the Labeling of Prepackaged Foods.

8.1 Name of the Food.

8.1.1 The name of the food shall be "Canned Salmon".

8.2 Mandatory Declarations on Retail Containers.

The following items must appear in Arabic (and other languages as appropriate) on the label of the product in conformity, as appropriate, with the Codex General Standard for the Labeling of Prepackaged Foods.

8.2.1 Name of the product
8.2.2 Name of the importer and the producer's name, address and applicable trade mark, if available.
8.2.3 Net weight of the pack.
8.2.4 Net weight of the canned fish meat (drained weight).
8.2.5 List of ingredients in descending order of predominance.
8.2.6 Media and shape of the presentation.
8.2.7 Number of the production operation.
8.2.8 Production date and date of maximum durability.
8.2.9 Storage conditions: canned fish are to be labeled showing that the product should be stored at room temperature.
8.2.10 Country of origin. Products manufactured in Egypt must use the phrase "Made in Egypt". The country of origin, if not Egypt, is the country in which the product was manufactured.

8.3 Date of Manufacture and Date of Durability

The product label shall declare the date of manufacture of the product and the date of minimum durability. The date of minimum durability shall be in accordance with the EOS Standard.

## 9. METHODS OF ANALYSIS

9.1 Inspection and testing shall be conducted according to the ES issued by the EOSQS concerning canned fish inspection and testing.

9.2 Microbiological tests shall be conducted according to ES issued by EOSQS.

9.3 Sampling, examination and analysis

The Codex Standard for Canned Salmon shall be used as a reference for sampling, examination and methods of analysis specific to Canned Salmon Fish.

## 10.0 REFERENCES

10.1 Codex International Standard for Canned Salmon.

10.2 Egan, S. Kirk, Sawyer 1981
Pearson's Chemical Analysis of Food 8th Edition
Churchill Livingston
Edinburgh, London, Melbourne, and New York

## ANNEX[2]

**STANDARD NO. ES 288 -1998**
**Canned Salmon Fish**

This Annex is intended as a Standard. Compliance with the provisions of this Annex is required of importers and producers. It imposes measures necessary within the meaning of the Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) Agreements. Provisions provided within this Annex have been reviewed and are considered as essential for consumer protection and for the prevention of deceptive practices. These provisions are intended to assist users; they reflect quality factors and criteria that may be used by commerce to define or describe the quality of the product and which may form part of contracts between buyers and sellers. Individual merchandisers should independently determine their product quality needs.

### 1.0 OTHER COMPOSITION OR QUALITY FACTORS

1.1 The product must be made of unblemished fish, characterized by firm tissues and totally free from wounds, bruises, mucous substances and unacceptable odor.

1.2 Fish used must be decapitated having removed the fins, tail and viscera. They must be washed carefully with clean water to remove impurities.

1.3 The product must be free from all alien substances and other factors that induce decomposition. It must maintain the characteristic color, flavor and odor of the canned product.

1.3.1 Total volatile nitrogenous alkaline should not exceed 40 mg/100 gm as nitrogen in the sample. This same percentage in raw fish (as intermediate raw material) should not exceed 20 mg/100 gm in the sample.

1.4 The product must be free of blood spots and blood vessels.

1.5 Fish units must be of the same species.

1.6 Presentation types.

1.6.1 Regular Canned Salmon shall consist of sections which are cut transversely from the fish and which are filled vertically into the can. The sections shall be packed so that the cut surfaces are approximately parallel with the ends of the container.

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[2] It should be noted that the establishment of the provisions of this Annex as a standard is contrary to the advice of the technical advisory team. The decision is based on discussions within the committee about problems with unacceptable imported product and how to deal with it. The language proposed by the technical team is attached at the end of the Annex.

1.6.2 Bone and Scale Free Salmon shall consist of Regular Canned Salmon, having the skin and backbone removed.

1.6.3 Salmon Flakes shall consist of small pieces of salmon flesh.

1.7 The final product made of non-skinned varieties must be free of skin defects.

1.8 Edible salt shall not exceed 2% of the net weight of the salmon contents.

1.9 Fins, viscera, parts of head and scales shall not exceed 1% of the salmon meat net weight.

1.10 Total fatty substances in the product shall not be less than 15% by weight in case of packing in edible oil.

## 2.0 WEIGHTS AND MEASURES

2.1 The volume of contents of the can shall not be less than 95% of the can's water capacity.

2.2 The percent of the solution formed in the product shall not exceed 10% of the net weight of the container contents if and when oil is used as a media for packing.

2.3 The salmon meat net weight shall not be less than 70% of the net weight of the contents of the container.

## 3.0 OTHER LABELING REQUIREMENTS

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Technical team proposed language for opening paragraphs of the Standard and the Annex:

"This standard is confined to essential provisions relating to public health, food safety and consumer protection. The Annex to this Standard contains quality and compositional provisions to be used by buyers and sellers as the basis of sales or purchase agreements to facilitate trade. The Annex does not however, form part of the Standard and acceptance of the Standard by the Egyptian Organization for Standardization or other Egyptian Governmental Bodies does not imply acceptance of the Annex."

This annex is not intended as a standard guideline recommendation, or technical regulation within the meaning of the Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) Agreements. Provisions provided within this Annex are not considered as essential for public health, food safety or consumer protection. These provisions are of a voluntary, advisory nature intended to assist users. They reflect quality factors and criteria that may be used by commerce to define or describe the quality of the product and which may form part of contracts between buyers and sellers. Individual merchandisers should independently determine their product quality needs. Provisions of this Annex do not constitute regulatory provisions of the Egyptian Organization for Standardization or any other Egyptian Governmental Body."

# EGYPTIAN ORGANIZATION FOR STANDARDIZATION

## PROPOSED DRAFT STANDARD

FOR

# CANNED TUNA FISH AND CANNED BONITO FISH

## PROPOSED DRAFT STANDARD NO. ES 804

Date of Proposed Revision: 1998

[Drafting Notes:
1. This draft standard is intended as an initial guideline only. Technical experts in fish and fishery products technology must revise the standard based on specific knowledge of the product(s).
2. EOS Standard No. ES 804 incorporates the use of the flesh of numerous tuna and bonito species. Similarly, the Codex Standard for Canned Tuna and Bonito provide for the use of numerous species and is recommended to be used as a reference for consideration during revision of this Standard.
3. Primary references used for the preparation of this draft are:
   A) Egyptian Standard ES 804 - 1995
   B) Codex Alimentarius Standard for Canned Tuna and Bonito.]

This standard is confined to essential provisions relating to public health, food safety, and consumer protection. The Annex to this Standard contains quality and compositional provisions that producers and importers must comply with [1]. Provisions of this standard and annex may be used by buyers and sellers as the basis of sales or purchase agreements to facilitate trade.

**Preamble**

These Standards abrogate and replace ES 804 of 1995 concerning canned Tuna and Bonito.

## 1. SCOPE

1.1 This Standard applies to Canned Tuna and Bonito Fish for direct human consumption in conformity with the product definition given in Section 2 of this Standard.

1.2 This Standard does not apply to specialty products where the inclusion of ingredients such as vegetables, rice or similar materials results in tuna or bonito fish flesh constituting less than 50%

[1] The text shown is that agreed upon by the Committee. The text proposed by the Technical Advisory Team is shown at the end of the Annex.

of the drained weight contents of the product.

## 2. DESCRIPTION

2.1 Product Definition

Canned Tuna Fish and Canned Bonito Fish are the products of preserving the flesh of species listed in 2.2 below having been prepared and packed in suitable medium, in hermetically sealed containers and treated thermally for preservation purposes.

2.2 Species used in Canned Tuna Fish and Canned Bonito Fish:

- Thunnus alalunga
- Thunnus albacares
- Thunnus atlanticus
- Thunnas obesus
- Thunnas maccoyii
- Thunnas thynnus
- Thunnas tongoe
- Euthynnus affinis
- Euthynnus alleteratus
- Euthynnus lineatus
- Katsuwonus pelamis (syn. Euthynnus pelarris)
- Sarda chilensis
- Sarda orientalis
- Sarda sarda

2.3 Process Definition

Canned Tuna Fish and Canned Bonito Fish are packed in hermetically sealed containers and shall receive a thermal processing treatment sufficient to ensure commercial sterility.

2.4 It is recommended that the products covered by the provisions of this standard be prepared in accordance with the following codes:

(i) the appropriate sections of the Codex Recommende d International Code of Practice - General Principles of Food Hygiene.

(ii) the Codex Recommended International Code of Practice for Canned Fish.

(iii) the Codex Recommended International Code of Hygienic Practice for Low-Acid and Acidified Low-Acid Canned Foods.

(iv) the Draft Codex International Code of Hygienic Practice for the Products of

Aquaculture.

## 3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 Tuna and Bonito

The products shall be prepared from sound fresh or frozen fish of the species in Section 2.2 and of a quality fit to be sold fresh for human consumption.

3.2 Other Permitted Ingredients

The packing medium and all other ingredients shall be of food grade quality and conform to all applicable standards of the Egyptian Organization for Standardization (EOS). The Codex Standard for Canned Tuna and Bonito shall be used as a reference to determine ingredients permitted in products.

## 4. FOOD ADDITIVES

4.1 All food additives used in Canned Tuna Fish and Canned Bonito Fish shall conform to specifications and maximum level limitations of the Egyptian Organization for Standardization and the Egyptian Ministry of Health (MOH).

4.2 The Codex Standard for Canned Tuna and Bonito shall be used as a reference to determine food additives and amounts of food additives permitted in products in international trade with the exception of Smoke Flavors which are not permitted..

## 5. CONTAMINANTS

5.1 Pesticides

Pesticide residues for the ingredients used for the manufacture of Canned Tuna Fish and Canned Bonito Fish included in this standard must not exceed Maximum Residue Levels specified by the Egyptian Organization for Standardization .

5.2 Heavy Metals

Heavy metal contaminant levels for the ingredients used for the manufacture of Canned Tuna Fish and Canned Bonito Fish included in this standard must not exceed those specified by the Egyptian Organization for Standardization in ES 2360/1993.

5.3 Radionuclides

The level of radioactivity for products included within this Standard shall be within limits proscribed by the concerned authorities.

5.4 Veterinary Drug Residues and Hormone Residues.

Veterinary drug residues and hormone residues for fish included in this Standard must not exceed Maximum Residue Limits specified by the Egyptian Organization for Standardization or Egyptian Ministry of Agriculture.

## 6.0 HYGIENE

6.1 Canned Tuna Fish and Canned Bonito Fish shall be prepared and handled in accordance with: good manufacturing practices as specified by the Egyptian Organization for Standards and Ministry Of Health standards and any other applicable Codes of Hygienic Practice.

6.2 When tested by methods of samples and examination specified by the Egyptian Organization for Standardization the product shall::

A) Be free from microorganisms which may represent a hazard to health.
B) Be free from parasites and diseases that represent a hazard to health.
C) Not contain any substance originating from microorganisms or their actions in amounts which may represent a hazard to health.
D) No sample shall contain histamine that exceeds 10 mg. Per 100 g.

6.3 The final product shall be free from any foreign material or objects that pose a threat to human health.

## 7.0 PACKAGING

7.1 Products manufactured or offered for sale under this Standard shall be packaged in containers that will safeguard the hygienic, nutritional, and organoleptic properties of the food. Containers shall have a negative pressure on the inside and be free of defects which may compromise the hermetic seal of the container.

7.2 The containers, including packaging and wrapping material, shall be made from substances that are safe and suitable for their intended use. They shall not impart any toxic substance or undesirable odor or flavor to the product.

7.3 Packs must fulfill the requirements stipulated in the Presidential Decree No. 798 of 1957 and ES 153 regarding tins for packing foodstuffs.

## 8.0 LABELING

Prepackaged products, including bulk packages and their subunits, covered by this Standard shall be labeled in accordance with the Provisions of Ministerial Decree No. 354/1985 and the provisions of ES 1546.

8.1 Name of the Food.

8.1.1 The name of the food shall be "Canned Tuna" or "Canned Bonito" as applicable.

8.2 Mandatory Declarations on Containers.

The following must appear in Arabic and other languages as appropriate on the label of the product in conformity, as appropriate, with the provisions of the Codex General Standard for the Labeling of Prepackaged Foods.

8.2.1 Name of the product.
8.2.2 Grade of the pack, color of the fish meat, and form of the pack.
8.2.3 Importers name and producers name, address and applicable trade mark, if any.
8.2.4 Net weight of the pack and drained weight of the fish meat.
8.2.5 List of raw materials and ingredients in descending order of predominance including all direct additives and preservatives.
8.2.6 If the net contents of the container include less than 75% tuna or bonito meat, the label must declare the percent of fish meat present as a percent of the net contents of the container.
8.2.7 Production date and expiry date.
8.2.8 Storage Conditions: the product label shall specify that the product should be stored at room temperature.
8.2.9 Country of origin. Products manufactured in Egypt must use the phrase "Made in Egypt". The country of origin, if not Egypt, is the country in which the product was manufactured.

8.3 Date of Production and Expiry Date.

The product label shall declare the date of production of the product and the expiry date in accordance with Egyptian Organization for Standardization standard ES 2613 - 1994.

## 9.0 METHODS OF ANALYSIS

9.1 Sampling, inspection and testing shall be conducted according to Egyptian Organization for Standardization standard 2760/1994 concerning canned fish inspection and testing.

9.2 Microbiological tests shall be conducted according to standards issued by the Egyptian Organization for Standardization.

9.3 Sampling, examination and analysis

The Codex Standard for Canned Tuna and Canned Bonito will be used as a reference for sampling, examination and methods of analysis specific to Canned Tuna and Canned Bonito.

## 10.0 REFERENCES

10.1 Codex International Standard for Canned Tuna and Bonito.

10.2 Egan, S. Kirk, Sawyer 1981
Pearson's "Chemical Analysis of Food" 8th Edition, Churchill Livingston
Edinburgh, London, Melbourne, and New York

## ANNEX[2]

**STANDARD NO. ES 804 - 1998**
**Canned Tuna Fish and Canned Bonito Fish**

This Annex is intended as a Standard. Compliance with the provisions of this Annex is required of importers and producers. It imposes measures necessary within the meaning of the Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) Agreements. Provisions provided within this Annex have been reviewed and are considered as essential for consumer protection and for the prevention of deceptive practices. These provisions are intended to assist users; they reflect quality factors and criteria that may be used by commerce to define or describe the quality of the product and which may form part of contracts between buyers and sellers. Individual merchandisers should independently determine their product quality needs.

### 1.0 OTHER COMPOSITION OR QUALITY FACTORS

1.1 The product must be made of unblemished fish, characterized by firm tissues and totally free from wounds, bruises, mucous substances and unacceptable odor.

1.2 Fish used must be decapitated having removed the fins, tail and viscera. They must be washed carefully with clean water to remove impurities.

1.2.1 Scales, parts of head, fins, and viscera shall not exceed 1% of the fish meat net weight in Skin-On product.

1.2.2 Scales, parts of head, fins, skin, and viscera shall not exceed 1% of the fish meat net weight in Skinless product.

1.3 The product must be free from all alien substances and other factors that induce decomposition. It must maintain the characteristic color, flavor and odor of the canned product.

1.4 The product must be free of blood spots and blood vessels.

1.5 Fish units must be of the same species.

1.6 Forms of Pack

1.6.1 Solid (skin-on or skinless) - fish cut into transverse segments which are placed in the can

[2] It should be noted that the establishment of the provisions of this Annex as a standard is contrary to the advice of the technical advisor. The decision is based on discussions within the committee about problems with unacceptable imported product and how to deal with it. The language proposed by the Technical Advisory Team is attached at the end of the Annex.

with the planes of their transverse cut ends parallel to the ends of the can. The proportion of free flakes or chunks shall not exceed 18% of the drained weight of the container.

1.6.2 Chunk - pieces of fish most of which have dimensions not less than 1.2 cm. in each direction and in which the original muscle structure is retained. The proportion of pieces of flesh of which the dimensions are less than 1.2 cm. shall not exceed 30% of he drained weight of the container.

1.6.3 Flake or Flakes - a mixture of particles and pieces of fish most of which have dimensions less than 1.2 cm. in each direction but in which the muscular structure of the flesh is retained. The proportion of pieces of flesh of which the dimensions are less than 1.2 cm. exceed 30% of the drained weight of the container.

1.6.4 Grated or shredded - a mixture of particles of cooked fish that have been reduced to a uniform size, in which particles are discrete and do not comprise a paste.

1.6.5 Any other presentation will be permitted provided that it complies with the hygienic and safety requirements of this standard and it is sufficiently distinctive from other forms of presention laid down in this Standard and it is adequately described on the label to avoid confusing or misleading the consumer.

1.7 Grades

1.7.1 Fancy Grade - solid pack presentation containing white or light fish meat. A can may contain 1-3 solid pieces.

1.7.2 First Grade

1.7.2.1 Solid pack presentation containing dark fish meat.

Or

1.7.2.2 Chunks in which no more than 50% of the containers net weight may consist of chunks less than 0.5 inches in thickness. Fish meat color is light or white.

Or

1.7.2.3 Flakes in which more than 50% are less than 0.5 inches thick and of white or light color.

1.7.3 Second Grade

1.7.3.1 Chunks or flakes (as in first grade 1.7.2.2 or 1.7.2.3) of dark meat.

Or

1.7.3.2 Shredded meat, small uniform pieces of white, light or dark color fish meat and does not form a paste.

1.8 Edible salt shall not exceed 2% of the net weight of the fish meat contents.

## 2.0 WEIGHTS AND MEASURES

2.1 The volume of contents of the can shall not be less than 95% of the can's water capacity.

2.2 The percent of solution formed in the product should not exceed 5% of the net weight when oil alone is used as a medium for packing.

2.3 The fish meat drained weight in the final product container should not be less than 70% of the tin's net weight stated on the label, provided that the medium of packing should be adequate enough to cover the fish meat.

## 3.0 OTHER LABELING REQUIREMENTS

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Technical Advisory Team proposed language for the opening paragraphs of the Standard and of the Annex:

"This standard is confined to essential provisions relating to public health, food safety, and consumer protection. The Annex to this Standard contains quality and compositional provisions to be used by buyers and sellers as the basis of sales or purchase agreements to facilitate trade. The Annex does not however, form part of the Standard, and acceptance of the Standard by the Egyptian Organization for Standardization or other Egyptian Governmental Bodies does not imply acceptance of the Annex."

"This annex is not intended as a standard, guideline recommendation, or technical regulation within the meaning of the Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) Agreements. Provisions provided within the Annex are not considered as essential for public health, food safety, or consumer protection. These provisions are of a voluntary, advisory nature intended to assist users; they reflect quality factors and criteria that may be used by commerce to define or describe the quality of the product and which may form part of contracts between buyers and sellers. Individual merchandisers should independently determine their product quality needs. Provisions of this Annex do not constitute regulatory provisions of the Egyptian Organization for Standardization or any other Egyptian Governmental Body."

# EGYPTIAN ORGANIZATION FOR STANDARDIZATION

## PROPOSED DRAFT STANDARD

FOR

# SMOKED FISH

## PROPOSED DRAFT STANDARD NO. ES 288

Date of Proposed Revision: 1998

[Drafting Notes:

1. This draft standard is intended as an initial guideline only. Technical experts in fish and fishery products technology must revise the standard based on specific knowledge of the product(s).

2. EOS Standard No. ES 288 incorporates the use of the flesh of numerous species of fish.

3. Primary references used for the preparation of this draft are: 1) Egyptian Standard ES 288 - 1996 2) Codex Alimentarius Proposed Draft Recommended Code International of Practice for Smoked Fish . ]

This standard addresses essential provisions relating to public health, food safety, and consumer protection. The Annex to this Standard contains quality and compositional provisions which producers and importers must comply with [1]. Provisions of this Standard and of the Annex may be used by buyers and sellers as the basis of sales or purchase agreements to facilitate trade.

**Preamble**

These Standards abrogate and replace ES 288 of 1996 concerning Smoked Fish.

**1.0 SCOPE**

1.1 This Standard applies to Smoked Fish for direct human consumption in conformity with the product definition given in Section 2 of this Standard.

[1] The text shown here is that agreed upon by the Committee. The text proposed by the Technical Advisory Team is shown at the end of the Annex.

## 2.0 DESCRIPTION

2.1 Product and Process Definitions

The term "Smoked Fish" covers a broad variety of products. Smoked Fish are those prepared so that the flesh acquires the color, flavor and odor characterizing smoked fish. Processing is performed using various temperatures and may include addition of smoke taste and colour by various means.
Smoked fish must be produced by licensed plants that fulfill all the hygienic requirements for good production.

2.1.1 Hot Smoked Fish has been processed using heat in combination with smoke. In processes where the temperature in the fish flesh exceeds 75 C for 30 minutes, the fish flesh is coagulated and a pasteurization effect is obtained.

2.1.2 Cold Smoked Fish has been processed in such a manner that the fish flesh does not appear heat coagulated and the process is performed in accordance with one of the following:

a) The temperature in the smoking chamber does not exceed 32C during a drying and smoking period that does not exceed 20 hours in length; or

b) The temperature in the smoking chamber does not exceed 40C during a drying and smoking period that does not exceed 24 hours; or

c) The temperature in the smoking chamber does not exceed 50C during a drying and smoking period that does not exceed 6 hours.

2.2 It is recommended that the products covered by the provisions of this Standard be prepared in accordance with the following codes:

(i) the appropriate sections of the Codex Recommended International Code of Practice - General Principles of Food Hygiene.

(ii) the Draft Codex International Code of Hygienic Practice for the Products of Aquaculture.

2.3 All finished products must be cooled to a temperature of 10C or below within 3 hours after smoking and further cooled to a temperature of 4C or below within 12 hours after smoking. The finished product must be maintained at 4C or lower during all subsequent storage and distribution.

## 3.0 ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 Fish Raw Materials

The products shall be prepared from sound fresh or frozen fish harvested from waters that do not contribute contamination or parasites in excess of standards of the Egyptian Organization for Standardization and are of a quality fit to be sold fresh for human consumption. Cold smoking

may not be sufficient to inactivate parasitic organisms, therefore, fish intended for cold smoking must have be from areas harvest areas that are parasite free or the fish must be frozen for 7 days at -20C or -35C for 15 hours.

3.2 Other Permitted Ingredients

All ingredients must be of food grade quality and conform to all applicable requirements of the Egyptian Organization for Standards.

3.3 Percent Salt in Final Products

3.3.1 Cold Smoked Fish: For complete fish salt content may not exceed 15% based on dry weight (8% of wet weight) and no less than 6% based on dry weight (3% on wet weight basis). For incomplete fish, salt shall not exceed 10% based on dry weight (5% of wet weight) and shall not be less than 4.5% of dry weight (2.5% of wet weight). If these products are packaged in vacuum packs or modified atmosphere, the salt content shall be at least 3% on a wet weight basis.

3.3.2 Hot Smoked Fish both intact and partial:

3.3.2.1 For product processed to achieve a temperature in the flesh of no less than [63-75 C], the salt content shall not exceed 10% based on dry weight (6% of wet weight) and not less than 6% based on dry weight (3% wet weight). If this product is packaged in modified atmosphere or vacuum packaged, it shall have a minimum of 3.5% salt on a wet weight basis.

3.3.2.2 For product processed to achieve a temperature in the flesh of at least [75 C], the salt content shall not exceed 8% based on dry weight (4% of wet weight) and not less than 5% of dry weight (2.5% of wet weight). If this product is packaged in modified atmosphere or vacuum packaged, it shall have a minimum of 3.0% salt on a wet weight basis.

## 4.0 FOOD ADDITIVES

4.1 All food additives used in Smoked Fish shall conform to specifications of the Egyptian Organization for Standardization and the Egyptian Ministry of Health.

4.2 Permitted smoking fluids resulting from wood smoke dilution may be used at suitable dilution and with methodology that gives the final product its characteristic color, flavor and odor in a manner that does not affect either the standard properties of the product nor the consumer's health.

## 5.0 CONTAMINANTS

5.1 Pesticides

Pesticide residues for the ingredients used for the manufacture of Smoked Fish included

in this standard must not exceed Maximum Residue Levels specified by the Egyptian Organization for Standardization.

5.2 Heavy Metals

Heavy metal contaminant levels for the ingredients used for the manufacture of Smoked Fish included in this standard must not exceed those specified by the Egyptian Organization for Standardization in ES 2360/1993.

5.3 Radionuclides

The level of radioactivity for products included within this Standard shall be within limits proscribed by the concerned authorities..

5.5 Veterinary Drug Residues and Hormone Residues.

Veterinary drug residues and hormones residues for fish included in this Standard must not exceed Maximum Residue Limits specified by the Egyptian Organization for Standardization or the Egyptian Ministry of Agriculture.

## 6.0 HYGIENE

6.1 Smoked Fish shall be prepared and handled in accordance with Egyptian Organization for Standardization standards and the Codex Alimentarius Recommended International Code of Practice - General Principles of Food Hygiene and any other applicable Codes of Hygienic Practice relevant to this product.

6.2 When tested at any point within the labeled shelf life by appropriate methods of samples and examination:

A) Be free from pathogenic microorganisms or their toxins in the flesh and gonads which may represent a hazard to health.
B) The flesh and gonads shall be free from viable parasites or their larval stages or their toxins and diseases that represent a hazard to health.
C) Not contain any substance originating from microorganisms or parasites in the flesh and gonads in amounts which may represent a hazard to health.
D) Histamine shall not exceed 10 mg. per 100 g. of fish flesh.

6.3 The final product shall be free from any foreign material or objects that pose a threat to human health.

## 7.0 PACKAGING

7.1 Products manufactured or offered for sale under this Standard shall be packaged in

containers that will safeguard the hygienic, nutritional, and organoleptic properties of the food.

7.2 The containers, including packaging and wrapping material, shall be made from substances that are safe and suitable for their intended use. They shall not impart any toxic substance or undesirable odor or flavor to the product.

7.3 Packs must fulfill the requirements stipulated in the Presidential Decree 798 of 1957 concerning packaging foodstuffs.

## 8.0 LABELING

Prepackaged products, including bulk packages and their subunits, covered by this Standard shall be labeled in accordance with the Provisions of Ministerial Decree No. 354/1985 and the provisions of Egyptian Organization for Standardization ES 1546 and the applicable provisions of the Codex General Standard for the Labeling of Prepackaged Foods.

8.1 Name of the Food.

8.1.1 The name of the food shall be "Smoked Fish" as appropriate and include the common or usual name of the fish either in close proximity to the declaration of the name or by replacing the term fish in the product name with the common or usual name of the fish..

8.2 Mandatory Declarations on Retail Containers

The following items must appear in Arabic and other languages as appropriate on the label of the product in conformity, as appropriate, with the Codex General Standard for the Labeling of Prepackaged Foods.

8.2.1 Name of the product and method of smoking
8.2.2 Importers name and the producers name, address and trade mark, if applicable.
8.2.3 Net weight of the pack.
8.2.4 List of ingredients in descending order of predominance including all direct additives and preservatives if present.
8.2.5 Production date and expiry date.
8.2.6 Country of origin. Products manufactured in Egypt must use the phrase "Made in Egypt". The country of origin, if not Egypt, is the country in which the product was manufactured.
8.2.7 If the temperature at which the product is to be stored and displayed is critical to maintaining safety of the product, the label shall include prominent instructions to maintain the product at a specified appropriate temperature to ensure that the product remains safe throughout the shelf life of the product.

8.4 Date of Production and Expiry Date

The product label shall declare the date of production of the product and the expiry date. The

expiry date shall be in accordance with Egyptian Organization for Standardization ES 2613 - 1994.

## 9.0 METHODS OF ANALYSIS

9.1 Sampling, inspection and testing shall be conducted according to ES 2760/1994 issued by the Egyptian Organization for Standardization.

## 10.0 REFERENCES

10.1 Draft Recommended Codex International Code of Practice for Smoked Fish.

10.2 Egan, S. Kirk, Sawyer 1981
Pearson's "Chemical Analysis of Food" 8th Edition, Churchill Livingston
Edinburgh, London, Melbourne, New York

## ANNEX[2]

**STANDARD NO. ES 288 - 1998**
**Smoked Fish**

This annex is intended as a Standard. Compliance with the provisions of this Annex is required of importers and producers. It imposes measures necessary within the meaning of the Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) Agreements. Provisions provided within this Annex are considered as essential for consumer protection and for the prevention of deceptive practices. These provisions are intended to assist users; they reflect quality factors and criteria that may be used by commerce to define or describe the quality of the product and which may form part of contracts between buyers and sellers. Individual merchandisers should independently determine their product quality needs.

### 1.0 OTHER COMPOSITION OR QUALITY FACTORS

1.1 The product must be made of unblemished fish with soft skin or bright scales, characterized by firm tissues and totally free from wounds, bruises, mucous substances and unacceptable odor.

1.2 The fish used must be washed carefully with clean water to remove impurities.

1.3 The product must be free from all alien substances and other factors that induce decomposition. It must maintain the characteristic color, flavor and odor of the smoked product.

1.4 Smoked fish fillets must be free of blood spots and blood vessels and scales.

1.5 Fish units must be of the same species whether the fish are intact, eviscerated, head on or off or sliced..

1.6 Tri-amine Nitrogen shall not exceed 10 mg/100 gm of fish flesh.

1.7 Ammonium Nitrogen shall not exceed 20 mg/100 gm of fish flesh.

1.8 Thiobarbituric acid shall not exceed 4.5 malonalhyde/ kg.

1.9 Fish flesh shall be free of parasites and worms or cysts whether dead or alive except parasites and worms that can be seen by the naked eye in the abdominal cavity or viscera should not exceed

[2] It should be noted that the establishment of the provisions of this Annex as a standard is contrary to the advice of the technical advisor. The decision is based on discussions within the committee about problems with unacceptable imported product and how to deal with it. The language proposed by the Technical Advisory Team is attached at the end of the Annex.

100 per fish. The percentage of fish containing such parasites in the abdominal cavity or vicera should not exceed 20% of the examined specimens.

## 2.0 WEIGHTS AND MEASURES

## 3.0 OTHER LABELING REQUIREMENTS

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Technical Team proposed language for the opening paragraphs of the Standard and of the Annex:

"This standard is confined to essential provisions relating to public health, food safety, and consumer protection. The Annex to this Standard contains quality and compositional provisions to be used by buyers and sellers as the basis of sales or purchase agreements to facilitate trade. The Annex does not however, form part of the Standard, and acceptance of the Standard by the Egyptian Organization for Standardization or other Egyptian Governmental Bodies does not imply acceptance of the Annex."

"This annex is not intended as a standard, guideline recommendation, or technical regulation within the meaning of the Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) Agreements. Provisions provided within this Annex are not considered as essential for public health, food safety, or consumer protection. These provisions are of a voluntary, advisory nature intended to assist users, they reflect quality factors and criteria that may be used by commerce to define or describe the quality of the product and which may form part of contracts between buyers and sellers. Individual merchandisers should independently determine their product quality needs. Provisions of this Annex do not constitute regulatory provisions of the Egyptian Organization for Standardization or any other Egyptian Governmental Body."

# EGYPTIAN ORGANIZATION FOR STANDARDIZATION

## PROPOSED DRAFT STANDARD

FOR

# FROZEN FISH

## STANDARD NO. ES 889

Date of Proposed Revision: 1998

[Drafting Notes:

1. This draft standard is intended as an initial guideline only. Technical experts in fish and fishery products technology must revise the standard based on specific knowledge of the product(s).

2. EOS Standard No. 889 incorporates products produced from many species of fish. Similarly both the Codex Standard for Quick Frozen Fin Fish, Uneviscerated and Eviscerated and the Codex Standard for Quick Frozen Fish Fillets incorporate products from many species of fish. It is recommended that these Codex Standards be considered during revision of the EOS standard.

3. Primary references used for the preparation of this draft are: 1) Egyptian Standard 889 - 1991 and 2) Codex Alimentarius Standards cited in paragraph no. 2 above. ]

This standard addresses essential provisions relating to public health, food safety, and consumer protection. The Annex to this Standard contains quality and compositional provisions which producers and importers must comply with [1]. Provisions of this standard and of the annex may be used by buyers and sellers as the basis of sales or purchase agreements to facilitate trade.

**Preamble**

These standards abrogate and replace ES 889 of 1991 concerning the product frozen fish. The product frozen fish fillets is the subject of a new standard.

[1] The text shown here is that agreed upon by the Committee. The text proposed by the Technical Advisory Team is shown at the end of the Annex.

## 1.0 SCOPE

1.1 This standard applies to frozen fish for direct human consumption in conformity with the product definition given in Section 2 of this Standard.

## 2.0 DESCRIPTION

2.1 Product Definition:
The product is frozen raw fin fish suitable for human consumption. The fin fish may be with or without the head, fins and tail. The fin fish viscera or other organs may be intact, completely removed or, partially removed.

2.2 Process Definition
The product is prepared from raw material which is substantially sound, wholesome, of suitable quality and otherwise handled, prepared and frozen in such a manner that prevents or precludes contamination that may provide risk to human health.

2.3 It is recommended that the products covered by the provisions of this Standard be prepared in accordance with the following codes:

(i) the appropriate sections of the Codex Recommended International Code of Practice - General Principles of Food Hygiene.

(ii) the Codex Recommended International Code of Hygienic Practice for the Products of Aquaculture.

(iii) the Recommended International Code of Practice for the Processing and Handling of Quick Frozen Foods.

## 3.0 ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 Fish Raw Materials

The products shall be prepared from sound fresh fish of a quality fit to be sold fresh for human consumption. Fish raw materials shall not be caught by non-permitted methods or from areas contaminated with radioactivity, fertilizers or insecticides that may result in levels of residues above those allowed by the Egyptian Organization for Standardization.

3.2 Other Permitted Ingredients

All ingredients including water used for glazing must be of food grade quality and conform to all applicable Egyptian Organization for Standardization requirements. If glazing is used, the water used for glazing or preparing glazing solutions shall be of potable quality or shall be clean sea-water. Potable water is fresh water fit for human consumption. Clean sea-water is sea-water which meets the same microbiological standards as potable water and is free from objectionable substances.

## 4.0 FOOD ADDITIVES

4.1 All food additives used on frozen fish shall conform to all specifications of the Egyptian Organization for Standardization and the Egyptian Ministry of Health.

4.2 All food additives must conform to the provisions of the applicable Codex Alimentarius Standard for Frozen Fish.

- Frozen fish may contain Ascorbate, sodium or potassium salts up to 1 g/kg expressed as ascorbic acid.

## 5.0 CONTAMINANTS

5.1 Pesticides

Pesticide residues for the fish and ingredients used for the manufacture of Frozen Fish included in this standard must not exceed Maximum Residue Levels specified by the Egyptian Organization for Standardization.

5.2 Heavy Metals

Heavy metal contaminant levels for the fish ingredients used for the manufacture of Frozen Fish included in this standard must not exceed those specified by the Egyptian Organization for Standardization.

5.3 Radionuclides

The level of radioactivity for products included within this Standard shall be within limits proscribed by the concerned authorities.

5.5 Veterinary Drug Residues and Hormone Residues.

Veterinary drug residues and hormone residues for fish included in this Standard must not exceed Maximum Residue Limits specified by the Egyptian Organization for Standardization or Egyptian Ministry of Agriculture.

## 6.0 HYGIENE

6.1 Frozen Fish shall be prepared and handled in accordance with: good manufacturing practices in accordance with the Egyptian Organization for Standardization and Egyptian Ministry of Health regulations and any other applicable Codes of Hygienic Practice.

6.2 The product, when tested using methods specified by the Egyptian Organization for Standardization shall be as follows:

A) Be free from microorganisms which may represent a hazard to health.
B) Be free from viable parasites and diseases that represent a hazard to health.
C) Not contain any substance originating from microorganisms in amounts which may represent a hazard to health.
D) Not contain more than 10 mg. histamine in 100 gm of fish meat of the sample unit tested.

## 7.0 PACKAGING

7.1 Products manufactured or offered for sale under this Standard shall be packaged in containers that will safeguard the hygienic, nutritional, and organoleptic properties of the food.

7.2 The containers, including packaging and wrapping material, shall be made from substances that are safe and suitable for their intended use. They shall not impart any toxic substance or undesirable odor or flavor to the product.

7.3 Packs must fulfill the requirements stipulated in the Presidential Decree No. 798 of 1957.

## 8.0 LABELING

Prepackaged products, including bulk packages and their subunits, covered by this Standard shall be labeled in accordance with the provisions of Ministerial Decree No. 354/1985 and the provisions of Egyptian Organization for Standardization standard 1546.

8.1 Name of the Food.

8.1.1 The name of the food shall be "Frozen Fish " followed by the name of the fish.

8.2 Mandatory Declarations

The following items must appear in Arabic, and other languages as appropriate, on the label of the product in conformity, as appropriate, with the Codex General Standard for the Labeling of Prepackaged Foods.

8.2.1 Name of the product
8.2.2 Importer's name and the producer's name, address and trade mark, if applicable.
8.2.3 Net weight of the pack exclusive of glazing, if present.
8.2.4 List of ingredients in descending order of predominance including all direct additives.
8.2.5 Production date and expiry date.
8.2.6 Country of origin. Products manufactured in Egypt must use the phrase "Made in Egypt". The country of origin, if not Egypt, is the country in which the product was harvested.
8.2.7 The label shall include prominent instructions to maintain the product at -18C temperature to ensure that the product remains safe throughout the shelf life of the product.

8.3 Date of Production Marking and Expiry Date

The product label shall declare the date of production of the product and the expiry date. The expiry date shall be in accordance with Egyptian Organization for Standardization standard 2613 - 1994.

8.4 Labeling of Non-retail Containers.

The name of the product, lot identification and name and address of the manufacturer or packer must appear on the container. Other information, required under 8.2 above, if not provided on the container, must be provided in accompanying shipping documents.

## 9.0 METHODS OF ANALYSIS

9.1 Sampling, inspection and testing are according to the Egyptian Organization for Standardization standards.

## 10.0 REFERENCES

International Commission on Microbiological Specifications for Food (1978)
Microorganisms in Food
Eds ICMSF, Toronto

## ANNEX[2]

**STANDARD NO. ES 889**
**Frozen Fish**

This annex is intended as a standard. Compliance with the provisions of this Annex is required of importers and producers. It imposes measures necessary within the meaning of the Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) Agreements. Provisions provided within this Annex have been reviewed and are considered as essential for consumer protection and for the prevention of deceptive practices. These provisions are intended to assist users; they reflect quality factors and criteria that may be used by commerce to define or describe the quality of the product and which may form part of contracts between buyers and sellers. Individual merchandisers should independently determine their product quality needs.

### 1.0 OTHER COMPOSITION OR QUALITY FACTORS

1.1 Fish raw materials shall have firm tissues, be free of injuries, mucous substances, or any abnormal color.

1.2 The product should have a normal color and odor.

1.3 The product should be free of frostbite (freezer burn).

1.4 Each package should contain the same product and be of equal volume.

1.5 pH of the product should not exceed 6.2.

1.6 Total volatile nitrogen compounds should not exceed 20 mgm.100 gm of fish flesh.
Ammoniacal nitrogen should not exceed 20 mgm/100 gm of fish flesh.
Thiobartituric acid should not exceed 4.5 melonaldhyd/kg of fish flesh.

1.7 Fish flesh should be free of parasites and worms or cysts whether dead or alive except parasites and worms that can be seen by the naked eye in the abdominal cavity and viscera should not exceed 100 per fish. The percentage of fish containing such parasites in the abdominal cavity and viscera should not exceed 20% of the examined specimens.

[2] It should be noted that the establishment of the provisions of this Annex as a standard is contrary to the advice of the technical advisory team. The decision is based on discussions within the committee about problems with unacceptable imported product and how to deal with it. The language proposed by the technical advisory team is attached at the end of the Annex.

1.8 Packing

1.8.1 Fish is packed uniformly in equal sizes in one container in polyethylene bags inside cardboard boxes tied with strong frames to protect the contents during handling and transportation.

1.8.2 In the case of any large fish that cannot be packed in cardboard boxes, any appropriate container that does not adversely affect the product may be used.

## 2.0 WEIGHTS AND MEASURES

## 3.0 OTHER LABELING REQUIREMENTS

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Technical team proposed language for opening paragraphs of the Standard and the Annex:

"This standard is confined to essential provisions relating to public health, food safety and consumer protection. The Annex to this Standard contains quality and compositional provisions to be used by buyers and sellers as the basis of sales or purchase agreements to facilitate trade. The Annex does not however, form part of the Standard and acceptance of the Standard by the Egyptian Organization for Standardization or other Egyptian Governmental Bodies does not imply acceptance of the Annex."

"This annex is not intended as a standard, guideline recommendation, or technical regulation within the meaning of the Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) Agreements. Provisions provided within this Annex are not considered as essential for public health, food safety or consumer protection. These provisions are of a voluntary, advisory nature intended to assist users. They reflect quality factors and criteria that may be used by commerce to define or describe the quality of the product and which may form part of contracts between buyers and sellers. Individual merchandisers should independently determine their product quality needs. Provisions of this Annex do not constitute regulatory provisions of the Egyptian Organization for Standardization or any other Egyptian Governmental Body."

# EGYPTIAN ORGANIZATION FOR STANDARDIZATION

## PROPOSED DRAFT STANDARD

FOR

# FROZEN FISH FILLETS

## STANDARD NO. ES ____

Date of Proposed Revision: 1998

[Drafting Notes:

1. This draft standard is intended as an initial guideline only. Technical experts in fish and fishery products technology must revise the standard based on specific knowledge of the product(s).

2. EOS Standard No. 889 incorporates products produced from many species of fish. Similarly the Codex Standard for Quick Frozen Fish Fillets incorporate products from many species of fish. It is recommended that this Codex Standard be considered during revision of the EOS standard.

3. Primary references used for the preparation of this draft are: 1) Egyptian Standard 889 - 1991 and 2) Codex Alimentarius Standards cited in paragraph no. 2 above.

4. Existing Egyptian Organization for Standardization standard 889 contains provisions for both frozen fish and for frozen fish fillets. This draft addressed frozen fish fillets. A separate draft addressed frozen fish.]

This standard addresses essential provisions relating to public health, food safety, and consumer protection. The Annex to this Standard contains quality and compositional provisions which producers and importers must comply with [1]. Provisions of this standard and of the annex may be used by buyers and sellers as the basis of sales or purchase agreements to facilitate trade.

**Preamble**

These standards abrogate and replace portions of ES 889 of 1991 concerning the product frozen fish fillets. The product frozen fish is the subject of another standard.

[1] The text shown here is that agreed upon by the Committee. The text proposed by the Technical Advisory Team is shown at the end of the Annex.

## 1.0 SCOPE

1.1 This standard applies to frozen fish fillets for direct human consumption in conformity with the product definition given in Section 2 of this Standard.

## 2.0 DESCRIPTION

2.1 Product Definition:
The product is frozen raw fin fish fillets suitable for human consumption. The fin fish fillets may be with or without the skin, fins and tail.

2.2 Process Definition
The product is prepared from raw material which is substantially sound, wholesome, of suitable quality and otherwise handled, prepared and frozen in such a manner that prevents or precludes contamination that may provide risk to human health.

2.3 It is recommended that the products covered by the provisions of this Standard be prepared in accordance with the following codes:

(i) the appropriate sections of the Codex Recommended International Code of Practice - General Principles of Food Hygiene.

(ii) the Codex Recommended International Code of Hygienic Practice for the Products of Aquaculture.

(iii) the Recommended International Code of Practice for the Processing and Handling of Quick Frozen Foods.

## 3.0 ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 Fish Raw Materials

The products shall be prepared from sound fresh fish of a quality fit to be sold fresh for human consumption. Fish raw materials shall not be caught by non-permitted methods or from areas contaminated with radioactivity, fertilizers or insecticides that may result in levels of residues above those allowed by the Egyptian Organization for Standardization.

3.2 Other Permitted Ingredients

All ingredients including water used for glazing must be of food grade quality and conform to all applicable Egyptian Organization for Standardization requirements. If glazing is used, the water used for glazing or preparing glazing solutions shall be of potable quality or shall be clean sea-water. Potable water is fresh water fit for human consumption. Clean sea-water is sea-water

which meets the same microbiological standards as potable water and is free from objectionable substances.

## 4.0 FOOD ADDITIVES

4.1 All food additives used on frozen fish fillets shall conform to all specifications of the Egyptian Organization for Standardization and the Egyptian Ministry of Health.

4.2 All food additives must conform to the provisions of the applicable Codex Alimentarius Standard for Frozen Fish Fillets:

| | |
|---|---|
| Moisture/Water - Retention Agents | |
| - Monophosphate, monosodium or monopotassium | }10 g/kg expressed |
| (Monosodium or Monopotassium orthophosphate | }as P203, singly |
| - Diphosphate, tetrasodium or tetrapotassium | }or in combination |
| (Na or K pyrophosphate) | }(includes natural |
| - Triphosphate, pentasodium or pentapotassium | }Phosphate) |
| or calcium (Na, K or Ca tripolyphosphate) | } |
| - Polyphosphate, sodium (Na hexametaphosphate) | }(naturally present) |
| - Sodium alginate | }5 g/kg |

Antioxidant

Ascorbate, sodium or potassium salts up to 1 g/kg expressed as ascorbic acid.

## 5.0 CONTAMINANTS

5.1 Pesticides

Pesticide residues for the fish and ingredients used for the manufacture of Frozen Fish Fillets included in this standard must not exceed Maximum Residue Levels specified by the Egyptian Organization for Standardization.

5.2 Heavy Metals

Heavy metal contaminant levels for the fish ingredients used for the manufacture of Frozen Fish Fillets included in this standard must not exceed those specified by the Egyptian Organization for Standardization.

5.3 Radionuclides

The level of radioactivity for products included within this Standard shall be within limits proscribed by the concerned authorities.

5.5 Veterinary Drug Residues and Hormone Residues.

Veterinary drug residues and hormone residues for fish included in this Standard must not exceed Maximum Residue Limits specified by the Egyptian Organization for Standardization or Egyptian Ministry of Agriculture.

## 6.0 HYGIENE

6.1 Frozen Fish Fillets shall be prepared and handled in accordance with: good manufacturing practices in accordance with the Egyptian Organization for Standardization and Egyptian Ministry of Health regulations and any other applicable Codes of Hygienic Practice.

6.2 The product, when tested using methods specified by the Egyptian Organization for Standardization shall be as follows:

A) Be free from microorganisms which may represent a hazard to health.
B) Be free from viable parasites and diseases that represent a hazard to health.
C) Not contain any substance originating from microorganisms in amounts which may represent a hazard to health.
D) Not contain more than 10 mg. histamine in 100 gm of fish meat of the sample unit tested.

## 7.0 PACKAGING

7.1 Products manufactured or offered for sale under this Standard shall be packaged in containers that will safeguard the hygienic, nutritional, and organoleptic properties of the food.

7.2 The containers used for Frozen Fish Fillets, including packaging and wrapping material, shall be made from substances that are safe and suitable for their intended use. They shall not impart any toxic substance or undesirable odor or flavor to the product.

7.3 Packs must fulfill the requirements stipulated in the Presidential Decree No. 798 of 1957.

## 8.0 LABELING

Prepackaged products, including bulk packages and their subunits, covered by this Standard shall be labeled in accordance with the provisions of Ministerial Decree No. 354/1985 and the provisions of Egyptian Organization for Standardization standard 1546.

8.1 Name of the Food.

8.1.1 The name of the food shall be "Frozen Fish Fillets" followed by the name of the fish.

8.2 Mandatory Declarations

The following items must appear in Arabic, and other languages as appropriate, on the label of the product in conformity, as appropriate, with the Codex General Standard for the Labeling of Prepackaged Foods.

8.2.1 Name of the product
8.2.2 Importer's name and the producer's name, address and trade mark, if applicable.
8.2.3 Net weight of the pack exclusive of glazing, if present.
8.2.4 List of ingredients in descending order of predominance including all direct additives.
8.2.5 Production date and expiry date.
8.2.6 Country of origin. Products manufactured in Egypt must use the phrase "Made in Egypt". The country of origin, if not Egypt, is the country in which the product was harvested.
8.2.7 The label shall include prominent instructions to maintain the product at -18C temperature to ensure that the product remains safe throughout the shelf life of the product.

8.3 Date of Production Marking and Expiry Date

The product label shall declare the date of production of the product and the expiry date. The expiry date shall be in accordance with Egyptian Organization for Standardization standard 2613 - 1994.

8.4 Labeling of Non-retail Containers.

The name of the product, lot identification and name and address of the manufacturer or packer must appear on the container. Other information, required under 8.2 above, if not provided on the container, must be provided in accompanying shipping documents.

## 9.0 METHODS OF ANALYSIS

9.1 Sampling, inspection and testing are according to the Egyptian Organization for Standardization standards.

## 10.0 REFERENCES

International Commission on Microbiological Specifications for Food (1978)
Microorganisms in Food
Eds ICMSF, Toronto

## ANNEX[2]

**STANDARD NO. ES _____**
**Frozen Fish Fillets**

This annex is intended as a standard. Compliance with the provisions of this Annex is required of importers and producers. It imposes measures necessary within the meaning of the Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) Agreements. Provisions provided within this Annex have been reviewed and are considered as essential for consumer protection and for the prevention of deceptive practices. These provisions are intended to assist users; they reflect quality factors and criteria that may be used by commerce to define or describe the quality of the product and which may form part of contracts between buyers and sellers. Individual merchandisers should independently determine their product quality needs.

### 1.0 OTHER COMPOSITION OR QUALITY FACTORS

1.1 Fish raw materials shall have firm tissues, be free of injuries, mucous substances, or any abnormal color.

1.2 The product should have a normal color and odor.

1.3 The product should be free of frostbite (freezer burn).

1.4 Each package should contain the same product and be of equal volume.

1.5 pH of the product should not exceed 6.2.

1.6 Total volatile nitrogen compounds should not exceed 20 mgm.100 gm of fish flesh.
Ammoniacal nitrogen should not exceed 20 mgm/100 gm of fish flesh.
Thiobartituric acid should not exceed 4.5 melonaldhyd/kg of fish flesh.

1.7 Fish flesh should be free of parasites and worms or cysts whether dead or alive.

1.8 Packing
1.8.1 Frozen Fish Fillets are packed uniformly in equal sizes in one container in polyethylene bags inside cardboard boxes tied with strong frames to protect the contents during handling and transportation.

[2] It should be noted that the establishment of the provisions of this Annex as a standard is contrary to the advice of the technical advisory team. The decision is based on discussions within the committee about problems with unacceptable imported product and how to deal with it. The language proposed by the technical team is attached at the end of the Annex.

1.8.2 In the case of any large fish fillets that cannot be packed in cardboard boxes, any appropriate container that does not adversely affect the product may be used.

## 2.0 WEIGHTS AND MEASURES

## 3.0 OTHER LABELING REQUIREMENTS

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Technical team proposed language for opening paragraphs of the Standard and the Annex:

"This standard is confined to essential provisions relating to public health, food safety and consumer protection. The Annex to this Standard contains quality and compositional provisions to be used by buyers and sellers as the basis of sales or purchase agreements to facilitate trade. The Annex does not however, form part of the Standard and acceptance of the Standard by the Egyptian Organization for Standardization or other Egyptian Governmental Bodies does not imply acceptance of the Annex."

"This annex is not intended as a standard, guideline recommendation, or technical regulation within the meaning of the Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) Agreements. Provisions provided within this Annex are not considered as essential for public health, food safety or consumer protection. These provisions are of a voluntary, advisory nature intended to assist users. They reflect quality factors and criteria that may be used by commerce to define or describe the quality of the product and which may form part of contracts between buyers and sellers. Individual merchandisers should independently determine their product quality needs. Provisions of this Annex do not constitute regulatory provisions of the Egyptian Organization for Standardization or any other Egyptian Governmental Body."

# EGYPTIAN ORGANIZATION FOR STANDARDIZATION

## PROPOSED DRAFT STANDARD

FOR

# FROZEN SHRIMPS

## STANDARD NO. 516

Date of Proposed Revision: 1998

[Drafting Notes:

1. This draft standard is intended as an initial guideline only. Technical experts in fish and fishery products technology must revise the standard based on specific knowledge of the product(s).

2. EOS Standard No. 516 incorporates the flesh of many species of shrimp as does the Codex Standard for Quick Frozen Shrimps or Prawns. It is recommended that consideration be given to utilizing the provisions of that Codex standard as a reference during the revision process.

3. Primary references used for the preparation of this draft are: 1) Egyptian Standard ES 516 and 2) Codex Alimentarius Proposed Draft Revised Standard for Quick Frozen Shrimps or Prawns.]

This standard is confined to essential provisions relating to public health, food safety, and consumer protection. The Annex to this Standard contains voluntary quality and compositional provisions to be used by buyers and sellers as the basis of sales or purchase agreements to facilitate trade. The Annex does not however, form part of the Standard, and acceptance of the Standard by the Egyptian Organization for Standardization or other Egyptian Governmental Bodies does not imply acceptance of the Annex.

### Preamble

These standards abrogate and replace ES 516 of _____ concerning Frozen Shrimps.

### 1.0 SCOPE

1.1 This standard applies to raw or partially or fully cooked Frozen Shrimps, peeled or unpeeled, for direct human consumption.

## 2.0 DESCRIPTION

2.1 Product Definition

Frozen Shrimps are the product obtained by quick freezing species of the following families:

- Penaeidae
- Pandalidae
- Crangonidae
- Palaemonidae

2.2 Product Presentations

Each presentation may consist of shrimps that are either raw, partially cooked or fully cooked.

- Intact Shrimps.
- Shrimps with heads only removed.
- Shrimps with heads, back scales and intestines removed, with or without the tail fins.
- Shrimps with heads, back scales, intestines and tail fins removed.
- Shrimps prepared in a special form such as butterfly.

2.3 Process Definition

The product, after suitable preparation, shall be subjected to a freezing process and shall comply with the provisions in this Standard. The quick freezing shall not be considered complete unless the product temperature has reached -18C or colder. The product shall be kept deep frozen during transportation, storage and distribution.

2.4 It is recommended that the products covered by the provisions of this Standard be prepared in accordance with the following Codex Alimentarius codes:

(i) The appropriate sections of the Recommended International Code of Practice - General Principles of Food Hygiene.

(ii) The Recommended International Code of Hygienic Practice for the Products of Aquaculture.

(iii) The Recommended International Code of Practice for Shrimp or Prawns.

(iv) The Recommended International Code of Practice for the Processing and Handling of Quick Frozen Foods.

## 3.0 ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 Shrimp

Quick frozen shrimp shall be prepared from sound shrimp which are of a quality fit to be sold fresh for human consumption.

3.2 Glazing

If glazed, the water used for glazing or preparing glazing solutions shall be of potable quality or shall be clean sea-water. Potable water is fresh-water fit for human consumption. Standards of potability shall not be less than the WHO International Guidelines for Drinking Water Quality. Clean sea-water is sea-water which meets the same microbiological standards as potable water and is free from objectionable substances.

3.3 Other Permitted Ingredients

All ingredients must be of food grade quality and conform to all applicable EOS standards.

## 4.0 FOOD ADDITIVES

4.1 All food additives used in Frozen Shrimps shall conform to specifications of the Egyptian Organization for Standardization and the Egyptian Ministry of Health.

4.2 [Only food additives permitted within the Codex Standard for Quick Frozen Shrimps or Prawns are allowed to be used and in amounts specified in that Standard.]

4.3 [Only food colors permitted within the Codex Standard for Quick Frozen Shrimps or Prawns are allowed to be used and in amounts specified in that Standard.]

## 5.0 CONTAMINANTS

5.1 Pesticides

Pesticide residues for the ingredients used for the manufacture of Frozen Shrimps included in this standard must not exceed Maximum Residue Levels specified by the Egyptian Organization for Standardization (EOS)

5.2 Heavy Metals

Heavy metal contaminant levels for the fish ingredients used for the manufacture of Frozen Shrimps included in this standard must not exceed those specified by the Egyptian Organization for Standardization (EOS) in ES 2360/1993..

5.3 Radionuclides

The level of radioactivity for products included within this Standard shall be within limits proscribed by the concerned authorities.

5.4 Veterinary Drug Residues and Hormone Residues.

Veterinary drug residues and hormone residues for products included in this Standard must not exceed Maximum Residue Limits specified by the Egyptian Organization for Standardization or Egyptian Ministry of Agriculture [and the Codex Recommended International Code of Practice for Products of Aquaculture].

## 6.0 HYGIENE

6.1 Frozen Shrimp shall be prepared and handled in accordance with: good manufacturing practices (specify Egyptian EOS and MOH regulations including microbial criteria if applicable); [Codex Alimentarius Recommended International Code of Practice - General Principles of Food Hygiene] and any other applicable Codes of Hygienic Practice. Since cooked shrimp may be eaten by the consumer without cooking, it is essential that manufacturing and handling procedures conform to good hygiene practices, that processing and handling be performed to prevent decomposition or introduction/growth of pathogenic microorganisms, and that packaging be designed to protect the product against contamination.

6.2 When tested by appropriate methods of samples and examination:

A) Be free from microorganisms which may represent a hazard to health.
B) Be free from viable parasites and diseases that represent a hazard to health.
C) Not contain any substance originating from microorganisms in amounts which may represent a hazard to health.

6.3 The final product shall be free from any foreign material or objects that pose a threat to human health.

## 7.0 PACKAGING

7.1 Products manufactured or offered for sale under this Standard shall be packaged in containers that will safeguard the hygienic, nutritional, and organoleptic properties of the food.

7.2 The containers, including packaging and wrapping material, shall be made from substances that are safe and suitable for their intended use. They shall not impart any toxic substance or undesirable odor or flavor to the product.

7.3 Packs must fulfill the requirements stipulated in the Presidential Decree No. 798 of 1957 and ES 153 regarding packing of foodstuffs.

## 8.0 LABELING

Prepackaged products, including bulk packages and their subunits, covered by this Standard shall be labeled in accordance with the provisions of Ministerial Decree No. 354/1985 and the provisions of ES 1546 [and the applicable provisions of the Codex General Standard for the Labeling of Prepackaged Foods].

8.1 Name of the Food.

8.1.1 The name of the food shall be "Frozen Shrimp" followed by a reference to the extent of cooking and the Product Presentation in close proximity to the product name in such descriptive terms that will adequately and fully describe the nature of the presentation of the product to avoid misleading or confusing the consumer.

8.2 Mandatory Declarations

The following items must appear in Arabic (and other appropriate languages as appropriate) on the label of the product [in conformity, as appropriate, with the Codex General Standard for the Labeling of Prepackaged Foods].

8.2.1 Name of the product and description of the presentation. If the product consists of shrimp that have been colored or are broken, the label shall clearly state so in close proximity to the product name.
8.2.2 Producer's name, address and applicable trade mark, if any.. (Must repacker and/or importer appear?)
8.2.3 Net weight of the pack exclusive of glaze, if present.
8.2.4 Number of shrimp units in a kg.
8.2.4 List of ingredients in descending order of predominance including all direct additives and preservatives.
8.2.5 Production date [and date of durability.]
8.2.6 Country of origin. Products manufactured in Egypt must use the phrase "Made in Egypt". The country of origin, if not Egypt, is the country in which the product was manufactured.
8.2.7 For product that requires storage temperatures to preserve its safety, the label shall bear storage instructions specifying desired temperatures or other conditions necessary to preserve the safety of the product.

8.3 Date of Manufacture Marking [and Date of Durability

The product label shall declare the date of manufacture of the product and the date of durability. The date of durability shall be determined by the manufacturer taking into consideration the nature of the product and its manufacturing and storage conditions, and the climatic, distribution, and retail sale characteristics of Egypt.]

8.4 Labeling of Non-retail Containers.

The name of the product, lot identification and name and address of the manufacturer or packer must appear on the container. Other information, required under 8.2 above, if not provided on the container, must be provided in accompanying shipping documents.

## 9.0 METHODS OF ANALYSIS

Inspection and testing must be conducted according to the ES issued by the EOS in this respect.

## 10.0 REFERENCES

10.1 Codex Standard for Quick Frozen Shrimps or Prawns 92-1981

10.2 Indian Standard 2237-1985
Specification for Frozen Prawns (Shrimp) second revision
Manak Bhavan, 9 Bahadur Shahzafar Marg
New Delhi II0002

## ANNEX

**STANDARD NO. ES 516**
**Frozen Shrimps**

This annex is not intended as a standard, guideline recommendation, or technical regulation within the meaning of the Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) Agreements. Provisions provided within this Annex are not considered as essential for public health, food safety, or consumer protection. These provisions are of a voluntary, advisory nature intended to assist users; they reflect quality factors and criteria that may be used by commerce to define or describe the quality of the product and which may form part of contracts between buyers and sellers. Individual merchandisers should independently determine their product quality needs. Provisions of this Annex do not constitute regulatory provisions of the Egyptian Organization for Standardization or any other Egyptian Governmental Body.

## 1.0 OTHER COMPOSITION OR QUALITY FACTORS

1.1 The General Conditions

- It is preferable to chop heads off of the shrimp directly after fishing, especially for big size.
- The product must be prepared from shrimps conserved in ice or refrigeration at a temperature not to exceed 0C and protected from dehydration or loss of freshness.
- Shrimp being transported to the factory should be in ice or under refrigeration at a temperature not to exceed 0C.
- Process should start on arrival of the shrimp at the factory and be done under refrigeration or the shrimp need to be iced.
- All processing, packing and transporting tools and equipment must be clean.

1.2 Specifications

- Frozen cooked shrimp shall retain their color. If natural colors are used, they must be declared on the label as an ingredient.
- The product must be free of dry surface (freezer burn or dehydration which should be prevented by glazing the product), black spots and any unusual colors.
- Edible salts in frozen cooked shrimps must not exceed 1.5% of the final product weight.
- Trimethylamine should not exceed 40 mg/100 gm of shrimp flesh.
- Total volatile nitrogenous compounds must not exceed 65 mg/100 gm of shrimp flesh.
- Ammonium nitrogen shall not exceed 25 mg/100 gm of shrimp flesh.
- pH of the product should not exceed 5.97 in a sample [after treating it with acid].

1.3 [Grades of shrimp

- Excellent Grade
  a) Natural characteristics of the shrimp are excellent.
  b) The shrimp are packed uniformly in equal sizes in one container.
  c) The product must be free of intestine (in the case of intestine removed shrimp).
  d) The product should be free from scales or any other substances such as chopped shrimp.

- Standard Grade
  a) Natural characteristics are similar to Excellent Grade with a tolerance of 10%.]

1.4 [Grade Sizes of Shrimps

See current standard for these designations.]

## 2.0 WEIGHTS AND MEASURES

[Codex methodology under development]

## 3.0 OTHER LABELING REQUIREMENTS

# EGYPTIAN ORGANIZATION FOR STANDARDIZATION

## PROPOSED DRAFT STANDARD

FOR

# PACKAGED ANCHOVIES

## STANDARD NO. 808

Date of Proposed Revision: 1998

[Drafting Notes:
1. This draft standard is intended as an initial guideline only. Technical experts in fish and fishery products technology must revise the standard based on specific knowledge of the product(s).

2. EOS Standard No. ES 808 incorporates the use of the flesh of various species..

3. Primary references used for the preparation of this draft is Egyptian Standard 808 - 1996.]

This standard is confined to essential provisions relating to public health, food safety, and consumer protection. The Annex to this Standard contains quality and compositional provisions to be used by buyers and sellers as the basis of sales or purchase agreements to facilitate trade. The Annex does not however, form part of the Standard, and acceptance of the Standard by the Egyptian Organization for Standardization or other Egyptian Governmental Bodies does not imply acceptance of the Annex.

**Preamble**

These Standards abrogate and replace ES 808 of 1996 concerning processed anchovies.

## 1.0 SCOPE

1.1 This standard applies to packaged anchovies for direct human consumption in conformity with the product definition given in Section 2 of this Standard.

1.2 This standard does not apply to specialty products where the fish content constitutes less than 50% of the content of the product.

## 2.0 DESCRIPTION

2.1 Product Definition
Processed Anchovies are the products of preserving the flesh of species listed in 2.2 below.

2.2 Species used in Processed Anchovies:
- Engraulis encrasicholus
- Engraulis anchoita
- Engraulis ringens
- Engraulis mordax
- Sardinella anchova

or any similar small size fish from the salmon fish family.

2.3 Process Definition

Processed Anchovies are the result of cutting or chopping the flesh of salted anchovies. They are packed in edible oil. Vinegar and spices can be added. The product is packed in suitable packages which are not thermally treated.

2.4 It is recommended that the products covered by the provisions of this standard be prepared in accordance with the appropriate sections of the Codex Recommended International Code of Practice - General Principles of Food Hygiene.

## 3.0 ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 Fish Ingredients

The product shall be prepared from sound fresh or frozen fish of the species listed in Section 2.2 and of quality fit to be sold for human consumption. Fish 5 inches in length or longer shall have the head, fins, tail and viscera removed. Fish less than 5 inches in length that have a water phase salt content of at least 10%, water activity under 0.85 or a pH of 4.6 or less are exempt from the evisceration requirement.

3.2 Other Permitted Ingredients

The packing medium and all other ingredients including food additives shall be of edible food grade quality and conform to all applicable EOS Standards.

3.3 Percent Salt in Final Products

The water phase salt level in the flesh of the finished product shall be no less than 10%.

## 4.0 FOOD ADDITIVES

Permitted food additives are as follows:

- Calcium, Sodium, or Potassium Sorbic Acid in amounts sufficient to achieve its intended purpose.
- Ascorbic Acid or one of its salts not to exceed 200 mg/kg of final product as ascorbic acid.

## 5.0 CONTAMINANTS

5.1 Pesticides

Pesticide residues for the ingredients used for the manufacture of packaged anchovies included in this standard must not exceed Maximum Residue Levels specified by the Egyptian Organization for Standardization (EOS).

5.2 Heavy Metals

Heavy metal contaminant levels for the ingredients used for the manufacture of packaged anchovies included in this standard must not exceed those specified by the Egyptian Organization for Standardization (EOS) in ES 2360/1993.

5.4 Radionuclides

The level of radioactivity for products included within this Standard shall be within limits proscribed by the concerned authorities.

5.5 Veterinary Drug Residues and Hormone Residues.

Veterinary drug residues and hormone residues for fish included in this Standard must not exceed Maximum Residue Limits specified by the Egyptian Organization for Standardization or Egyptian Ministry of Agriculture [and the Codex Recommended International Code of Hygienic Practice for the Products of Aquaculture.]

## 6.0 HYGIENE

6.1 Packaged Anchovies shall be prepared and handled in accordance with: good manufacturing practices (specify Egyptian EOS and MOH regulations including microbial criteria if applicable); [Codex Alimentarius Recommended International Code of Practice - General Principles of Food Hygiene] and any other applicable Codes of Hygienic Practice.

6.2 When tested by appropriate methods of samples and examination:

A) Be free from pathogenic microorganisms which may represent a hazard to health.
B) Be free from viable parasites and diseases that represent a hazard to health.
C) Not contain any substance originating from microorganisms in amounts which may represent a hazard to health.
D) No sample shall contain histamine that exceeds 20 mg. per 100 gm. of the final product.

6.3 The final product shall be free from any foreign material or objects that pose a threat to human health.

## 7.0 PACKAGING

7.1 Products manufactured or offered for sale under this Standard shall be packaged in containers that will safeguard the hygienic, nutritional, and organoleptic properties of the food.

7.2 The containers, including packaging and wrapping material, shall be made from substances that are safe and suitable for their intended use. They shall not impart any toxic substance or undesirable odor or flavor to the product.

7.3 Packs must fulfill the requirements stipulated in the Presidential Decree No. 798 of 1957 and ES 153 regarding containers for packing foodstuffs.

## 8.0 LABELING

Prepackaged products, including bulk packages and their subunits, covered by this Standard shall be labeled in accordance with the Provisions of Ministerial Decree No. 354/1985 and the provisions of ES 1546. [The applicable provisions of Codex General Standard for the Labeling of Prepackaged Foods shall be used for guidance.]

8.1 Name of the Food.

8.1.1 The name of the food shall be "Anchovies" followed by its variety (fillets, rolled, paste)

8.2 Mandatory Declarations

The following items must appear in Arabic (and other appropriate languages as appropriate) on the label of the product [in conformity, as appropriate, with the Codex General Standard for the Labeling of Prepackaged Foods.]

8.2.1 Name of the product
8.2.2 Producers name, address and applicable trade mark, if any. [Must repacker and/or importer appear?]

8.2.3 Net weight of the pack.
8.2.4 List of ingredients in descending order of predominance including all direct additives and preservatives.
8.2.5 Production date [and date of durability.]
8.2.6 Country of origin. Products manufactured in Egypt must use the phrase "Made in Egypt". The country of origin, if not Egypt, is the country in which the product was manufactured.

8.4 Date of Manufacture Marking [and Date of Durability.

The product label shall declare the date of manufacture of the product and the date of durability. The date of durability shall be determined by the manufacturer taking into consideration the nature of the product and its manufacturing and storage conditions, and the climatic, distribution, and retail sale characteristics of Egypt.]

8.5 Labeling of Non-retail Containers.

The name of the product, lot identification and name and address of the manufacturer or packer must appear on the container. Other information, required under 8.2 above, if not provided on the container, must be provided in accompanying shipping documents.

## 9.0 METHODS OF ANALYSIS

9.1 Inspection and testing shall be conducted according to the concerned standards of the natural and chemical methods of fish testing and its products, Chapter 4 (Salted Fish).

9.2 Microbiological tests shall be conducted according to ES issued by EOS.

## 10.0 REFERENCES

10.1 John Willey & Sons 1989
Processing Aquatic Food Products
Fredrich W. Wheaton
Thomas B. Lawson, New York

10.2 Zaitsev, et al 1969
Fish Curing and Processing
MIR Publishing, Moscow

10.3 Donald K.T. and James MC. W. C 1957
Marine Products of Commerce II Ed.

[10.4 CL 1991/20 - FFP - August 1991
Codex Alimentarius Commission]

## ANNEX

**STANDARD NO. ES 808**
**Packaged Anchovies**

This annex is not intended as a standard, guideline recommendation, or technical regulation within the meaning of the Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) Agreements. Provisions provided within this Annex are not considered as essential for public health, food safety, or consumer protection. These provisions are of a voluntary, advisory nature intended to assist users; they reflect quality factors and criteria that may be used by commerce to define or describe the quality of the product and which may form part of contracts between buyers and sellers. Individual merchandisers should independently determine their product quality needs. Provisions of this Annex do not constitute regulatory provisions of the Egyptian Organization for Standardization or any other Egyptian Governmental Body.

### 1.0 OTHER COMPOSITION OR QUALITY FACTORS

1.1 The product must be made of unblemished fish, characterized by firm tissues and totally free from wounds, bruises, mucous substances and unacceptable odor.

1.2 The product must be free from all alien or undesirable substances as well as factors that induce decomposition. It must maintain the characteristic color, flavor, and odor of the product.

1.3 Fish used must be decapitated having removed the fins, tail and viscera. Complete small anchovies must conform with salted sardine.

1.4 The product may be packed in any of the following forms:
- Long Slices (Anchovy Fillets)
- Rolled Anchovy
- Anchovy Paste
- Small Whole

1.5 Product in the same container must be uniform in size and length.

1.6 Edible scale in the package shall not exceed 12% of the net weight of edible flesh.

1.7 The product shall be free from anaerobic bacteria which produce hydrogen sulfate.

## 2.0 WEIGHTS AND MEASURES

2.1 The anchovy net weight should not be less than 60% of the net weight declared on the product label.

2.2 The percent of solution formed in the product must not exceed 3% of the net weight of the package if and when oil is used as a media for packing.

## 3.0 OTHER LABELING REQUIREMENTS

## APPENDIX 4

## STANDARDS PREPARED BY THE TECHNICAL ADVISORS BUT NOT REVIEWED BY EOS TECHNICAL COMMITTEES

1. Non-Carbonated Fruit Juices/Beverages
2. Evaporated & Condensed Milk
3. Minced Meat
4. Meat Balls
5. Minced Meat with Soya Bean Protein
6. Frozen Sausage
7. Frozen Offals
8. Canned Sausage
9. Coffee Beans
10. Instant Coffee
11. Tea

**WORKING DRAFT ONLY**

**EGYPTIAN ORGANIZATION FOR STANDARDIZATION**

# PROPOSED DRAFT GENERAL STANDARD FOR NON-CARBONATED FRUIT JUICES AND FRUIT JUICE BEVERAGES PRESERVED EXCLUSIVELY BY PHYSICAL MEANS[1]

**STANDARD NO. 129-1986 (Amended, 1990)[Fruit Juice Sections Only]**

**[**Drafting Notes:

1. A large number of non-carbonated fruit juice products (termed fruit juice products) exist that are sold in high volume and traded internationally. These include single strength fruit juice (made from the juice and/or reconstituted concentrated juice of a single fruit type), single strength fruit juice made from a blend of juices and/or reconstituted concentrated fruit juices, and fruit juice beverages (either single fruit and/or blends) with varying levels of fruit juice amounts (e.g., fruit juice drinks, fruit cocktail drinks, etc.) made from fruit juice and/or reconstituted concentrated fruit juice. Single strength means juice with a brix value equal to that of the natural fruit juice. This standard is intended to include all of these products although it may be of value to separate the standard to place fruit juice beverages (those products not equal to single strength juice) into a separate standard.

   This working draft standard should be considered only as a model by which standards for fruit juices and fruit juice beverages should be constructed.

2. This draft standard is intended as an initial guideline only. Technical experts in fruit juice technology must revise the standard based on specific knowledge of the product(s).

3. EOS Standard 129-1986 incorporates many preserved fruit products. Since the Codex Alimentarius separates these products into multiple standards, it is recommended that consideration be given to using the Codex model in the revision of this Standard; that is, the separation of the products in EOS Standard 129-1986 into several standards.

4. Primary references used for the preparation of this draft are: 1) Egyptian Standard 129-1986, Fruit Preserves; 2) Codex Alimentarius General Standard for Fruit Juices Preserved Exclusively by Physical Means Not Covered by Individual Standards, Codex Standard 164-1989, 3) U.S. Code of Federal Regulations, 21 CFR 101.30 (Percentage juice declaration for foods purporting to be beverages that contain fruit or vegetable juice); and 4) U.S. Code of Federal Regulations, 21 CFR Part 102 (Common

[1]Prepared by the Egyptian Organization for Standardization in Coordination with the Development Economic Policy Reform and Analysis Project (DEPRA), Nathan Associates Inc., Arlington, VA, USA.

or usual names for non-standardized foods, specifically Part 102.5 (General principles) and Part 102.33 (Beverages that contain fruit or vegetable juice). Judgment has been used in incorporating, not incorporating or modifying elements of both Standards into this working draft.

5. The Codex Alimentarius General Standard for Fruit Juices was published in 1989. It has not been updated into the format currently being used for revised standards. Currently, there are no known plans for Codex to revise this standard. This draft is prepared, however, based on the revised format.**]**

This Standard is confined to essential provisions relating to public health, food safety and consumer protection. The Annex to this Standard contains voluntary quality and compositional provisions to be used by buyers and sellers as the basis of sales or purchase agreements to facilitate trade. The Annex does not however, form part of the Standard, and acceptance of the Standard by the Egyptian Organization for Standardization or other Egyptian Governmental Bodies does not imply acceptance of the Annex.

## 1.0 SCOPE

**1.1** This standard applies to the following:

**1.1.1** Non-carbonated fruit juices (termed fruit juices), made from fruit of a single species, as defined in Sections 2.0 and 3.0 for which an individual specie fruit juice standard does not exist.

**1.1.2** Non-carbonated fruit juices (termed fruit juices) made from fruit of multiple species, as defined in Sections 2.0 and 3.0 for which an individual fruit juice standard does not exist.

**1.1.3** Non-carbonated fruit juices beverages (termed fruit juice beverages) made from fruit of a single species or from fruit of multiples species, as defined in Sections 2.0 and 3.0 for which an individual fruit juice beverage standard does not exist.

**1.2** The standard does not apply to:

**1.2.1** Non-carbonated fruit juices prepared from a single fruit specie, multiple fruit species, or fruit juice beverages from single or multiple species for which a specific standard exists.

**1.2.2** Non-carbonated or fruit flavored beverages that contain only fruit flavorants to characterize the fruit nature of the beverage.

**1.2.3** Carbonated fruit juices or fruit juice beverages.

## 2.0 DESCRIPTION

### 2.1 Definition

Fruit juice is the unfermented, but fermentable juice (pulpy, turbid or clear) intended for direct consumption, obtained by a mechanical means from sound ripe fruit or the flesh thereof of a single fruit specie or multiple fruit species, and preserved exclusively by physical means. The juice or juices may have been concentrated and later reconstituted with water suitable for the purpose of maintaining the essential composition and quality factors of the juice or juices.

### 2.2 Other Definitions

**2.2.1** Concentrated Fruit Juice

Concentrated fruit juice in the unfermentable product, which is capable of fermentation after reconstitution, obtained from the juice of sound, ripe fruits, from which the water has been removed to the extent that the product has a soluble solids content of not less than double the content of the original juice intended for direct consumption. The product may be preserved exclusively by physical means and may be clear or turbid. The addition of sugars or acids is permitted and must be declared on the product label.

**2.2.2** Single strength fruit juice.

Single strength fruit juice is the fruit juice product consisting of the expressed juice, including concentrated and reconstituted fruit juice, of a single fruit species as defined in Section 2.0 above.

**2.2.3** Single strength fruit juice made multiple species.

Single strength fruit juice is the fruit product consisting of the expressed juices, including concentrated and reconstituted fruit juices as defined in Section 2.0 above, of multiple fruit juice species in any combination or amounts.

**2.2.4** Fruit Juice Beverage

Fruit juice beverage means any non-carbonated product containing one or more fruit juices as defined in 2.1 above where the final fruit juice amount is less than 100% but more than 0%.

## 3.0 ESSENTIAL COMPOSITION AND RELATED FACTORS

### 3.1 Raw Material

**3.1.1** Fruit juice as defined in Section 2.0.
**3.1.2** Concentrated Fruit Juice as defined in Section 2.2.1
**3.1.3** Water
**3.1.4** Fruit pulp

### 3.2 Composition

**3.2.1** Soluble solids

**3.2.1.1** Single strength fruit juice made from a single fruit species.

The soluble solids content of single strength fruit juice made from a single fruit species shall not be less than a value which corresponds to the soluble solids content of the named ripe fruit as determined by an appropriate standard method, uncorrected for acidity and read as ºBrix on the International Sucrose Scales.

**3.2.1.2** Single strength fruit juice made from multiple fruit species.

The soluble solids content of fruit juice made from multiple fruit species shall not be less than that value computed from the normal soluble solids content of the named ripe fruits on volume/volume basis as determined by an appropriate standard method, uncorrected for acidity and read as ºBrix on the International Sucrose Scales, keeping in mind that the final fruit juice amount shall be not less than 100%.

**3.2.1.3** Fruit juice beverages.

The soluble solids content of fruit juice beverages shall not be less than the value corresponding computed from the normal soluble solids content of the named ripe fruits on a volume/volume basis as determined by an appropriate standard method, uncorrected for acidity and read as ºBrix on the International Sucrose Scales, keeping in mind that the final fruit juice amount shall be less than 100% and greater than 0%.

**3.2.2** Sugars.

One or more sugars permitted by the Egyptian Organization for Standardization (EOS) may be added to obtain the correct sugar/acid

balance.

**3.2.3** Ethanol content.

The ethanol content shall not exceed 5 g/kg.

**3.2.4** Use of concentrates.

The addition of concentrates to fruit juices or fruit juice beverages permitted. Only concentrates obtained from the name fruit(s) may be used.

**3.2.5** Pulp

The use of fruit pulp in fruit juice beverages is permitted.

### 3.3 Related Factors

3.3.1 The fruit juice or fruit juice beverage products shall be of normal color, aroma taste and flavor for the product. Natural volatile components may be restored to any juice obtained from the same type of fruit from which the natural volatile juice components were removed.

3.3.2 If preservation is by refrigeration or freezing, the product shall be kept continuously and fully refrigerated or frozen as appropriate for the product.

## 4.0 FOOD ADDITIVES

Only food additives permitted by the permitted by the Egyptian Ministry of Health can be used.

## 5.0 CONTAMINANTS

### 5.1 Pesticides

Pesticide residues for the fruit ingredient(s) used for the manufacture fruit juices or fruit juice beverages included in this standard must not exceed Maximum Residue Levels specified by the Egyptian Organization for Standardization (EOS).

### 5.2 Heavy Metals

Heavy metal contaminant levels must not exceed those specified by the Egyptian Organization for Standardization (EOS).

### 5.3 Radionuclides

The level of radioactivity for products included within this Standard shall be within limits proscribed by recognized international standards setting bodies.

## 6.0 HYGIENE

Fruit juices produced under this standard must:

6.1 Be prepared and handled in accordance with: good manufacturing practices [specify Egyptian EOS and MOH regulations including microbiological criteria if applicable ]; Codex Alimentarius Recommended International Code of Practice- General Principles of Food Hygiene and any other relevant Codex texts (specify).

6.2 To the extent possible in good manufacturing practice, be free from objectionable material (e.g., insect parts, rodent hair/excreta, foreign objects- rock, glass, metal).

6.3 The products should comply with any microbiological criteria established in accordance with the Principles for the Establishment and Application of Microbiological Criteria for Foods (CAC/GL 21-1997).

**[**6.3 When tested by appropriate methods of samples and examination:

a) Be free from microorganisms in which may represent a hazard to health.
b) Be free from parasites; and,
c) Not contain any substance originating from microorganisms in amounts which may represent a hazard to health.**]**

## 7.0 PACKAGING

**7.1** Fruit juices and fruit juice beverages manufactured or offered for sale under this Standard shall be packaged in containers that will safeguard the hygienic, nutritional, and organoleptic properties of the food.

**7.2** The containers, including packaging and wrapping material, shall be made from substances that are safe and suitable for their intended use. They shall not impart any toxic substance or undesirable odor or flavor to the product.

## 8.0 LABELING

Prepackaged products covered by this Standard shall be labeled in accordance with the Codex General Standard for the Labeling of Prepackaged Foods.

**8.1** Name of the Food.

**8.1.1** Single strength juice made from a single fruit species.

**8.1.1.1** The name of the food shall be "x" juice or pulpy "x" juice where "x" is the common name of the fruit. The term "contains 100 percent (or %) juice" shall appear on the label.

**8.1.1.2** If the quantity of added sugar or sugars exceeds 15 gr./kg the words "x added" shall plainly and conspicuously accompany the name of the product where "x" represents the name or names of the sugar or sugars added.

**8.1.1.2** In the case of fruit juice made from concentrate, the fact of reconstitution shall be declared as follows: "x juice made from concentrate" or "x juice made from concentrated "x" juice", where "x" represents the name of the fruit from which the juice has been obtained. The information shall be given in close proximity to the name of the food or in another prominent position on the label.

**8.1.2** Single strength juice made from multiple fruit juice species.

**8.1.2.1** The name of the food shall be "x-y-z (etc.) juice" or "x-y-z (etc.) juice blend or "x-y-z (etc.) juice mixture where x, y, z, (etc.) represent the names of the various fruit species contained in the juice. The names of each fruit juice must appear in descending order of predominance. The term "contains 100 percent (or %) juice" shall appear on the label.

**8.1.2.2** The percentage of each characterizing fruit juice ingredient must appear on the front label panel.

**8.1.2.3** If the quantity of added sugar or sugars exceeds 15 gr./kg the words "x added" shall plainly and conspicuously accompany the name of the product where "x" represents the name or names of the sugar or sugars added.

**8.1.2.3** In the case of product made from one or more fruit juice concentrates, the fact of reconstitution shall be declared for each fruit juice specie as follows: “x juice made from concentrate” or “x juice made from concentrated “x” juice”, where “x” represents the name of the fruit from which the juice has been obtained. The information shall be given in close proximity to the name of the food or in another prominent position on the label.

**8.1.3** Fruit juice beverages.

**8.1.3.1** The name of the product shall be a descriptive name that describes the basic nature of the product and shall not be misleading to the consumer. The terms “beverage”, “drink” or “cocktail” may be used for the product. If the term “fruit juice” or “juice” is used, the qualifying terms “beverage”, “drink” or “cocktail” must be used in conjunction with the term such that the consumer is aware that the product contains less than 100% juice.

**8.1.3.2** The percentage of juice contained in the beverage shall be declared on the label by the words “contains “x” percent (or %) juice or a similar phrase.

**8.1.3.3** If the name juice(s) is/are not the predominant juice(s) in the beverage, the label shall indicate the named juices are present as a flavor or shall give the amount(s) of the named juice(s) in 5% increments.

**8.1.3.4** If the product is a diluted multiple-juice beverage, in addition to the ingredient statement declaration, the names of the juices, if they appear on the label, must appear in descending order of predominance.

**8.1.3.5** If a product is a diluted multiple-juice beverage that contains juices other than those that appear on the label, than the common or usual name for the product shall indicate that the represented juice is not the only juice in the product (e.g., Apple blend; apple juice in a blend of two other fruit juices).

**8.1.3.6** If the beverage contains less than 1% fruit juice, the total percentage juice shall be declared as “less than 1 percent (or %) “x” with the blank filled in with the name of the particular fruit.

**8.1.3.7** Fruit juice beverage products shall not bear any descriptive labeling that contains terms such as "100% natural" or "100% pure".

**8.1.3.8** The common or usual name of a juice that has been modified shall include a description of the exact nature of the modification (e.g., "acid-reduced cranberry juice").

**8.1.3.9** If the product contains a juice whose color, taste, or other organoleptic properties have been modified to the extent that the original juice is no longer recognizable at the time processing is complete, or if its nutrient profile has been diminished below a level the normal range for the juice, then the fruit may not be depicted on the label by vignette or other pictorial representation.

**8.2** Mandatory Declarations

The following items must appear in Arabic (and other languages as appropriate) on the label of the product in conformity, as appropriate, with the Codex General Standard for the Labeling of Prepackaged Foods.

**8.2.1** Name of the product including, as appropriate, all information given in 8.1 above.
**8.2.2** Name and address of the manufacturer.
**8.2.3** Net weight or volume.
**8.2.4** List of ingredients in descending order of predominance including all direct additives and preservatives.
**8.2.5** Production date and date of durability.
**8.2.6** Country of origin. Products manufactured in Egypt must use the phrase "Made in Egypt".

**8.3** Country of Origin.

Country of origin is the country in which the juice product was manufactured.

**8.5** Date Marking (Date of Durability).

**[**The date of durability shall be determined by the manufacturer taking into consideration the nature of the product and its manufacturing and storage conditions, and the climatic, distribution and retail sale characteristics of Egypt. **]**

Note: information in brackets (**[ ]**) should be further discussed.

**8.6** Labeling of Non-retail Containers.

The name of the product, lot identification and the name and address of the manufacturer or packer must appear on the container. Other required labeling information, if not provided on the container, must be provided in accompanying shipping documents.

## 9.0 METHODS OF ANALYSIS

[To be specified.]

**ANNEX**
**STANDARD NO. 129-1986**
**FRUIT JUICES PRESERVED EXCLUSIVELY BY PHYSICAL MEANS**

This Annex is not intended as a standard, guideline recommendation, or technical regulation within the meaning of the Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) Agreements. Provisions provided within this Annex are not considered as essential for public health, food safety or consumer protection. These provisions are of a voluntary advisory nature intended to assist users; they reflect quality factors and criteria that may be used by commerce to define or describe the quality of the product and which may form part of contracts between buyers and sellers. Individual merchandisers should independently determine their product quality needs. Provisions of this annex do not constitute regulatory provisions of the Egyptian Organization for Standardization or any other Egyptian Governmental Body.

## 1.0 OTHER COMPOSITION OR QUALITY FACTORS

### 1.1 Formulation

### 1.2 Other Quality Factors

## 2.0 WEIGHTS AND MEASURES

Fill of container information should be given here.

## 3.0 OTHER LABELING FACTORS

**EGYPTIAN ORGANIZATION FOR STANDARDIZATION**

# PROPOSED DRAFT STANDARD FOR CONCENTRATED MILKS (EVAPORATED AND CONDENSED MILK)[1]

**STANDARD NO. 1648**
**DATE OF REVISION: 27 September, 1997**

**[**Drafting Notes:

1. This draft standard is intended as an initial guideline only. Technical experts in concentrated milk manufacture must revise the standard based on specific knowledge of the product(s).

2. Primary references used for the preparation of this draft are: 1) Egyptian Standard 1830 - 1990, Concentrated Milk; and, 2) Codex Alimentarius Draft Revised Standards for Evaporated Milks (A-3) and Condensed Milks (A-4) (at Step 6). Judgment has been used in incorporating, not incorporating or modifying elements of both Standards into this working draft. **]**

This Standard is confined to essential provisions relating to public health, food safety and consumer protection. The Annex to this Standard contains voluntary quality and compositional provisions to be used by buyers and sellers as the basis of sales or purchase agreements to facilitate trade. The Annex does not however, form part of the Standard, and acceptance of the Standard by the Egyptian Organization for Standardization or other Egyptian Governmental Bodies does not imply acceptance of the Annex.

## 1.0 SCOPE

This standard applies to evaporated milks and sweetened condensed milks intended for direct consumption or further processing in conformity with the product definition given in Section 2 of this Standard.

## 2.0 DESCRIPTION

**Evaporated milks** are milk products which can be obtained by the partial removal of water from milk by heat, or by any other process which leads to a product of the same composition and characteristics. The fat and/or protein content of the milk may have been adjusted, only to comply with the compositional requirements given in Section 3 of this Standard, by the addition and/or withdrawal of milk constituents in such a way as not to alter the whey protein to casein ratio of the milk being adjusted.

[1] Prepared by the Egyptian Organization for Standardization in Coordination with the Development Economic Policy Reform and Analysis Project (DEPRA), Nathan Associates Inc., Arlington, VA, USA, AND THE New Zealand Ministry of Agriculture and Forestry.

**Sweetened condensed milks** are milk products which can be obtained by the partial removal of water from milk with the addition of sugar, or by any other process which leads to a product of the same composition and characteristics. The fat and/or protein content of the milk may have been adjusted, only to comply with the compositional requirements given in Section 3 of this Standard, by the addition and/or withdrawal of milk constituents in such a way as not to alter the whey protein to casein ratio of the milk being adjusted.

## 3.0 ESSENTIAL COMPOSITION AND QUALITY FACTORS

### 3.1 Raw Materials

- Milk and milk powders[2], cream and cream powders[2], milkfat products[2]

The following milk products are allowed for protein adjustment purposes:

- Milk retentate. Milk retentate is the product obtained by concentrating milk protein by ultrafiltration of milk, partly skimmed milk, or skimmed milk.

- Milk permeate. Milk Permeate is the product obtained by removing milk proteins and milkfat from milk, partly skimmed milk, or skimmed milk by ultrafiltration.

- Lactose[2]

### 3.2 Permitted Ingredients

Potable water

For sweetened condensed milk only:

Sugar

In this product, sugar is generally considered to be sucrose, but a combination of sucrose with other sugars, consistent with Good Manufacturing Practice, may be used.

### 3.3 Composition

**3.3.1** Evaporated milks

Evaporated milk

| | |
|---|---|
| Minimum milkfat | 7.5% m/m |
| Minimum milk solids | 25% m/m[3] |

[2] For specifications, see the relevant Egyptian Standard.
[3] The dry matter (or milk solids) content includes water of crystallization of lactose.

| | |
|---|---|
| Minimum milk protein in milk solids-not-fat | 34% m/m |

Evaporated skimmed milk

| | |
|---|---|
| Minimum milkfat | 1% m/m |
| Minimum milk solids | 20% $m/m^3$ |
| Minimum milk protein in milk solids-not-fat | 34% m/m |

Evaporated partly skimmed milk

| | |
|---|---|
| Minimum milkfat | More than 1% and less than 7.5% m/m |
| Minimum milk solids | 20% $m/m^3$ |
| Minimum milk protein in milk solids-not-fat | 34% m/m |

Evaporated high-fat milk

| | |
|---|---|
| Minimum milkfat | 15% m/m |
| Minimum milk solids-not-fat | 11.5% $m/m^3$ |
| Minimum milk protein in milk solids-not-fat | 34% m/m |

### 3.3.2 Sweetened condensed milks

Sweetened condensed milk

| | |
|---|---|
| Minimum milkfat | 8% m/m |
| Minimum milk solids | 28% $m/m^3$ |
| Minimum milk protein in milk solids-not-fat | 34% m/m |

Sweetened condensed skimmed milk

| | |
|---|---|
| Minimum milkfat | 1% m/m |
| Minimum milk solids | 24% $m/m^3$ |
| Minimum milk protein in milk solids-not-fat | 34% m/m |

Sweetened condensed partly skimmed milk

| | |
|---|---|
| Minimum milkfat | More than 1% and less than 8% m/m |
| Minimum milk solids-not-fat | 20% $m/m^3$ |
| Minimum milk solids | 24% $m/m^3$ |
| Minimum milk protein in milk solids-not-fat | 34% m/m |

Sweetened condensed high-fat milk

| | |
|---|---|
| Minimum milkfat | 16% m/m |
| Minimum milk solids-not-fat | 14% $m/m^3$ |
| Minimum milk protein in milk solids-not-fat | 34% m/m |

For all sweetened condensed milks the amount of sugar is restricted by Good Manufacturing Practice to a minimum value which safeguards the keeping quality of the product and a maximum value above which crystallization of sugar may occur.

## 4.0 FOOD ADDITIVES

Only food additives permitted by the Egyptian Ministry of Health and EOS may be used.

## 5.0 CONTAMINANTS

### 5.1 Pesticides

Pesticide residues for concentrated milk included in this standard must not exceed Maximum Residue Levels specified by the Egyptian Organization for Standardization (EOS).

### 5.2 Heavy Metals

Residues of heavy metals should not exceed levels specified by the Egyptian Organization for Standardization.

### 5.3 Mycotoxins

Residues of mycotoxins should not exceed levels specified by the Ministry of Health.

### 5.4 Veterinary Drug Residues

Veterinary drug residues in concentrated milk included in this standard must not exceed Maximum Residue Levels specified by the Egyptian Ministry of Agriculture.

### 5.5 Radionuclides

Testing for radioactivity will be undertaken when the origin of milk used to manufacture products covered under this Standard is from a region in which agricultural products are known to be exposed to excessive levels of radiation or when it is not possible to verify that the origin of milk used to manufacture products covered under this standard is obtained from a region free of excessive radiation. Radioactivity levels in concentrated milk included in this Standard must not exceed maximum levels specified by the Egyptian competent authority.

## 6.0 HYGIENE

**6.1** It is recommended that the products covered by the provisions of this standard b e prepared and handled in accordance with the appropriate sections of the Recommended International Code of Practice - General Principles of Food Hygiene (CAC/RCP 1-1969, Rev. 3-1997), and other relevant Codex texts such as Code s of Hygienic Practice and Codes of Practice. To the extent possible in good manufacturing practice, the product must be free from objectionable matter (impurities).

**6.2** From raw material production to the point of consumption, the products covered by this standard should be subject to a combination of control measures, which must include [commercial sterilization], and these shall be shown to achieve the appropriate level of public health protection.

[All concentrated milks manufactured under this Standard must be phosphatase negative.]

**6.3** The products should comply with any microbiological criteria established in accordance with the Principles for the Establishment and Application of Microbiological Criteria for Foods (CAC/GL 21-1997).

### 6.3.1 Microbiological Criteria

The product shall be free from pathogenic bacteria and their toxins, and in particular the following:

| | |
|---|---|
| [Aerobic plate count at 37° C for 48 h | <50 000 cfu/g |
| [Coliforms | <10 cfu/g |
| *[Escherichia coli* | Not detected in 1 g |
| *[Staphylococcus aureus* and its toxins | Not detected in [50 g] |
| *[Listeria monocytogenes* | Not detected in [250 g] |

*<u>Comment</u>: The committee should consider what microbiological criteria should be included in the standard for public health reasons, considering the risks that the products pose and the Codex Principles (mentioned above); and what microbiological criteria are quality matters can be transferred to the Annex.*

## 7.0 PACKAGING

**7.1** Concentrated milks manufactured or offered for sale under these Standards shall be packaged in containers that will safeguard the hygienic, nutritional, and organoleptic properties of the food and which comply with Republican Decree No. 798/1957 concerning containers for packaging foodstuffs.

**7.2** The containers, including packaging and wrapping material, shall be made from substances that are safe and suitable for their intended use. They shall not impart any toxic substance or undesirable odor or flavor to the product.

## 8.0 LABELING

The product name or names used in this Standard shall be used only in accordance with the Codex Alimentarius Code of Principles Concerning Milk and Milk Products.

**8.1** Name of the Food.

**8.1.1** The name of the food shall be:

- evaporated milk
- evaporated skimmed milk
- evaporated partly skimmed milk
- evaporated high-fat milk
- sweetened condensed milk
- sweetened condensed skimmed milk
- sweetened condensed partly skimmed milk
- sweetened condensed high-fat milk

according to the compositional product specifications given in Section 3.3 above.

Evaporated partly skimmed milk may be designated "evaporated semi-skimmed milk" provided that the content of milkfat does not exceed 4.5% m/m and is not less than 4.0% m/m, and the milk solids content is at least 24% m/m.

Sweetened condensed partly skimmed milk may be designated "sweetened condensed semi-skimmed milk" provided that the content of milkfat does not exceed 4.5% m/m and is not less than 4.0% m/m, and the milk solids content is at least 28% m/m.

**8.1.2** If milk other than cows' milk is used, a word or words denoting the animal, or the case of a mixture, animals from which the milk has been derived should be inserted immediately before or after the designation of the product.

**8.2** Mandatory Declarations

The following items should be printed clearly in Arabic on the label of both prepackaged product and non-retail containers in conformity, as appropriate, with the Egyptian General Standard for the Labeling of Packaged Foods, Ministerial Decree No. 354/1985 and

Egyptian Specification No. 1546. They may also be printed in a second language in addition to Arabic.

**8.2.1** Name of the product.
**8.2.2** Name and address of the manufacturer.
**8.2.3** Net weight.
**8.2.4** List of ingredients including food additives and percentage of preservatives. Milk products used only for protein adjustment purposes do not have to be declared.
**8.2.5** Production date and date of maximum durability.
**8.2.6** List of constituents content as a percentage of the product by weight.
**8.2.7** Country of origin. "Country of origin" is the country in which the concentrated milk was manufactured. Products manufactured in Egypt must use the phrase "Made in Egypt".
**8.2.8** Storage conditions according to Egyptian Standard 2613.
**8.2.9** Lot identification or batch number.
**8.2.10** The words "Standard No. 1830/1998".

## 9.0 METHODS OF ANALYSIS

Inspection and testing methods should conform to the Egyptian Standard Specification No. 155 concerning the natural and chemical methods of testing milk and milk products as well as the Egyptian Standard Specification concerning the microbiological testing methods (issued by the Organization in this respect).

**ANNEX**

**STANDARD NO. 1830**
**CONCENTRATED MILK**

This Annex is not intended as a standard, guideline recommendation, or technical regulation within the meaning of the Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) Agreements. Provisions provided within this Annex are not considered as essential for public health, food safety or consumer protection. These provisions are of a voluntary advisory nature intended to assist users; they reflect quality factors and criteria that may be used by commerce to define or describe the quality of the product and which may form part of contracts between buyers and sellers. Individual merchandisers should independently determine their product quality needs. Provisions of this annex do not constitute regulatory provisions of the Egyptian Organization for Standardization or any other Egyptian Governmental Body.

## 1.0 OTHER QUALITY FACTORS

**1.1** Labeling information on method of dehydration.
**1.2** Labeling information on method of rehydration.

*Comment: The committee may wish to include advisory specifications for lactose, ash, sugars, sediment, precipitation, caramelization, microbiological quality, and product stability.*

**EGYPTIAN ORGANIZATION FOR STANDARDIZATION**

# PROPOSED DRAFT STANDARD FOR MINCED MEAT[1]

**STANDARD NO. 1694**
**DATE OF REVISION: 1991**

[This Standard has not been discussed by the Technical Committee. The text of this proposed draft Standard has been modelled on the development of Standard ES 1688 for Frozen Meat Burgers. All comments of the Technical Committee relating to Standard 1688 have been incorporated in this draft standard. Initial copies of this proposed draft Standard have been distributed to the Technical Committee. The text of this Standard does not include notes of the Technical Expert relating to any aspect of this Standard although the notes in the text of draft Standard 1688 could be expected to have a similar effect in this Standard.]

This Standard is confined to essential provisions relating to public health, food safety and consumer protection. The Annex to this Standard contains voluntary quality and compositional provisions to be used by buyers and sellers as the basis of sales or purchase agreements to facilitate trade. The Annex does not however, form part of the Standard, and acceptance of the Standard by the Egyptian Organization for Standardization or other Egyptian Governmental Bodies does not imply acceptance of the Annex.

The requirements of this standard shall be administered by the competent authorities.

## 1.0 SCOPE

This standard applies to minced meat and includes all minced meat produced in and imported into the Arab Republic of Egypt.

## 2.0 DESCRIPTION

### 2.1 Definition

Minced meat is the product prepared from chopped (minced) fresh or frozen meat obtained from species of animals permitted to be used for human consumption. Minced meat may contain permitted additives.

## 3.0 ESSENTIAL COMPOSITION AND RELATED FACTORS

### 3.1 Raw Materials

[1] Prepared by the Egyptian Organization for Standardization in Coordination with the Development Economic Policy Reform and Analysis Project (DEPRA), Nathan Associates Inc., Arlington, VA, USA.

3.1.1 Frozen meat produced in accordance with the standard 1522 (1991), Egyptian Organization for Standardization.

3.1.2 Fresh meat produced in accordance with standards for Good Manufacturing Practice laid down by the Egyptian Organization for Standardization.

3.1.3 The following are prohibited in minced meat:
(i) meat obtained from swine (pork).
(ii) tissues of any species obtained from head, nose, ear, lips, mucous membrane, reproductive system parts, lungs, esophagus, intestines, bladder, skin, hide and hair, bones and cartilage, and apparent blood vessels

## 3.2 Other Permitted Ingredients

All food and food ingredients must be of a suitable quality. Food ingredients shall comply with the requirements of the appropriate Egyptian standard.

3.2.1 Salt.
3.2.2 Food additives as specified below.

## 3.3 Composition

3.3.1 Fat content is not to exceed 20%.
3.3.2 Red meat content of at least 80%.
3.3.3 Total protein content of at least 18%.
3.3.4 Moisture should not exceed 70%.
3.3.5 Salt: the amount of salt should be according to Good Manufacturing Practice.

## 3.4 Related Factors

3.4.1 Minced meat as defined in this standard shall be obtained from the meat of only one species of animal.

3.4.2 Shall be processed according to the requirements of the competent authority.

3.4.3 Be slaughtered and processed in an establishment licensed by the competent authority.

3.4.4 Be obtained from animals that were determined to be healthy at the time of slaughter. Animals slaughtered for the purposes of disease control or eradication shall not be used for meat.

3.4.5 Be slaughtered according to Islamic legislation (Halal).

3.4.6 After slaughter and before further processing of the carcass, shall not contain any diseased tissues or defects that are injurious to public health and are fit for human consumption.

3.4.7 After production, the minced meat must be reduced to, and maintained at, a temperature not exceeding:

-18°C in the case of frozen mince, and
4°C in the case of chilled mince.

3.4.8 The date of durability shall be determined according to standard 2613 of the Egyptian Organization for Standardization taking into account the following recommendation:

(i) The date of durability should be determined by the manufacturer taking into consideration the nature of the product and its manufacturing and storage conditions, and the climatic, distribution and retail sale characteristics of Egypt.

(ii) The shelf life of frozen mince should not exceed 3 months from the date of manufacture but, in any event, the shelf life should not exceed the shelf life of the frozen meat ingredients.

## 4.0 FOOD ADDITIVES

Food additives are which are permitted by the Ministry of Health (MOH) may be used in minced meat at the levels specified by the MOH.

## 5.0 CONTAMINANTS

### 5.1 Pesticides

Pesticide residues for the frozen meat ingredient used to manufacture meat products included in this standard must not exceed Maximum Residue Levels specified by the Egyptian Organization for Standardization (EOS).

### 5.2 Heavy Metals

Heavy metals contaminants in the frozen meat ingredients used to manufacture meat products included in this standard shall meet the requirements of the Egyptian Organization for Standardization (EOS).

**5.3 Veterinary Drug Residues and Hormones**

Veterinary drug residues and hormones for the frozen meat ingredient used in this standard must not exceed Maximum Residue Limits specified by the Egyptian Ministry of Agriculture.

**5.4 Radionuclides**

The level of radioactivity for products included within this Standard shall be within limits proscribed by recognized international standards setting bodies.

## 6.0 HYGIENE

Meat used in the preparation of minced meat included in this standard must:

**6.1** Be prepared and handled in accordance with good manufacturing practices [specify Egyptian EOS and MOH regulations including microbiological criteria if applicable]; the Codex Alimentarius Recommended International Code of Practice- General Provisions of Food Hygiene and other Codex Codes of Practices relevant to these products.

**6.2** Minced meat should comply with any microbiological criteria established in accordance with the Principles for the Establishment and Application of Microbiological Criteria for Foods (CAC/GL 21-1997).

**6.3** To the extent possible in good manufacturing practice, be free from objectionable material.

**6.4** At all times, minced meat must be handled and stored in a frozen state in a manner that avoids deterioration and spoilage.

## 7.0 PACKAGING

**7.1** Packaging and wrapping materials shall conform to all requirements of the Egyptian Organization for Standardization for packaging materials.

## 8.0 LABELING

Prepackaged products covered by this Standard shall be labelled in accordance with the requirements of the Egyptian Organization for Standardization for labelling of pre-packaged foods.

**8.1 Name of the Product.**

The name of the food is frozen "x" minced meat where "x" is the name of the animal used to manufacture the product (e.g., from beef meat).

**8.2 Mandatory Declarations.**

The following items must appear on the label of th e product in Arabic (and other languages as appropriate):.

8.2.1 Name of the product.
8.2.2 Name and address and license (establishment) number of the manufacturer.
8.2.3 Name and address of the importer and exporter (for imported products).
8.2.4 Net weight.
8.2.5 List of ingredients in descending order of predominance including all direct additives and preservatives.
8.2.6 Statement "Must be kept frozen at -18°C" or "Must be kept chilled" as the case may be.
8.2.7 Production date and date of durability.
8.2.8 Country of origin. Products manufactured in Egypt must use the phrase "Made in Egypt"
8.2.9 The expression "Produced according to Islamic Legislation" (Halal).
8.2.10 Statement "Not less than 80% lean meat"

**8.3 Country of Origin.**

Country of origin is the country in which the meat burger was manufactured and the animal was slaughtered.

**8.4 Origin of frozen meat ingredient.**

On the public health certificate accompanying imported product as required by governmental authority, an additional declaration must be made on the origin(s) of the animals from which the meat was obtained to manufacture the minced meat.

**8.5 Date Marking (Date of Durability).**

The date should be the date of manufacture.

**8.6 Labeling of Non-retail Containers.**

The name of the product, lot identification and the name and address of the manufacturer or packer must appear on the c ontainer. Other required labeling information, if not provided on the container, must be provided in accompanying shipping documents.

## 9.0 METHODS OF ANALYSIS

[To be specified by the Egyptian Organization for Standardization.]

**ANNEX**
**STANDARD NO. 1973**
**[MINCED MEAT]**

This Annex is not intended as a standard, guideline recommendation, or technical regulation within the meaning of the Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) Agreements. Provisions provided within this Annex are not considered as essential for public health, food safety or consumer protection. These provisions are of a voluntary advisory nature intended to assist users; they reflect quality factors and criteria that may be used by commerce to define or describe the quality of the product and which may form part of contracts between buyers and sellers. Individual merchandisers should independently determine their product quality needs. Provisions of this annex do not constitute regulatory provisions of the Egyptian Organization for Standardization or any other Egyptian Governmental Body.

## OTHER COMPOSITION OR QUALITY FACTORS

Guideline values for total volatile nitrogen may given.

## WEIGHTS AND MEASURES

none stated

**EGYPTIAN ORGANIZATION FOR STANDARDIZATION**

# PROPOSED DRAFT STANDARD FOR MEAT BALLS[1]

**STANDARD NO. 1973**
**DATE OF REVISION: 1991**

This Standard is confined to essential provisions relating to public health, food safety and consumer protection. The Annex to this Standard contains voluntary quality and compositional provisions to be used by buyers and sellers as the basis of sales or purchase agreements to facilitate trade. The Annex does not however, form part of the Standard, and acceptance of the Standard by the Egyptian Organization for Standardization or other Egyptian Governmental Bodies does not imply acceptance of the Annex.

The requirements of this standard shall be administered by the competent authorities.

## 1.0 SCOPE

This standard applies to meat balls and includes all meat balls produced in and imported into the Arab Republic of Egypt.

## 2.0 DESCRIPTION

### 2.1 Definition

Meat balls are the formed product prepared from chopped (minced) fresh or frozen meat obtained from species of animals permitted to be used for human consumption. Meat balls may contain other foods, filling agents and permitted additives.

## 3.0 ESSENTIAL COMPOSITION AND RELATED FACTORS

### 3.1 Raw Materials

**3.1.1** Frozen meat produced in accordance with the standard 1522 (1991), Egyptian Organization for Standardization.

**3.1.2** Fresh meat produced in accordance with standards for Good Manufacturing Practice laid down by the Egyptian Organization for Standardization.

[1] Prepared by the Egyptian Organization for Standardization in Coordination with the Development Economic Policy Reform and Analysis Project (DEPRA), Nathan Associates Inc., Arlington, VA, USA.

**3.1.3** The following are prohibited in meat balls:

(i) meat obtained from swine (pork).

(ii) tissues of any species obtained from head, nose, ear, lips, mucous membrane, reproductive system parts, lungs, esophagus, intestines, bladder, skin, hide and hair, bones and cartilage, and apparent blood vessels

## 3.2 Other Permitted Ingredients

All food and food ingredients must be of a suitable quality. Food ingredients shall comply with the requirements of the appropriate Egyptian standard.

3.2.1 Filling agents may include cereals, potato bread, and other permitted filling agents.

3.2.2 Other foods includes onion and herbs.

3.2.2 Salt.

3.2.3 Food additives as specified below.

## 3.3 Composition

**3.3.1** Fat content is not to exceed 25%.

**3.3.2** Red meat content of at least 60%.

**3.3.3** Total protein content of at least 15%.

**3.3.4** Moisture should not exceed 60%.

**3.3.5** Filling agents should not exceed 20%

**3.3.**6 Other foods should not exceed 10%

**3.3.**7 Salt: the amount used should be according to Good Manufacturing Practice.

## 3.4 Related Factors

3.4.1 Meat Balls as defined in this standard shall be obtained from the meat of only one species of animal.

3.3.2 Shall be processed according to the requirements of the competent authority.

3.3.3 Be slaughtered and processed in an establishment approved by the competent authority.

3.3.4 Be obtained from animals that were determined to be healthy at the time of slaughter. Animals slaughtered for the purposes of disease control or eradication shall not be used for meat.

3.3.5 Be slaughtered according to Islamic legislation (Halal).

3.3.6 After slaughter and before further processing of the carcass, shall not contain any diseased tissues or defects that are injurious to public health and are fit for human consumption.

3.3.7 After production, the meat balls must be reduced to, and maintained at, a temperature not exceeding -12°C in all parts of the meat.

3.3.8 The date of durability shall be determined by the Egyptian Organizations for Standardization taking into accounts the following recommendation:

(i) The date of durability should be determined by the manufacturer taking into consideration the nature of the product and its manufacturing and storage conditions, and the climatic, distribution and retail sale characteristics of Egypt.

(ii) The shelf life of frozen meat balls should not exceed 3 months from the date of manufacture but, in any event, the shelf life should not exceed the shelf life of the meat ingredients.

[The Technical Expert pointed out that the second part contradicted the general principles for establishing shelf life.]

## 4.0 FOOD ADDITIVES

The following additives are permitted for use in meat balls at the levels specified.

Sodium nitrate, calculated as the nitrite in the finished product, shall not exceed 125 ppm.

[The Technical Expert suggests that the nitrite should be used rather than the nitrate.]

## 5.0 CONTAMINANTS

### 5.1 Pesticides

Pesticide residues for the frozen meat ingredient and other ingredients used to manufacture meat products included in this standard must not exceed Maximum Residue Levels specified by the Egyptian Organization for Standardization (EOS).

### 5.2 Heavy Metals

Heavy metals contaminants in the frozen meat ingredient and other ingredients used to manufacture meat product in this standard shall meet the requirements of the Egyptian Organization for Standardization (EOS).

**5.3 Veterinary Drug Residues and Hormones**

Veterinary drug residues and hormones for the frozen meat ingredient used in this standard must not exceed Maximum Residue Limits specified by the Egyptian Ministry of Agriculture.

**5.4 Radionuclides**

The level of radioactivity for products included within this Standard shall be within limits proscribed by recognized international standards setting bodies.

## 6.0 HYGIENE

Meat and other ingredients used in the preparation of meat balls included in this standard must:

**6.1** Be prepared and handled in accordance with good manufacturing practices [specify Egyptian EOS and MOH regulations including microbiological criteria if applicable]; the Codex Alimentarius Recommended International Code of Practice- General Provisions of Food Hygiene and other Codex Codes of Practices relevant to these products.

**6.2** Meat balls should comply with any microbiological criteria established in accordance with the Principles for the Establishment and Application of Microbiological Criteria for Foods (CAC/GL 21-1997).

**6.3** To the extent possible in good manufacturing practice, be free from objectionable material.

**6.4** At all times, meat balls must be handled and stored in a manner that avoids deterioration and spoilage.

## 7.0 PACKAGING

**7.1** Packaging and wrapping materials shall conform to all requirements of the Egyptian Organization for Standardization for packaging materials.

## 8.0 LABELING

Prepackaged products covered by this Standard shall be labeled in accordance with the requirements of the Egyptian Organization for Standardization for labeling of pre-packaged foods.

**8.1 Name of the Food.**

The name of the food is frozen "x" meat ball where "x" is the name of the animal used to manufacture the product (e.g., from beef meat).

**8.2 Mandatory Declarations.**

The following items must appear on the label of the product in Arabic (and other languages as appropriate):

8.2.1 Name of the product.
8.2.2 Name and address and license (establishment) number of the manufacturer.
8.2.3 Name and address of the importer (for imported product).
8.2.4 Net weight.
8.2.5 List of ingredients in descending order of predominance including all direct additives and preservatives.
8.2.6 Statement "Must be kept frozen"
8.2.7 Production date and date of durability.
8.2.8 Country of origin. Products manufactured in Egypt must use the phrase "Made in Egypt"
8.2.9 The expression "Produced according to Islamic Legislation" (Halal).
8.2.10 Statement "Not less than 60% lean meat"

**8.3 Country of Origin.**

Country of origin is the country in which the meat balls were manufactured.

**8.4 Origin of meat ingredient.**

On the public health certificate accompanying imported product as required by governmental authority, an additional declaration must be made on the origin(s) of the meat used to manufacture the meat ball products.

**8.5 Date Marking (Date of Durability).**

The date should be the date of manufacture.

**8.6 Labeling of Non-retail Containers.**

The name of the product, lot identification and the name and addre ss of the manufacturer or packer must appear on the container. Other required labeling information, if not provided on the container, must be provided in accompanying shipping documents.

## 9.0 METHODS OF ANALYSIS

[To be specified by the Egyptian Organization for Standardization]

**ANNEX**
**STANDARD NO. 1973**
**[MEAT BALLS]**

This Annex is not intended as a standard, guideline recommendation, or technical regulation within the meaning of the Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) Agreements. Provisions provided within this Annex are not considered as essential for public health, food safety or consumer protection. These provisions are of a voluntary advisory nature intended to assist users; they reflect quality factors and criteria that may be used by commerce to define or describe the quality of the product and which may form part of contracts between buyers and sellers. Individual merchandisers should independently determine their product quality needs. Provisions of this annex do not constitute regulatory provisions of the Egyptian Organization for Standardization or any other Egyptian Governmental Body.

## OTHER COMPOSITION OR QUALITY FACTORS

none stated

## WEIGHTS AND MEASURES

none stated

**EGYPTIAN ORGANIZATION FOR STANDARDIZATION**

# PROPOSED DRAFT STANDARD FOR MINCED MEAT with SOYA BEAN PROTEIN[1]

**STANDARD NO. 1641**
**DATE OF REVISION: 1993**

[This Standard has not been discussed by the Technical Committee. The text of this proposed draft Standard has been modeled on the development of Standard ES 1688 for Frozen Meat Burgers. All comments of the Technical Committee relating to Standard 1688 have been incorporated in this draft standard. Initial copies of this proposed draft Standard have been distributed to the Technical Committee. The text of this Standard does not include notes of the Technical Expert relating to any aspect of this Standard although the notes in the text of draft Standard 1688 could be expected to have a similar effect in this Standard.]

This Standard is confined to essential provisions relating to public health, food safety and consumer protection. The Annex to this Standard contains voluntary quality and compositional provisions to be used by buyers and sellers as the basis of sales or purchase agreements to facilitate trade. The Annex does not however, form part of the Standard, and acceptance of the Standard by the Egyptian Organization for Standardization or other Egyptian Governmental Bodies does not imply acceptance of the Annex.

The requirements of this standard shall be administered by the competent authorities.

## 1.0 SCOPE

This standard applies to minced meat with soya bean protein and includes all product of this type produced in and imported into the Arab Republic of Egypt.

## 2.0 DESCRIPTION

### 2.1 Definition

Minced meat with soya bean protein is the product prepared from chopped (minced) fresh or frozen meat obtained from species of animals permitted to be used for human consumption and mixed with soya bean protein. Minced meat with soya bean protein may contain permitted additives.

[1] Prepared by the Egyptian Organization for Standardization in Coordination with the Development Economic Policy Reform and Analysis Project (DEPRA), Nathan Associates Inc., Arlington, VA, USA.

## 3.0 ESSENTIAL COMPOSITION AND RELATED FACTORS

### 3.1 Raw Materials

3.1.1 Frozen meat produced in accordance with the standard 1522 (1991), Egyptian Organization for Standardization.

3.1.2 Fresh meat produced in accordance with standards for Good Manufacturing Practice laid down by the Egyptian Organization for Standardization.

3.1.3 Minced meat produced in accordance with standard 1964 (1991) laid down by the Egyptian Organization for Standardization may be used.

3.1.4 The following are prohibited in minced meat with soya bean protein:

(i) meat obtained from swine (pork).

(ii) tissues of any species obtained from head, nose, ear, lips, mucous membrane, reproductive system parts, lungs, esophagus, intestines, bladder, skin, hide and hair, bones and cartilage, and apparent blood vessels

### 3.2 Other Permitted Ingredients

All food and food ingredients must be of a suitable quality. Food ingredients shall comply with the requirements of the appropriate Egyptian standard.

3.2.1 Soya Bean Protein.
3.2.2 Salt.
3.2.3 Food additives as specified below.

### 3.3 Composition

3.3.1 Fat content is not to exceed 20%.
3.3.2 Red meat content of at least 70%.
3.3.3 Total protein content is not less than 20%.
3.3.4 Soya bean protein content is not to exceed 10%.
3.3.5 Moisture should not exceed 65%.
3.3.6 Salt: the amount of salt used should be according to Good Manufacturing Practice.

### 3.4 Related Factors

3.4.1 Minced meat with soya bean protein as defined in this standard shall be obtained from the meat of only one species of animal.

3.4.2 Shall be processed according to the requirements of the competent authority.

3.4.3 Be slaughtered and processed in an establishment licensed by the competent authority.

3.4.4 Be obtained from animals that were determined to be healthy at the time of slaughter. Animals slaughtered for the purposes of disease control or eradication shall not be used for meat.

3.4.5 Be slaughtered according to Islamic legislation (Halal).

3.4.6 After slaughter and before further processing of the carcass, shall not contain any diseased tissues or defects that are injurious to public health and are fit for human consumption.

3.4.7 After production, minced meat with soya bean protein must be reduced to, and maintained at, a temperature of:
-18°C in the case of frozen product, and
4°C in the case of chilled product.
Minced meat with soya bean protein may be canned.

3.4.8 The date of durability shall be determined by the Egyptian Organizations for Standardization taking into accounts the following recommendation:

(i) The date of durability should be determined by the manufacturer taking into consideration the nature of the product and its manufacturing and storage conditions, and the climatic, distribution and retail sale characteristics of Egypt.

(ii) The shelf life of minced meat with soya bean protein should not exceed 3 months from the date of manufacture but, in any event, the shelf life should not exceed the shelf life of the frozen meat ingredients.

## 4.0 FOOD ADDITIVES

Food additives are which are permitted by the Ministry of Health (MOH) may be used in mince meat with soya bean protein at the levels specified by the MOH.

## 5.0 CONTAMINANTS

### 5.1 Pesticides

Pesticide residues for the frozen meat ingredient and other ingredients used to manufacture meat products included in this standard must not exceed Maximum Residue Levels specified by the Egyptian Organization for Standardization (EOS).

### 5.2 Heavy Metals

Heavy metals contaminants in the frozen meat ingredient and other ingredients used to manufacture meat product in this standard shall meet the requirements of the Egyptian Organization for Standardization (EOS).

### 5.3 Veterinary Drug Residues and Hormones

Veterinary drug residues and hormones for the frozen meat ingredient used in this standard must not exceed Maximum Residue Limits specified by the Egyptian Ministry of Agriculture.

### 5.4 Radionuclides

The level of radioactivity for products included within this Standard shall be within limits proscribed by recognized international standards setting bodies.

## 6.0 HYGIENE

Meat used in the preparation of minced meat with soya bean protein included in this standard must:

**6.1** Be prepared and handled in accordance with good manufacturing practices [specify Egyptian EOS and MOH regulations including microbiological criteria if applicable]; the Codex Alimentarius Recommended International Code of Practice- General Provisions of Food Hygiene and other Codex Codes of Practices relevant to these products.

**6.2** Minced meat with soya bean protein should comply with any microbiological criteria established in accordance with the Principles for the Establishment and Application of Microbiological Criteria for Foods (CAC/GL 21-1997).

**6.3** To the extent possible in good manufacturing practice, be free from objectionable material.

**6.4** At all times, minced meat with soya bean protein must be handled and stored in a frozen state in a manner that avoids deterioration and spoilage.

## 7.0 PACKAGING

**7.1** Packaging and wrapping materials shall conform to all requirements of the Egyptian Organization for Standardization for packaging materials.

## 8.0 LABELING

Prepackaged products covered by this Standard shall be labeled in accordance with the Codex General Standard for the Labeling of Prepackaged Foods.

**8.1 Name of the Product.**

The name of the food is frozen "x" minced meat with soya bean protein where "x" is the name of the animal used to manufacture the product (e.g., from beef meat).

**8.2 Mandatory Declarations.**

The following items must appear on the label of the product in Arabic (and other languages as appropriate):.

8.2.1 Name of the product.
8.2.2 Name and address and license (establishment) number of the manufacturer.
8.2.3 Name and address of the importer and exporter (for imported products).
8.2.4 Net weight.
8.2.5 List of ingredients in descending order of predominance including all direct additives and preservatives.
8.2.6 Statement "Must be kept frozen at -18°C" or "Must be kept chilled" as the case may be.
8.2.7 Production date and date of durability.
8.2.8 Country of origin. Products manufactured in Egypt must use the phrase "Made in Egypt"
8.2.9 The expression "Produced according to Islamic Legislation" (Halal).
8.2.10 Statement "Not less than 70% lean meat"

**8.3 Country of Origin.**

Country of origin is the country in which the minced meat with soya bean protein was manufactured and the animal was slaughtered.

**8.4 Origin of frozen meat ingredient.**

On the public health certificate accompanying imported product as required by governmental authority, an additional declaration must be made on the origin(s) of the animals from which the meat was obtained to manufacture the minced meat.

**8.5 Date Marking (Date of Durability).**

The date should be the date of manufacture.

**8.6 Labeling of Non-retail Containers.**

The name of the product, lot identification and the name and address of the manufacturer or packer must appear on the container. Other required labeling information, if not provided on the container, must be provided in accompanying shipping documents.

## 9.0 METHODS OF ANALYSIS

[To be specified by the Egyptian Organization for Standardization]

**ANNEX**
**STANDARD NO. 1973**
**[MINCED MEAT with SOYA BEAN PROTEIN]**

This Annex is not intended as a standard, guideline recommendation, or technical regulation within the meaning of the Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) Agreements. Provisions provided within this Annex are not considered as essential for public health, food safety or consumer protection. These provisions are of a voluntary advisory nature intended to assist users; they reflect quality factors and criteria that may be used by commerce to define or describe the quality of the product and which may form part of contracts between buyers and sellers. Individual merchandisers should independently determine their product quality needs. Provisions of this annex do not constitute regulatory provisions of the Egyptian Organization for Standardization or any other Egyptian Governmental Body.

## OTHER COMPOSITION OR QUALITY FACTORS

Guideline values for total volatile nitrogen acid may given.

## WEIGHTS AND MEASURES

none stated

**EGYPTIAN ORGANIZATION FOR STANDARDIZATION**

# PROPOSED DRAFT STANDARD FOR FROZEN SAUSAGE[1]

**STANDARD NO. 1972**
**DATE OF REVISION: 1991**

[This Standard has not been discussed by the Technical Committee. The text of this proposed draft Standard has been modeled on the development of Standard ES 1688 for Frozen Meat Burgers. All comments of the Technical Committee relating to Standard 1688 have been incorporated in this draft standard. Initial copies of this proposed draft Standard have been distributed to the Technical Committee. The text of this Standard does not include notes of the Technical Expert relating to any aspect of this Standard although the notes in the text of draft Standard 1688 could be expected to have a similar effect in this Standard.]

This Standard is confined to essential provisions relating to public health, food safety and consumer protection. The Annex to this Standard contains voluntary quality and compositional provisions to be used by buyers and sellers as the basis of sales or purchase agreements to facilitate trade. The Annex does not however, form part of the Standard, and acceptance of the Standard by the Egyptian Organization for Standardization or other Egyptian Governmental Bodies does not imply acceptance of the Annex.

The requirements of this standard shall be administered by the competent authorities.

## 1.0 SCOPE

This standard applies to frozen sausage and includes all frozen sausages produced in and imported into the Arab Republic of Egypt.

## 2.0 DESCRIPTION

### 2.1 Definition

Frozen sausages are the frozen product prepared from chopped (minced) fresh or frozen meat obtained from species of animals permitted to be used for human consumption and filled into casings. Frozen sausages may contain spices, filling agents and permitted additives.

[1] Prepared by the Egyptian Organization for Standardization in Coordination with the Development Economic Policy Reform and Analysis Project (DEPRA), Nathan Associates Inc., Arlington, VA, USA.

## 3.0 ESSENTIAL COMPOSITION AND RELATED FACTORS

### 3.1 Raw Materials

3.1.1 Frozen meat produced in accordance with the standard 1522 (1991), Egyptian Organization for Standardization.

3.1.2 Fresh meat produced in accordance with standards for Good Manufacturing Practice laid down by the Egyptian Organization for Standardization.

3.1.3 Minced meat produced in accordance with the standard 1694 (1991) Egyptian Organization for Standardization.

3.1.4 The following are prohibited in frozen sausa ge:

(i) meat obtained from swine (pork).

(ii) tissues of any species obtained from head, nose, ear, lips, mucous membrane, reproductive system parts, lungs, esophagus, intestines, bladder, skin, hide and hair, bones and cartilage, and apparent blood vessels

### 3.2 Other Permitted Ingredients

All food and food ingredients must be of a suitable quality. Food ingredients shall comply with the requirements of the appropriate Egyptian standard.

3.2.1 Filling agents.
3.2.2 Spices.
3.2.3 Salt.
3.2.4 Food additives as specified below.
3.2.5 Natural sheep casings or synthetic collagen casings

### 3.3 Composition

3.3.1 Fat content is not to exceed 30%.
3.3.2 Red meat content of at least 60%.
3.3.3 Total protein content of at least 15%.
3.3.4 Moisture should not exceed 60%.
3.3.5 Filling agents should not exceed 5%
3.3.6 Salt: the amount of salt used should be according to Good Manufacturing Practice.

### 3.4 Related Factors

3.4.1 Frozen sausages as defined in this standard shall be obtained from the meat of only one species of animal.

3.4.2 Shall be processed according to the requirements of the competent authority.

3.4.3 Be slaughtered and processed in an establishment licensed by the competent authority.

3.4.4 Be obtained from animals that were determined to be healthy at the time of slaughter. Animals slaughtered for the purposes of disease control or eradication shall not be used for meat.

3.4.5 Be slaughtered according to Islamic legislation (Halal).

3.4.6 After slaughter and before further processing of the carcass, shall not contain any diseased tissues or defects that are injurious to public health and are fit for human consumption.

3.4.7 After production, the sausages must be reduced to, and maintained at, a temperature not exceeding -12°C in all parts of the meat.

3.4.8 The date of durability shall be determined by the Egyptian Organizations for Standardization taking into accounts the following recommendation:

(i) The date of durability should be determined by the manufacturer taking into consideration the nature of the product and its manufacturing and storage conditions, and the climatic, distribution and retail sale characteristics of Egypt.

(ii) The shelf life of frozen sausages should not exceed 3 months from the date of manufacture but, in any event, the shelf life should not exceed the shelf life of the meat ingredients.

## 4.0 FOOD ADDITIVES

Food additives are which are permitted by the Ministry of Health (MOH) may be used in frozen sausages at the levels specified by the MOH.

## 5.0 CONTAMINANTS

### 5.1 Pesticides

Pesticide residues for the frozen meat ingredient and other ingredients used to manufacture meat products included in this standard must not exceed Maximum Residue Levels specified by the Egyptian Organization for Standardization (EOS).

### 5.2 Heavy Metals

Heavy metals contaminants in the frozen meat ingredient and other ingredients used to manufacture meat product in this standard shall meet the requirements of the Egyptian Organization for Standardization (EOS).

### 5.3 Veterinary Drug Residues and Hormones

Veterinary drug residues and hormones for the frozen meat ingredient used in this standard must not exceed Maximum Residue Limits specified by the Egyptian Ministry of Agriculture.

### 5.4 Radionuclides

The level of radioactivity for products included within this Standard shall be within limits proscribed by recognized international standards setting bodies.

## 6.0 HYGIENE

Meat and other ingredients used in the preparation of frozen sausages included in this standard must:

**6.1** Be prepared and handled in accordance with good manufacturing practices [specify Egyptian EOS and MOH regulations including microbiological criteria if applicable]; the Codex Alimentarius Recommended International Code of Practice- General Provisions of Food Hygiene and other Codex Codes of Practices relevant to these products.

**6.2** Frozen sausages should comply with any microbiological criteria established in accordance with the Principles for the Establishment and Application of Microbiological Criteria for Foods (CAC/GL 21-1997).

**6.3** To the extent possible in good manufacturing practice, be free from objectionable material.

**6.4** At all times, frozen sausages must be handled and stored in a frozen state in a manner that avoids deterioration and spoilage.

## 7.0 PACKAGING

**7.1** Packaging and wrapping material shall conform to all requirements of the Egyptian Organization for Standardization for packaging materials.

## 8.0 LABELING

Prepackaged products covered by this Standard shall be labeled in accordance with the requirements of the Egyptian Organization for Standardization for labeling of pre-packaged foods.

**8.1 Name of the Product.**
The name of the food is frozen "x" frozen sausages where "x" is the name of the animal used to manufacture the product (e.g., from beef meat).

**8.2 Mandatory Declarations.**
The following items must appear on the label of the product in Arabic (and other languages as appropriate):

8.2.1 Name of the product.
8.2.2 Name and address and license (establishment) number of the manufacturer.
8.2.3 Name and address of the importer and exporter (for imported product)
8.2.4 Net weight.
8.2.5 List of ingredients in descending order of predominance including all direct additives and preservatives.
8.2.6 Statement "Must be kept frozen at -18°C"
8.2.7 Production date and date of durability.
8.2.8 Country of origin. Products manufactured in Egypt must use the phrase "Made in Egypt"
8.2.9 The expression "Produced according to Islamic Legislation" (Halal).
8.2.10 Statement "Not less than 60% lean meat"

**8.3 Country of Origin.**
Country of origin is the country in which the frozen sausages were manufactured and the animal was slaughtered.

**8.4 Origin of frozen meat ingredient.**
On the public health certificate accompanying imported product as required by governmental authority, an additional declaration must be made on the origin(s) of the meat used to manufacture the frozen sausage products.

**8.5 Date Marking (Date of Durability).**

The date should be the date of manufacture.

**8.6 Labeling of Non-retail Containers.**

The name of the product, lot identification and the name and address of the manufacturer or packer must appear on the container. Other required labeling information, if not provided on the container, must be provided in accompanying shipping documents.

## 9.0 METHODS OF ANALYSIS

[To be specified by the Egyptian Organization for Standardization]

**ANNEX**
**STANDARD NO. 1972**
**[FROZEN SAUSAGES]**

This Annex is not intended as a standard, guideline recommendation, or technical regulation within the meaning of the Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) Agreements. Provisions provided within this Annex are not considered as essential for public health, food safety or consumer protection. These provisions are of a voluntary advisory nature intended to assist users; they reflect quality factors and criteria that may be used by commerce to define or describe the quality of the product and which may form part of contracts between buyers and sellers. Individual merchandisers should independently determine their product quality needs. Provisions of this annex do not constitute regulatory provisions of the Egyptian Organization for Standardization or any other Egyptian Governmental Body.

## OTHER COMPOSITION OR QUALITY FACTORS

Guideline values for total volatile nitrogen may be given.

## WEIGHTS AND MEASURES

none stated

**EGYPTIAN ORGANIZATION FOR STANDARDIZATION**

# PROPOSED DRAFT STANDARD FOR FROZEN OFFALS[1]

**STANDARD NO. 1473**
**DATE OF REVISION: 1990**

[This Standard has not been discussed by the Technical Committee although the committee indicated that Standard 1473 related specifically to Frozen Beef Liver. The Technical Expert had used the text of Standard 1473, titled Frozen Liver, that had been made available to him in developing this draft. The definition in the text of Standard 1473 did not limit the standard to Beef Livers.

The text of this proposed draft Standard has been modeled on the development of Standard ES 1522 for Frozen Meat. All comments of the Technical Committee relating to Standard 1522 have been incorporated in this draft standard. Initial copies of this proposed draft Standard have been distributed to the Technical Committee. The text of this Standard does not include notes of the Technical Expert relating to any aspect of this Standard although the notes in the text of draft Standard 1522 could be expected to have a similar effect in this Standard.]

This Standard is confined to essential provisions relating to public health, food safety and consumer protection. The Annex to this Standard contains voluntary quality and compositional provisions to be used by buyers and sellers as the basis of sales or purchase agreements to facilitate trade. The Annex does not however, form part of the Standard, and acceptance of the Standard by the Egyptian Organization for Standardization or other Egyptian Governmental Bodies does not imply acceptance of the Annex.

The requirements of this standard shall be administered by the competent authorities.

## 1.0 SCOPE

This standard applies to frozen offals obtained from species of slaughtered animals that are permitted to be used for human consumption.

Permitted species includes:
Bovine animals (e.g. bull, cow, steer, heifer, veal), ovine animals (e.g. ram, mutton, lamb), Buffalo, goats, camel, deer, rabbits and poultry.

[1] Prepared by the Egyptian Organization for Standardization and in Coordination with the Development Economic Reform Analysis Project (DEPRA). Nathan and Associates Inc. Arlington. VA.

This standard includes all offals produced in, and permitted to be imported into, the Arab Republic of Egypt.

## 2.0 DESCRIPTION

### 2.1 Definitions

Frozen offals are the tissues obtained from of the thoracic and abdominal cavities of permitted slaughtered animals. Frozen offals include the heart and liver of all species and the gizzard, in the case of poultry.

## 3.0 ESSENTIAL COMPOSITION AND RELATED FACTORS

### 3.1 Raw Materials

3.1.1 Raw Materials

Only raw materials specified in Section 2 (above) of this Standard are permitted.

### 3.2 Composition

3.2.1 Gall bladders shall be removed from livers.

3.2.2 Decomposition
Recommended levels for volatile nitrogen, pH, drip and lipid oxidation can be given, if desired.

### 3.3 Related Factors

Offals as defined in this standard shall:

3.3.1 Be processed according to the requirements of the competent authority.

3.3.2 Be obtained from animals that were slaughtered and processed in an establishment licensed by the competent authority.

3.3.3 Be obtained from animals that were determined to be healthy at the time of slaughter. Animals slaughtered for the purposes of disease control or eradication shall not be used for meat.

3.3.4 Be slaughtered according to Islamic legislation (Halal).

3.3.5 Not contain any diseased tissues or defects that are injurious to public health and are fit for human consumption.

3.3.6 Be preserved by freezing.

3.3.7 The date of durability shall be determined according to standard 2613 of the Egyptian Organization for Standardization taking into account the following recommendation:
The date of durability shall be determined by the manufacturer taking into consideration the nature of the product and its manufacturing and storage conditions, and the climatic, distribution and retail sale characteristics of Egypt.

## 4.0 FOOD ADDITIVES

No food additives are permitted in frozen offals.

## 5.0 CONTAMINANTS

### 5.1 Pesticides and Hazardous Organic Compounds

Residues of pesticide or hazardous organic compounds for frozen offals included in this standard must not exceed Maximum Residue Levels specified by the Egyptian Organization of Standardization (EOS). In the absence of an Egyptian standard the relevant Codex recommendation shall apply.

### 5.2 Heavy Metals

Heavy metals contaminants in frozen offals included in this standard shall meet the requirements of the EOS. In the absence of an Egyptian standard the relevant Codex recommendation shall apply.

### 5.3 Veterinary Drug Residues and Hormones

Veterinary drug residues and hormones for offals included in this standard must not exceed Maximum Residue Limits specified by Egyptian standards. In the absence of an Egyptian standard the relevant Codex recommendation shall apply.

### 5.4 Radionuclides

The residues of radionuclides for products included within this Standard shall be within limits proscribed by recognized national or international standards setting bodies.

## 6.0 HYGIENE

**6.1** The products covered by the provisions of this standard should be prepared and handled in accordance with good manufacturing practices [specify Egyptian EOS and MOH regulations including microbiological criteria if applicable]; the Codex Alimentarius Recommended

International Code of Practice- General Provisions of Food Hygiene and other relevant Codex Codes of Practices relevant to these products.

**6.2** Frozen offals should comply with any microbiological criteria established in accordance with the Principles for the Establishment and Application of Microbiological Criteria for Foods (CAC/GL 21-1997).

**6.3** To the extent possible in good manufacturing practice, be free from objectionable material.

**6.4** The offals must be reduced to, and maintained at, a temperature not exceeding -18°C in all parts of the offals.

**6.5** At all times, offals must be handled and stored in a frozen state in a manner that avoids deterioration and spoilage.

## 7.0 PACKAGING

**7.1** Packaging and wrapping materials shall conform to all requirements of the Egyptian Organization for Standardization for packaging materials.

## 8.0 LABELING

Prepackaged products, including bulk packages and their subunits, covered by this Standard shall be labeled in accordance with the requirements of the Egyptian Organization for Standardization for labeling of pre-packaged foods.

**8.1 Name of the Product.**

The name of the product shall be frozen "x" "offal", where "x" is the name of the animals from which the offal was derived and "offal" is the type of offal e.g., frozen beef livers.

**8.2 Mandatory Declarations**

The following items must appear on the label of the product in Arabic (or other languages as appropriate):

8.2.1 Name of the product.
8.2.2 Name and address and license (establishment) number of the slaughterer/manufacturer.
8.2.3 Name and address of the importer and exporter.
8.2.4 Net weight.
8.2.5 Production date and date of durability.
8.2.6 Country of origin.
8.2.7 The expression Slaughtered according to Islamic Legislation (Halal).
8.2.8 Keep Frozen at -18°C.

**8.3 Country of Origin.**

Country of origin is the country where the animals from which the offals were derived were slaughtered.

**8.5 Date Marking (Date of Durability).**

The date should be the date of slaughter.

**8.6 Labeling of Non-retail Containers.**

The name of the product, lot identification and the name and address of the manufacturer or packer must appear on the container. Other required labeling information, if not provided on the container, must be provided in accompanying shipping documents.

## 9.0 METHODS OF ANALYSIS

[To be specified by the Egyptian Organization for Standardization]

**ANNEX**
**STANDARD NO. 1473**
**FROZEN OFFALS**

This Annex is not intended as a standard, guideline recommendation, or technical regulation within the meaning of the Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) Agreements. Provisions provided within this Annex are not considered as essential for public health, food safety or consumer protection. These provisions are of a voluntary advisory nature intended to assist users; they reflect quality factors and criteria that may be used by commerce to define or describe the quality of the product and which may form part of contracts between buyers and sellers. Individual merchandisers should independently determine their product quality needs. Provisions of this annex do not constitute regulatory provisions of the Egyptian Organization for Standardization or any other Egyptian Governmental Body.

## 1.0 OTHER COMPOSITION OR QUALITY FACTORS

**1.1** Packaged poultry offals containing both livers and gizzards: livers not to be less than 50% of the packed weight.

**1.2** Recommended volatile nitrogen and pH levels can be given, if desired. These criteria should only be used to examine the offals when there is clear evidence of deterioration or spoilage.

## 2.0 WEIGHTS AND MEASURES

Drip levels may be indicated, if desired.

**EGYPTIAN ORGANIZATION FOR STANDARDIZATION**

# PROPOSED DRAFT STANDARD FOR CANNED SAUSAGE[1]

**STANDARD NO. 1971**
**DATE OF REVISION: 1991**

[This Standard has not been discussed by the Technical Committee. The text of this proposed draft Standard has been modeled on the development of Standard ES 1688 for Frozen Meat Burgers. All comments of the Technical Committee relating to Standard 1688 have been incorporated in this draft standard. Initial copies of this proposed draft Standard have been distributed to the Technical Committee. The text of this Standard does not include notes of the Technical Expert relating to any aspect of this Standard although the notes in the text of draft Standard 1688 could be expected to have a similar effect in this Standard.]

This Standard is confined to essential provisions relating to public health, food safety and consumer protection. The Annex to this Standard contains voluntary quality and compositional provisions to be used by buyers and sellers as the basis of sales or purchase agreements to facilitate trade. The Annex does not however, form part of the Standard, and acceptance of the Standard by the Egyptian Organization for Standardization or other Egyptian Governmental Bodies does not imply acceptance of the Annex.

The requirements of this standard shall be administered by the competent authorities.

## 1.0 SCOPE

This standard applies to canned sausage and includes all canned sausages produced in and imported into the Arab Republic of Egypt.

## 2.0 DESCRIPTION

### 2.1 Definition

Canned sausages are the cooked canned product prepared from chopped (minced) fresh or frozen meat obtained from species of animals permitted to be used for human consumption and filled into casings. Canned sausages may contain smoke, spices, filling agents and permitted additives.

[1] Prepared by the Egyptian Organization for Standardization in Coordination with the Development Economic Policy Reform and Analysis Project (DEPRA), Nathan Associates Inc., Arlington, VA, USA.

## 3.0 ESSENTIAL COMPOSITION AND RELATED FACTORS

### 3.1 Raw Materials

**3.1.1** Frozen meat produced in accordance with the standard 1522 (1991), Egyptian Organization for Standardization.

**3.1.2** Fresh meat produced in accordance with standards for Good Manufacturing Practice laid down by the Egyptian Organization for Standardization.

**3.1.3** Pure minced meat produced in accordance with the standard 1694 (1991) Egyptian Organization for Standardization.

**3.1.4** The following are prohibited in canned sausage:

(i) meat obtained from swine (pork).

(ii) tissues of any species obtained from head, nose, ear, lips, mucous membrane, reproductive system parts, lungs, esophagus, intestines, bladder, skin, hide and hair, bones and cartilage, and apparent blood vessels

### 3.2 Other Permitted Ingredients

All food and food ingredients must be of a suitable quality. Food ingredients shall comply with the requirements of the appropriate Egyptian standard.

3.2.1 Filling agents.
3.2.2 Spices and other foods.
3.2.2 Salt.
3.2.3 Food additives as specified below.
3.2.4 Natural sheep casings or synthetic collagen casings
3.2.5 Natural smoke.

### 3.3 Composition

3.3.1 Fat content is not to exceed 20%.
3.3.2 Moisture should not exceed 60%.
3.3.3 Filling agents should not exceed 20%
3.3.4 Salt: the amount of salt used should be according to Good Manufacturing Practice.

### 3.4 Related Factors

Canned sausages as defined in this standard shall be obtained from the meat of only one species of animal.

3.4.1 Canned sausages as defined in this standard shall be obtained from the meat of only one species of animal.

3.4.2 Shall be processed according to the requirements of the competent authority.

3.4.3 Be slaughtered and processed in an establishment licensed by the competent authority.

3.4.4 Be obtained from animals that were determined to be healthy at the time of slaughter. Animals slaughtered for the purposes of disease control or eradication shall not be used for meat.

3.4.5 Be slaughtered according to Islamic 1egislation (Halal).

3.4.6 After slaughter and before further processing of the carcass, shall not contain any diseased tissues or defects that are injurious to public health and are fit for human consumption.

## 4.0 FOOD ADDITIVES

Food additives are which are permitted by the Ministry of Health (MOH) may be used in canned sausages at the levels specified by the MOH.

## 5.0 CONTAMINANTS

### 5.1 Pesticides

Pesticide residues for the frozen meat ingredient and other ingredients used to manufacture meat products included in this standard must not exceed Maximum Residue Levels specified by the Egyptian Organization for Standardization (EOS).

### 5.2 Heavy Metals

Heavy metals contaminants in the frozen meat ingredient and other ingredients used to manufacture meat product in this standard shall meet the requirements of the Egyptian Organization for Standardization (EOS).

### 5.3 Veterinary Drug Residues and Hormones

Veterinary drug residues and hormones for the frozen meat ingredient used in this standard must not exceed Maximum Residue Limits specified by the Egyptian Ministry of Agriculture.

### 5.4 Radionuclides

The level of radioactivity for products included within this Standard shall be within limits proscribed by recognized international standards setting bodies.

## 6.0 HYGIENE

Meat and other ingredients used in the preparation of canned sausages included in this standard must:

**6.1** Be prepared and handled in accordance with good manufacturing practices [specify Egyptian EOS and MOH regulations including microbiological criteria if applicable]; the Codex Alimentarius Recommended International Code of Practice- General Provisions of Food Hygiene and other Codex Codes of Practices relevant to these products and to the production of low acid canned foods.

**6.2** Calculation of the thermal process must be carried out by a competent person. Process control and operation of the retorts must be carried out under the supervision of a competent person.

**6.3** Canned sausages should comply with any microbiological criteria established in accordance with the Principles for the Establishment and Application of Microbiological Criteria for Foods (CAC/GL 21-1997). After the thermal process, samples from each batch should be subjected to incubation tests.

**6.4** To the extent possible in good manufacturing practice, be free from objectionable material.

## 7.0 PACKAGING

**7.1** Cans shall conform to all requirements of the Egyptian Organization for Standardization.

## 8.0 LABELING

Canned products covered by this Standard shall be labelled in accordance with the requirements of the Egyptian Organization for Standardization for labelling of pre-packaged foods.

**8.1 Name of the Product.**
The name of the food is canned "x" sausages where "x" is the name of the animal used to manufacture the product (e.g., from beef meat).

**8.2 Mandatory Declarations.**
The following items must appear on the label of the product in Arabic (and other languages as appropriate):

8.2.1 Name of the product.

8.2.2 Name and address and license (establishment) number of the manufacturer.
8.2.3 Name and address of the importer exporter (for imported products)
8.2.4 Net weight.
8.2.5 List of ingredients in descending order of predominance including all direct additives and preservatives.
8.2.7 Production date and batch number.
8.2.8 Country of origin. Products manufactured in Egypt must use the phrase "Made in Egypt"
8.2.9 The expression "Produced according to Islamic Legislation" (Halal).

**8.3 Country of Origin.**

Country of origin is the country in which the canned sausages were manufactured and the animal was slaughtered.

**8.4 Origin of frozen meat ingredient.**

On the public health certificate accompanying imported product as required by governmental authority, an additional declaration must be made on the origin(s) of the meat used to manufacture the canned sausage products.

**8.5 Date Marking**

The date should be the date of manufacture. The batch number should be printed onto the can.

**8.6 Labeling of Non-retail Containers.**

The name of the product, lot identification and the name and ad dress of the manufacturer or packer must appear on the container. Other required labeling information, if not provided on the container, must be provided in accompanying shipping documents.

## 9.0 METHODS OF ANALYSIS

[To be specified by the Egyptian Organization for Standardization]

**ANNEX**
**STANDARD NO. 1971**
**[CANNED SAUSAGES]**

This Annex is not intended as a standard, guideline recommendation, or technical regulation within the meaning of the Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) Agreements. Provisions provided within this Annex are not considered as essential for public health, food safety or consumer protection. These provisions are of a voluntary advisory nature intended to assist users; they reflect quality factors and criteria that may be used by commerce to define or describe the quality of the product and which may form part of contracts between buyers and sellers. Individual merchandisers should independently determine their product quality needs. Provisions of this annex do not constitute regulatory provisions of the Egyptian Organization for Standardization or any other Egyptian Governmental Body.

## OTHER COMPOSITION OR QUALITY FACTORS

Guideline values for total volatile nitrogen may be given.

Guideline values for arsenic, copper, lead, zinc and tin may be given. These should not be necessary if the cans are manufactured according to good manufacturing practices.

The cans should be treated with a suitable coating to avoid corrosion.

## WEIGHTS AND MEASURES

none stated

**WORKING DRAFT ONLY**

**EGYPTIAN ORGANIZATION FOR STANDARDIZATION**

# PROPOSED DRAFT GENERAL STANDARD FOR GREEN AND ROASTED COFFEE BEANS[1]

**BASED ON STANDARD NO. 517-1474/1987**

**[**Drafting Notes:

1. The existing EOS standard for coffee and its products covers a lar ge number of products, including green coffee beans, roasted coffee beans, roasted crushed coffee, ground coffee, instant coffee and decaffeinated instant coffee. For ease of discussion, this draft standard is limited to green coffee beans and roasted coffee beans. A separate draft standard has been developed for instant coffee and decaffeinated instant coffee. Consideration can be given to the specific products to be included in any one standard and this standard modified or other standards prepared.

2. The existing EOS standard for Coffee and Its Products is essentially a purchase specification, not a standard that relates solely to safety and essential quality elements. Since it desirable for revised standards to contain only safety and essential quality elements (i.e., prevention of fraud, essential product compositional requirements), it is important to remove from the existing EOS Standard for Coffee and its Products the large number of non-essential quality elements in the standard. The elements to be removed include but are not necessarily limited to those for color, size, smoothness, flowability, dissolution, taste, odor, broken and defective beans (above a minimum requirement), moisture (above a minimum requirement for roasted beans and for instant coffee), caffeine level, and ash. This working draft standard should be considered only as a model by which standards for coffee and its products should be constructed.

3. This draft standard is intended as an initial guideline only. Technical exp erts in coffee and its products revise the standard based on specific knowledge of the product(s).

4. Primary references used for the preparation of this draft are: 1) Egyptian Standard 517-1474/1987, Coffee and Its Products; 2) Health and Safety in the Importation of Green Coffee into the United States, prepared by the National Coffee Association of the USA, Inc., and the U.S. Food and Drug Administration, 1990, and 3) the U.S. Food and Drug Administration Compliance Policy Guideline for Green Coffee Beans-Adulteration with Insects; Mold, Section. 7101.06.

5. There is no Codex Alimentarius Standard for coffee or coffee products. This draft is

[1]Prepared by the Egyptian Organization for Standardization in Coordination with the Development Economic Policy Reform and Analysis Project (DEPRA), Nathan Associates Inc., Arlington, VA, USA.

prepared, however, based on the revised format.**]**

This Standard is confined to essential provisions relating to public health, food safety and consumer protection. The Annex to this Standard contains voluntary quality and compositional provisions to be used by buyers and sellers as the basis of sales or purchase agreements to facilitate trade. The Annex does not however, form part of the Standard, and acceptance of the Standard by the Egyptian Organization for Standardization or other Egyptian Governmental Bodies does not imply acceptance of the Annex.

## 1.0 SCOPE

**1.1** This standard applies to the following:

**1.1.1** Green coffee beans generally.
**1.1.2** Roasted coffee beans generally.

**1.2** The standard does not apply to ground or crushed coffee, instant coffee products, or other coffee products.

## 2.0 DESCRIPTION

**2.1** Green coffee: Green coffee is the bean remaining after removal of the fruit cover by and acceptable process.

**2.2** Roasted coffee: Roasted coffee is the product resulting from the treatment of green coffee with heat to achieve appropriate color and flavor characteristics.

## 3.0 ESSENTIAL COMPOSITION AND RELATED FACTORS

### 3.1 Raw Material

**3.1.1** Green coffee as defined in Section 2.0.
**3.1.2** Roasted coffee as defined in Section 2.0.

### 3.2 Composition

**3.2.1** Green coffee consists solely of green coffee beans.

**3.2.2** Roasted coffee consists solely of green coffee beans that have been appropriately heat treated.

### 3.3 Related Factors

**3.3.1** Green coffee beans shall not contain an excessive number of defective beans, including broken, unripe, black, scarred, withered, spongy or otherwise defective beans. [Note: a single minimum percent level of defective beans can be established, below which green coffee beans are unacceptable. See reference *Health and Safety in the Importation of Green Coffee Beans into the United States,* p. 6.]

[See hygiene section for specifications for insect and mold damaged beans.]

**3.3.2** Coffee prepared from green and/or roasted coffee beans shall not present unacceptable odors or flavors.

**3.3.3** A maximum moisture level may wish to be specified for roasted coffee.

## 4.0 FOOD ADDITIVES

No food additives are permitted in green or roasted coffee beans.

## 5.0 CONTAMINANTS

### 5.1 Pesticides

Pesticide residues for the green and roasted coffee beans must not exceed Maximum Residue Levels specified by the Egyptian Organization for Standardization (EOS).

### 5.2 Heavy Metals

Heavy metal contaminant levels must not exceed those specified by the Egyptian Organization for Standardization (EOS).

### 5.3 Radionuclides

The level of radioactivity for products included within this Standard shall be within limits proscribed by recognized international standards setting bodies.

### 5.4 Mycotoxins

The level of mycotoxin residues in green and roasted coffee beans must not exceed Maximum Residue Levels specified by the Egyptian Organization for Standardization (EOS).

## 6.0 HYGIENE

**6.1** Green coffee beans must;

**6.1.1** To the extent possible in good manufacturing practice, be free from objectionable material (e.g., insect parts, rodent hair/excreta, foreign objects- rock, glass, metal). [The following language may wish to be included in the standard. Must not contain more than 10% by count of beans that are insect-infested and/or moldy.]

**6.1.2** Be prepared and handled in accordance with appropriate sections of: Egyptian good manufacturing practice regulations [specify Egyptian EOS and MOH regulations including microbiological criteria if applicable]; Codex Alimentarius Recommended International Code of Practice- General Principles of Food Hygiene and any other relevant Codex texts (specify).

**6.2** Roasted coffee beans;

**6.2.1** To the extent possible in good manufacturing practice, be free from objectionable material (e.g., insect parts, rodent hair/excreta, foreign objects- rock, glass, metal). [The following language may wish to be included in the standard. Must not contain more than 10% by count of beans that are insect-infested and/or moldy.]

**6.2.2** Be prepared and handled in accordance with appropriate sections of: Egyptian good manufacturing practice reguations [specify Egyptian EOS and MOH regulations including microbiological criteria if applicable]; Codex Alimentarius Recommended International Code of Practice- General Principles of Food Hygiene and any other relevant Codex texts (specify).

**6.2.3** The products should comply with any microbiological criteria established in accordance with the Principles for the Establishment and Application of Microbiological Criteria for Foods (CAC/GL 21-1997).

**[**6.3 When tested by appropriate methods of samples and examination:

a) Be free from microorganisms in which may represent a hazard to health.
b) Be free from parasites; and,
c) Not contain any substance originating from microorganisms in amounts which may represent a hazard to health.**]**

## 7.0 PACKAGING

**7.1** Green and roasted coffee beans offered for sale under this Standard shall be packaged in containers that will safeguard the hygienic, nutritional, and organoleptic properties of the food.

**7.2** The containers, including packaging and wrapping material, shall be made from substances that are safe and suitable for their intended use. They shall not impart any toxic substance or undesirable odor or flavor to the product.

## 8.0 LABELING

Prepackaged products covered by this Standard shall be labeled in accordance with the Codex General Standard for the Labeling of Prepackaged Foods.

**8.1** Name of the Food.

**8.1.1** Green coffee beans shall be clearly identified as coffee beans, unroasted. A designation as to type of coffee bean may be made.

**8.1.2** Roasted coffee beans shall be clearly identified as roasted coffee beans. A designation as to type of coffee bean may be made.

**8.2** Mandatory Declarations

The following items must appear in Arabic (and other languages as appropriate) on the label of the product in conformity, as appropriate, with the Codex General Standard for the Labeling of Prepackaged Foods.

**8.2.1** Name of the product including, as appropriate, all information given in 8.1 above.
**8.2.2** Name and address of the manufacturer.
**8.2.3** Net weight or volume.
**8.2.4** Production date (for roasted coffee only).
**8.2.6** Country of origin. Products manufactured in Egypt must use the phrase “Made in Egypt”.

**8.3** Country of Origin.

Country of origin is the country in which the juice product was manufactured.

**8.4** Labeling of Non-retail Containers.

The name of the product, lot identification and the name and address of the manufacturer or packer must appear on the container. Other required labeling information, if not provided on the container, must be provided in accompanying shipping documents.

## 9.0 METHODS OF ANALYSIS

[To be specified.]

**ANNEX**
**BASED ON STANDARD NO. 517-1474/1987**
**GREEN AND ROASTED COFFEE**

This Annex is not intended as a standard, guideline recommendation, or technical regulation within the meaning of the Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) Agreements. Provisions provided within this Annex are not considered as essential for public health, food safety or consumer protection. These provisions are of a voluntary advisory nature intended to assist users; they reflect quality factors and criteria that may be used by commerce to define or describe the quality of the product and which may form part of contracts between buyers and sellers. Individual merchandisers should independently determine their product quality needs. Provisions of this annex do not constitute regulatory provisions of the Egyptian Organization for Standardization or any other Egyptian Governmental Body.

## 1.0 OTHER COMPOSITION OR QUALITY FACTORS

### 1.1 Formulation

### 1.2 Other Quality Factors

Grade factors such as color, size, homogeneity, smoothness, taste, odor, defects including broken and insect damaged beans greater than the miniumum specified in the above Standard, fat content, moisture content lower than the maximum moisture content for roasted beans, etc. can be provided in this section.

## 2.0 WEIGHTS AND MEASURES

Fill of container information should be given here.

## 3.0 OTHER LABELING FACTORS

**WORKING DRAFT ONLY**

**EGYPTIAN ORGANIZATION FOR STANDARDIZATION**

# PROPOSED DRAFT GENERAL STANDARD FOR INSTANT COFFEE [1]

**BASED ON STANDARD NO. 517-1474/1987**

**[**Drafting Notes:

1. The existing EOS standard for coffee and its products covers a large number of products, including green coffee beans, roasted coffee beans, roasted crushed coffee, ground coffee, instant coffee and decaffeinated instant coffee. For ease of discussion, this draft standard is limited to instant coffee containing caffeine and decaffeinated instant coffee. A separate draft standard has been developed for green coffee beans and roasted coffee beans. Consideration can be given to the specific products to be included in any one standard and this standard modified or other standards prepared.

2. The existing EOS standard for Coffee and Its Products is essentially a purchase specification, not a standard that relates solely to safety and essential quality elements. Since it desirable for revised standards to contain only safety and essential quality elements (i.e., prevention of fraud, essential product compositional requirements), it is important to remove from the existing EOS Standard for Coffee and its Products the large number of non-essential quality elements in the standard. The elements to be removed include but are not necessarily limited to those for color, size, smoothness, flowability, dissolution, taste, odor, broken and defective beans (above a minimum requirement), moisture (above a minimum requirement for roasted beans and for instant coffee), caffeine level, and ash. This working draft standard should be considered only as a model by which standards for coffee and its products should be constructed.

3. This draft standard is intended as an initial guideline only. Technica l experts in coffee and its products revise the standard based on specific knowledge of the product(s).

4. Primary references used for the preparation of this draft are: 1) Egyptian Standard 517-1474/1987, Coffee and Its Products; 2) Health and Safety in the Importation of Green Coffee into the United States, prepared by the National Coffee Association of the USA, Inc., and the U.S. Food and Drug Administration, 1990; 3) the U.S. Food and Drug Administration Compliance Policy Guideline for Green Coffee Beans-Adulteration with Insects; Mold, Section. 7101.06, and 4) U.S. Federal Purchase specification for instant coffee.

[1]Prepared by the Egyptian Organization for Standardization in Coordination with the Development Economic Policy Reform and Analysis Project (DEPRA), Nathan Associates Inc., Arlington, VA, USA.

5. There is no Codex Alimentarius Standard for coffee or coffee products. This draft is prepared, however, based on the revised format.**]**

This Standard is confined to essential provisions relating to public health, food safety and consumer protection. The Annex to this Standard contains voluntary quality and compositional provisions to be used by buyers and sellers as the basis of sales or purchase agreements to facilitate trade. The Annex does not however, form part of the Standard, and acceptance of the Standard by the Egyptian Organization for Standardization or other Egyptian Governmental Bodies does not imply acceptance of the Annex.

## 1.0 SCOPE

**1.1** This standard applies to the following:

**1.1.1** Instant coffee containing caffeine.
**1.1.2** Decaffeinated instant coffee.

**1.2** The standard does not apply to ground or crushed coffee, green or roasted coffee beans or any other coffee products.

## 2.0 DESCRIPTION

**2.1** Instant coffee containing caffeine is the product obtained from appropriately dehydrating the water extract of roasted coffee beans.

**2.2** Decaffeinated instant coffee is the product obtained from appropriately dehydrating the decaffeinated water extract of roasted coffee beans (that is, removing the caffeine from the water extract of roasted coffee beans followed by dehydration of the water extract). It may be manufactured by appropriately dehydrating the water extract obtained from decaffeinated coffee beans.

## 3.0 ESSENTIAL COMPOSITION AND RELATED FACTORS

### 3.1 Raw Materials

**3.1.1** Roasted coffee beans.
**3.1.2** Potable water.
**3.1.3** Permitted solvents for caffeine removal.

### 3.2 Composition

**3.2.1** Instant coffee consists solely of the dehydrated water extract from roasted coffee beans.

**3.2.2** Decaffeinated instant coffee consists solely of the dehydrated decaffeinated water extract of roasted coffee beans.

The final residue level of the solvent(s) used to remove the caffeine from the water extract and/or the roasted coffee beans shall be within permitted tolerances.

### 3.3 Related Factors

**3.3.1** The instant coffee products covered under this standard shall contain no carbohydrate or other extenders.

**3.3.2** The instant coffee products covered under this standard should be free flowing and readily dissolvable.

**3.3.3** A maximum caffeine level may be specified for decaffeinated coffee (the current EOS standard specified a maximum caffeine level of 0.2%).

**3.3.4** A maximum moisture level may wish to be specified for instant coffee products covered under this standard.

## 4.0 FOOD ADDITIVES

Only food additives permitted by the permitted by the Egyptian Ministry of Health can be used.

## 5.0 CONTAMINANTS

### 5.1 Pesticides

Pesticide residues for the green and roasted coffee beans used in the manufacture of instant coffee products covered under this standard must not exceed Maximum Residue Levels specified by the Egyptian Organization for Standardization (EOS).

### 5.2 Heavy Metals

Heavy metal contaminant levels for products covered under this standard must not exceed those specified by the Egyptian Organization for Standardization (EOS), including the following specific requirements.

Copper not to exceed 30 parts per million.
Arsenic not to exceed 1 part per million.
Lead not to exceed 0.5 part per million.

### 5.3 Radionuclides

The level of radioactivity for products included within this Standard shall be within limits proscribed by recognized international standards setting bodies.

### 5.4 Mycotoxins

The level of mycotoxin residues in green and roasted coffee beans used in the manufacture of products covered under this standard must not exceed Maximum Residue Levels specified by the Egyptian Organization for Standardization (EOS).

## 6.0 HYGIENE

The instant coffee products manufactured under this standard must:

**6.1** Be prepared and handled in accordance with: good manufacturing practices [specify Egyptian EOS and MOH regulations including microbiological criteria if applicable ]; Codex Alimentarius Recommended International Code of Practice- General Principles of Food Hygiene and any other relevant Codex texts (specify).

**6.2** To the extent possible in good manufacturing practice, be free from objectionable material (e.g., insect parts, rodent hair/excreta, foreign objects- rock, glass, metal).

**6.3** The products should comply with any microbiological criteria established in accordance with the Principles for the Establishment and Application of Microbiological Criteria for Foods (CAC/GL 21-1997).

**[6.4** When tested by appropriate methods of samples and examination:

a) Be free from microorganisms in which may represent a hazard to health.

b) Be free from parasites; and,
c) Not contain any substance originating from microorganisms in amounts which may represent a hazard to health. **]**

## 7.0 PACKAGING

**7.1** Instant coffee products manufactured and offered for sale under this under this Standard shall be packaged in containers that will safeguard the hygienic, nutritional, and organoleptic properties of the food.

**7.2** The containers, including packaging and wrapping material, shall be made from substances that are safe and suitable for their intended use. They shall not impart any toxic substance or undesirable odor or flavor to the product.

## 8.0 LABELING

Prepackaged products covered by this Standard shall be labeled in accordance with the Codex General Standard for the Labeling of Prepackaged Foods.

**8.1** Name of the Food.

The name of the food shall be instant coffee o r decaffeinated instant coffee as appropriate.

**8.2** Mandatory Declarations

The following items must appear in Arabic (and other languages as appropriate) on the label of the product in conformity, as appropriate, with the Codex General Standard for the Labeling of Prepackaged Foods.

**8.2.1** Name of the product including, as appropriate, all information given in 8.1 above.
**8.2.2** Name and address of the manufacturer.
**8.2.3** Net weight or volume.
**8.2.4** List of ingredients in descending order of predominance including all direct additives and preservatives.
**8.2.5** Production date and date of durability.
**8.2.6** Country of origin. Products manufactured in Egypt must use the phrase “Made in Egypt”.

**8.3** Country of Origin.

Country of origin is the country in which the juice product was manufactured.

**8.5** Date Marking (Date of Durability).

**[**The date of durability shall be determined by the manufacturer taking into consideration the nature of the product and its manufacturing and storage conditions, and the climatic, distribution and retail sale characteristics of Egypt. **]**

Note: information in brackets (**[ ]**) should be further discussed.

**8.6** Labeling of Non-retail Containers.

The name of the product, lot identification and the name and address of the manufacturer or packer must appear on the container. Other required labeling information, if not provided on the container, must be provided in accompanying shipping documents.

## 9.0 METHODS OF ANALYSIS

[To be specified.]

**ANNEX**
**BASED ON STANDARD NO. 517-1474/1987**
**INSTANT COFFEE**

This Annex is not intended as a standard, guideline recommendation, or technical regulation within the meaning of the Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) Agreements. Provisions provided within this Annex are not considered as essential for public health, food safety or consumer protection. These provisions are of a voluntary advisory nature intended to assist users; they reflect quality factors and criteria that may be used by commerce to define or describe the quality of the product and which may form part of contracts between buyers and sellers. Individual merchandisers should independently determine their product quality needs. Provisions of this annex do not constitute regulatory provisions of the Egyptian Organization for Standardization or any other Egyptian Governmental Body.

## 1.0 OTHER COMPOSITION OR QUALITY FACTORS

### 1.1 Formulation

### 1.2 Other Quality Factors

Product grade and other factors such as grade of the coffee beans used in the manufacture of instant coffee products, color, taste, odor, flowability, dissolvability, ash, alkaline ash, moisture content lower than the maximum moisture content for roasted beans, etc. can be provided in this section.

## 2.0 WEIGHTS AND MEASURES

Fill of container information should be given here.

## 3.0 OTHER LABELING FACTORS

**WORKING DRAFT ONLY**

**EGYPTIAN ORGANIZATION FOR STANDARDIZATION**

# PROPOSED DRAFT GENERAL STANDARD FOR TEA [1]

**BASED ON STANDARD NO. 559-1991**

**[**Drafting Notes:

1. The existing EOS standard for Tea is similar to a purchase specification, not a standard that relates solely to safety and essential quality elements. Since it is desirable for revised standards to contain only safety and essential quality elements (i.e., prevention of fraud, essential product compositional requirements), it is important to remove from this Standard non-essential quality elements. This working draft standard should be considered only as a model by which the standard for tea should be constructed

2. This draft standard is intended as an initial guideline only. Technical expert s in tea and its products should revise the standard based on specific knowledge of the product(s).

3. Primary references used for the preparation of this draft are: 1) Egyptian Standard 559-1991; and 2) the U.S. Department of Agriculture Commercial Item Description for Tea, Black (Bags or Loose).

4. There is no Codex Alimentarius Standard for tea. This draft is prepared, however, based on the revised format.

5. Consideration may wish to be given to the development of Standards for teas which are a blend of plant species and for instant tea, including flavored products if no such EOS Standard(s) exist since these products are commonly consumed products.**]**

This Standard is confined to essential provisions relating to public health, food safety and consumer protection. The Annex to this Standard contains voluntary quality and compositional provisions to be used by buyers and sellers as the basis of sales or purchase agreements to facilitate trade. The Annex does not however, form part of the Standard, and acceptance of the Standard by the Egyptian Organization for Standardization or other Egyptian Governmental Bodies does not imply acceptance of the Annex.

[1]Prepared by the Egyptian Organization for Standardization in Coordination with the Development Economic Policy Reform and Analysis Project (DEPRA), Nathan Associates Inc., Arlington, VA, USA.

## 1.0 SCOPE

**1.1** This standard applies to green and black teas.

**1.2** The standard does not apply to flavored teas, teas which are blend of plant species, or to instant teas or tea products.

## 2.0 DESCRIPTION

**2.1** Green tea is the dry, unfermented leaves of the tea plant.

[Note: should buds and stems be included? Suggest including plant spe cies names.]

**2.2** Black tea is green tea which has been fully fermented and dried.

## 3.0 ESSENTIAL COMPOSITION AND RELATED FACTORS

### 3.1 Raw Materials

**3.1.1** Green or black tea leaves

### 3.2 Composition

**3.2.1** Green tea consists solely of the dehydrated unfermented leaves of the tea plant.

**3.2.2** Black tea consists solely of the fully fermented and dried leaves of tea plants.

### 3.3 Related Factors

**3.3.1** Products covered under this standard should contain no toxic plant species and should be free of excessive amounts of non-tea plant species.

**3.3.2** A maximum moisture level may wish to be specified for green and black teas covered under this standard. [8% given in existing EOS Standard.]

**3.3.3** The content of stems in green and dry leaves should not exceed 5%.

**3.3.4** Products covered under this standard should of normal color and produce teas with no off odors, flavors or colors.

## 4.0 FOOD ADDITIVES

Only food additives permitted by the permitted by the Egyptian Ministry of Health can be used.

## 5.0 CONTAMINANTS

### 5.1 Pesticides

Pesticide residues for the green and black tea products covered under this standard must not exceed Maximum Residue Levels specified by the Egyptian Organization for Standardization (EOS).

### 5.2 Heavy Metals

Heavy metal contaminant levels for products covered under this standard must not exceed those specified by the Egyptian Organization for Standardization (EOS), including the following specific requirements.

Copper not to exceed 30 parts per million.
Arsenic not to exceed 1 part per million.
Lead not to exceed 4.0 parts per million.
Iron not to exceed 150 parts per million.

### 5.3 Radionuclides

The level of radioactivity for products included within this Standard shall be within limits proscribed by recognized international standards setting bodies.

### 5.4 Mycotoxins

The level of mycotoxin residues in products covered under this standard must not exceed Maximum Residue Levels specified by the Egyptian Organization for Standardization (EOS).

## 6.0 HYGIENE

The tea products covered under this standard must:

**6.1** Be prepared and handled in accordance with: good manufacturing

practices [specify Egyptian EOS and MOH regulations including microbiological criteria if applicable ]; Codex Alimentarius Recommended International Code of Practice- General Principles of Food Hygiene and any other relevant Codex texts (specify).

**6.2** To the extent possible in good manufacturing practice, be free from objectionable material (e.g., insect parts, rodent hair/excreta, foreign objects- rock, glass, metal).

**6.3** The products should comply with any microbiological criteria established in accordance with the Principles for the Establishment and Application of Microbiological Criteria for Foods (CAC/GL 21-1997).

**[6.4** When tested by appropriate methods of samples and examination:

a) Be free from microorganisms in which may represent a hazard to health.
b) Be free from parasites; and,
c) Not contain any substance originating from microorganisms in amounts which may represent a hazard to health.**]**

## 7.0 PACKAGING

**7.1** Tea products offered for sale under this under this Standard shall be packaged in containers that will safeguard the hygienic, nutritional, and organoleptic properties of the food.

**7.2** The containers, including packaging and wrapping material, shall be made from substances that are safe and suitable for their intended use. They shall not impart any toxic substance or undesirable odor or flavor to the product.

## 8.0 LABELING

Prepackaged products covered by this Standard shall be labeled in accordance with the Codex General Standard for the Labeling of Prepackaged Foods.

**8.1** Name of the Food.

The name of the food shall be tea and may be accompanied by the common and usual name for the plant species from which the tea product was made or otherwise possess a name which is commonly recognized and will not confuse the consumer.

**8.2** Mandatory Declarations

The following items must appear in Arabic (and other languages as appropriate) on the label of the product in conformity, as appropriate, with the Codex General Standard for the Labeling of Prepackaged Foods.

**8.2.1** Name of the product including, as appropriate, all information given in 8.1 above.
**8.2.2** Name and address of the manufacturer.
**8.2.3** Net weight or volume.
**8.2.4** List of ingredients in descending order of predominance including all direct additives and preservatives.
**8.2.5** Production date and date of durability.
**8.2.6** Country of origin. Products manufactured in Egypt must use the phrase "Made in Egypt".

**8.3** Country of Origin.

Country of origin is the country in which the juice product was manufactured.

**8.5** Date Marking (Date of Durability).

**[**The date of durability shall be determined by the manufacturer taking into consideration the nature of the product and its manufacturing and storage conditions, and the climatic, distribution and retail sale characteristics of Egypt.**]**

Note: information in brackets (**[ ]**) should be further discussed.

**8.6** Labeling of Non-retail Containers.

The name of the product, lot identification and the name and address of the manufacturer or packer must appear on the container. Other required labeling information, if not provided on the container, must be provided in accompanying shipping documents.

## 9.0 METHODS OF ANALYSIS

[To be specified.]

**ANNEX**
**BASED ON STANDARD NO. 559-1991**
**TEA**

This Annex is not intended as a standard, guideline recommendation, or technical regulation within the meaning of the Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) Agreements. Provisions provided within this Annex are not considered as essential for public health, food safety or consumer protection. These provisions are of a voluntary advisory nature intended to assist users; they reflect quality factors and criteria that may be used by commerce to define or describe the quality of the product and which may form part of contracts between buyers and sellers. Individual merchandisers should independently determine their product quality needs. Provisions of this annex do not constitute regulatory provisions of the Egyptian Organization for Standardization or any other Egyptian Governmental Body.

## 1.0 OTHER COMPOSITION OR QUALITY FACTORS

### 1.1 Formulation

### 1.2 Other Quality Factors

Product grade and other factors such as color, flavor characteristics, tea infusion levels, fiber content, caffeine content, ash content, tannin content, etc. can be provided in this section.

## 2.0 WEIGHTS AND MEASURES

Fill of container information should be given here.

## 3.0 OTHER LABELING FACTORS

# APPENDIX 5

# CODEX ALIMENTARIUS MODEL TEMPLATE

**MODEL TEMPLATE**

**EGYPTIAN ORGANIZATION FOR STANDARDIZATION**

# PROPOSED DRAFT STANDARD FOR [NAME COMMODITY][1]

## STANDARD NO. XXXX

This Standard is confined to essential provisions relating to public health, food safety and consumer protection. The Annex to this Standard contains voluntary quality and compositional provisions to be used by buyers and sellers as the basis of sales or purchase agreements to facilitate trade. The Annex does not however, form part of the Standard, and acceptance of the Standard by the Egyptian Organization for Standardization or other Egyptian Governmental Bodies does not imply acceptance of the Standard.

## 1.0 SCOPE

This standard applies to [name of product] for direct human consumption [or further processing] in conformity with the product definition given in Section 2 of this Standard. [Generally indicate product, whether packaged or loose, etc. Also indicate what is not included if needed.]

## 2.0 DESCRIPTION

### 2.1 Product Definition

## 3.0 ESSENTIAL COMPOSITION AND QUALITY FACTORS

### 3.1 Composition

### 3.2 Quality Factors

## 4.0 FOOD ADDITIVES

[1]Prepared by the Egyptian Organization for Standardization in Coordination with the Development Economic Policy Reform and Analysis Project (DEPRA), Nathan Associates Inc., Arlington, VA, USA.

**5.0 CONTAMINANTS**

**5.1 Pesticides**

**5.2 Heavy Metals**

**5.3 Mycotoxins**

**6.0 HYGIENE**

**7.0 PACKAGING**

**8.0 LABELING**

**9.0 METHODS OF ANALYSIS**

**ANNEX**
**STANDARD NO. XXXXX**
**[NAME COMMODITY]**

This Annex is not intended as a standard, guideline recommendation, or technical regulation within the meaning of the Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) Agreements. Provisions provided within this Annex are not considered as essential for public health, food safety or consumer protection. These provisions are of a voluntary advisory nature intended to assist users; they reflect quality factors and criteria that may be used by commerce to define or describe the quality of the product and which may form part of contracts between buyers and sellers. Individual merchandisers should independently determine their product quality needs. Provisions of this annex do not constitute regulatory provisions of the Egyptian Organization for Standardization or any other Egyptian Governmental Body.

## 1.0 OTHER COMPOSITION OR QUALITY FACTORS

## 2.0 WEIGHTS AND MEASURES

## 3.0 OTHER LABELING REQUIREMENTS

# APPENDIX 6

# AUSTRALIA-NEW ZEALAND NATIONAL FOOD AUTHORITY POLICY ON STANDARDS DEVELOPMENT

# Background

## Australia New Zealand Food Authority

The Australia New Zealand Food Authority is a joint statutory body responsible for making recommendations on food standards which, when approved by the Australia New Zealand Food Standards Council, are adopted by reference and without amendment into the food laws of the Australian States and Territories. In New Zealand for the time being, such standards apply as part of a system of dual standards, where the Australian Food Standards Code is recognised as an alternative to the New Zealand Food Regulations. At a future date, standards in the New Zealand Food Regulations will be repealed and the standards developed under the joint system will apply in both countries.

The Authority's other functions include developing codes of practice for industry on any matter that may be included in a food standard, coordinating the surveillance of food in Australia and liaising with the Ministry of Health in New Zealand on arrangements for imported foods, conducting research and surveys in relation to food standards matters, developing food safety education initiatives in cooperation with the States and Territories, and assisting in the coordination of food recalls in Australia. The Ministry of Health manages recalls in New Zealand. In Australia, the Authority develops assessment policies in relation to imported food.

## Review of Food Standards

When the National Food Authority was established in August 1991, the Commonwealth Government in Australia indicated that the Authority would review the policies and principles for setting and varying food standards which it would then apply to a review of the Code.

In developing or reviewing food standards, the Authority must have regard to the objectives outlined in section 10 of the *National Food Authority Act 1991*[1] (now the *Australia New Zealand Food Authority Act 1991*).

Consistent with these statutory objectives and the policies of the Authority, the review will, where possible:

- reduce the level of prescriptiveness of standards to facilitate innovation by allowing wider permission on the use of ingredients and additives, but with consideration of the possible increased need for consumer information;
- develop standards which are easier to understand and make amendment more straightforward;

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[1] Section 10 states that the Authority, in developing standards and variations of standards, must have regard to the following objectives in descending order:

(a) the protection of public health and safety;
(b) the provision of adequate information relating to food to enable consumers to make informed choices about food and to prevent fraud and deception;
(c) the promotion of fair trading in food;
(d) the promotion of trade and commerce in the food industry; and
(e) the promotion of consistency between domestic and international food standards where these are at variance.

- replace standards which regulate individual foods with standards that apply across all foods or a range of foods;
- consider the possibility of industry codes of practice as an alternative to regulation; and
- facilitate harmonisation of food standards between Australia and New Zealand.

The Review will also be carried out in accordance with the competition policy principles established by the Council of Australian Governments in 1995 and the draft Code of Good Regulatory Practice (New Zealand).

## Food Standards Setting in Australia and New Zealand

The Governments of Australia and New Zealand entered an Agreement in December 1995 establishing a system for the development of joint food standards. The Australia New Zealand Food Authority is now developing a joint *Australia New Zealand Food Standards Code* which will provide compositional and labelling standards for food in both Australia and New Zealand.

Until the joint *Australia New Zealand Food Standards Code* is finalised, transitional arrangements for the two countries apply:

- Food sold in New Zealand (that has been manufactured in, or imported into, New Zealand either from Australia or from a third country) may comply with either the Australian *Food Standards Code* , as gazetted in New Zealand, or the New Zealand *Food Regulations*, but not a combination of both. However in all cases maximum residue limits for agricultural and veterinary chemicals must comply solely with those limits specified in the New Zealand *Food Regulations*.
- Food manufactured in Australia and sold in Australia must for most products comply solely with the Australian *Food Standards Code*. However Standard T1 allows for certain specified foods to be manufactured in accordance with the relevant provisions of New Zealand *Food Regulations*.
- Food imported into Australia from New Zealand must either comply with the Australian *Food Standards Code* or relevant provisions of the New Zealand *Food Regulations*. If they comply with the New Zealand *Food Regulations* they must also comply with Standard A14 and the maximum permitted concentrations for cadmium as set out in Standard A12 of the Australian *Food Standards Code*.
- Food imported into Australia from other then New Zealand must comply solely with the Australian *Food Standards Code*. The provisions set out in Standard T1 of the Australian *Food Standards Code* do not apply in this case.

In addition to the above, all food sold in New Zealand must comply with the New Zealand *Fair Trading Act* and all food sold in Australia must comply with the Australian *Trade Practices Act (1974)*.

Any person or organisation may apply to ANZFA to have the Australian *Food Standards Code* amended. In addition, ANZFA may develop proposals to amend the Australian *Food Standards Code*. ANZFA can provide advice on the requirements for applications to amend the Australian *Food Standards Code*.

# SECTION 10 OBJECTIVES

**the protection of public health and safety;**

**the provision of adequate information relating to food to enable consumers to make informed choices and to prevent fraud and deception;**

**the promotion of fair trading in food;**

**the promotion of trade and commerce in the food industry; and**

**the promotion of consistency between domestic and international food standards where these are at variance.**

ANZFA
Australia New Zealand Food Authority
TE MANA WHAKARITE KAI
MO AHITEREIRIA ME AOTEAROA

# PRINCIPLES OF THE REVIEW

## REDUCE LEVEL OF PRESCRIPTIVENESS

## DEVELOP STANDARDS WHICH ARE EASIER TO UNDERSTAND AND AMEND

## DEVELOP STANDARDS THAT APPLY ACROSS ALL FOODS OR A RANGE OF FOODS

## CONSIDER USE OF INDUSTRY CODES

## DEVELOP JOINT FOOD STANDARDS FOR AUSTRALIA AND NEW ZEALAND HAVING REGARDS TO CODEX STANDARDS

ANZFA
Australia New Zealand Food Authority
TE MANA WHAKARITE KAI
MO AHITEREIRIA ME AOTEAROA

**Final Report:**

# EGYPT: A Review Of Selected Egyptian Organization For Standardization (EOS) Food Standards With Respect To International Norms

Prepared For
**The Government of Egypt**

Submitted To
**USAID**
**Economic Growth/Sector Policy**
**Cairo, Egypt**

Submitted By
**Nathan Associates Inc.**

Under
**Contract # 263-C-00-96-00001-00**

**March 1998**

NATHAN ASSOCIATES
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FREE ENTERPRISE
IN THE PUBLIC INTEREST

# مراجعة لبعض المواصفات القياسية المختارة من
# الهيئة المصرية للتوحيد القياسى لسلع غذائية فى ضوء المعايير الدولية

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**تقرير الدراسة**

**معد لأجل**

**حكومة جمهورية مصر العربية**

**مقدم الى**

**الوكالة الأمريكية للتنمية الدولية (USAID)**

**مقدم من**

**مؤسسة ناثان (Nathan Associates Inc.)**

**عقد رقم**

**٢٦٣-C-٠٠-٩٦-٠٠٠٠١-٠٠**

**مشروع تحليل وإصلاح السياسات الاقتصادية والتنمية**

**٢٦ مارس ١٩٩٨**


**اعداد**

**هـ. مايكل وير**

بدهسا، ميريلاند

**ريتشارد دييس**

خبير الأطعمة البحرية، روكفيل، ميريلاند

**نيل ارميتاج**

وزارة الزراعة بنيوزيلندا، ولينجتون، نيوزيلندا

**فيليب فاوست**

وزارة الزراعة بنيوزيلندا، ولينجتون، نيوزيلندا

**بمساعدة**

**دافيد جونز**

مؤسسة اللحوم والحيوانات الأسترالية – البحرين

# ملخص تنفيذى

## مراجعة لبعض المواصفات القياسية المختارة من الهيئة المصرية للتوحيد القياسى لسلع غذائية فى ضوء المعايير الدولية

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فى أكتوبر عام ١٩٩٧ قام مشروع تحليل وإصلاح السياسات الاقتصادية والتنمية (دبرا) بدراسة لمراجعة بعض المواصفات المصرية القائمة لسلع غذائية وسلع صناعية معمرة. وكان الهدف من هذه المراجعة هو عمل دراسة تجريبية تستخدم كنموذج فعلى لمراجعة شاملة لجميع المواصفات القياسية للهيئة المصرية للتوحيد القياسى، وبصفة خاصة تلك التى تعتبر بمثابة مواصفات قياسية إلزامية. وكان غرض المراجعة هو فصل عناصر الجودة غير الضرورية عن تلك العناصر التى ترتبط بالسلامة والتركيب الأساسى للسلعة، والعمل على جعل المواصفات المطبقة متمشية مع المعايير الدولية، وتحقق الاتساق مع متطلبات اتفاقيات القيود الفنية على التجارة (TBT) والاشتراطات الصحية والصحة النباتية والحيوانية (SPS).

وقد إنتهت دراسة عام ١٩٩٧ بالنسبة لقطاع الاغذية الى عمل نموذج مسودة مراجعة لمواصفات الهيئة المصرية للتوحيد القياسى وذلك للسلع الآتية: اللبن البودرة، والجبن المطبوخ، والجبن الجاف، واللحم المجمد، والبرجر البقرى المجمد، والفواكه المحفوظة (متضمنة الفواكه المعلبة، وعصير الفاكهة، والمربات والجيلى)، ومنتجات الطماطم المحفوظة (مشتملة على منتجات الطماطم المركزة، والطماطم المعلبة، والكاتشب)، والعجائن الجافة. وبالاضافة الى ذلك، تمت مناقشة ومراجعة مواصفات البن ومنتجاته دون عمل مسودة مراجعة للمواصفة بسبب القيود الزمنية وقيود المعلومات. ومن ناحية اخرى، أدى عدم وجود خبير منظمة الاغذية والزراعة ضمن الفريق البحثى، والقيود المتعلقة بتوافر المعلومات عن العصائر والبن، إلى عدم مراجعة عدة مواصفات متضمنة اجزاء اللحم، والأرانب والدواجن. كما يحتاج الامر الى مزيد من المراجعة لكل من مواصفات العصائر والبن.

وبسبب الحاجة الى استكمال مراجعة المواصفات فى أكتوبر ١٩٩٧، ولاعطاء الفرصة لعمل المزيد من المراجعات لمواصفات الهيئة المصرية للتوحيد القياسى، حيث هناك توصية بعمل دراسة لمتابعة ما تم فى اكتوبر ١٩٩٧. يضاف الى ذلك، وعقب دراسة ١٩٩٧، ابدت كل من نيوزيلندا واستراليا رغبتيهما فى المساعدة فى عمل مراجعات أخرى لمواصفات منتجات الالبان واللحوم. كما ان الهيئة المصرية للتوحيد القياسى اظهرت رغبتها فى مراجعة المزيد من المواصفات متضمنة المواصفات الخاصة بمنتجات الاطعمة البحرية، ومواد تعبئة الاغذية.

ولقد ترتب توصيات الدراسة السابقة ورغبات كل من نيوزيلندا واستراليا والهيئة المصرية للتوحيد القياسي، أن تم تقديم المساعدة الفنية فى هذا الخصوص والتى تمثلت فى أهداف التقرير الحالى وهى:

١-تحديد وتقييم العمل الذى قامت به الهيئة المصرية للتوحيد القياسى منذ تقرير دراسة أكتوبر ١٩٩٧ الذى اشتمل على نموذج للمواصفات يتم الاسترشاد به فى مراجعة وتحديث المواصفات المصرية القائمة فعلاً. ويتضمن ذلك مراجعة واعادة صياغة جميع المواصفات التى تم تناولها فى تقرير اكتوبر ١٩٩٧، وذلك فى ضوء التعليقات التى حصلت عليها الهيئة المصرية للتوحيد القياسى من كافة الاطراف المهتمة سواء كانت محلية او دولية.

٢-تحديث المواصفة القياسية المصرية الخاصة بعصائر الفاكهة والتى تمت مراجعتها خلال دراسة عام ١٩٩٧، بحيث تتضمن منتجات العصائر الحديثة مثل مزيج عصائر الفاكهة، ومشروبات عصائر الفاكهة.

٣-استكمال مراجعة المواصفة الخاصة بالبن ومنتجاته، والتى كانت قد بدأت خلال دراسة عام ١٩٩٧.

٤-القيام بمراجعة المواصفات الغذائية الاضافية التالية فى حدود الزمن المتاح: السالمون المعلب، السمك المدخن، اسماك التونة والبونيتو المعلبة، الجمبرى المجمد، الاسماك المجمدة، شرائح الاسماك المجمدة، الانشوجة المعلبة، الزبادى، الزبادى المطعم المحلى، اللبن المطعم المحلى، اللبن المركز (المبخر والمكثف)، اللحم المفروم المخلوط ببروتين الصويا، السجق المعلب، السجق المجمد، وكفتة اللحم. وبعد المراجعة يتم عمل مسودة مواصفات لهذه المنتجات.

٥-واذا سمح الوقت يتم مراجعة المواصفات القياسية المصرية التالية:

أ. الاشتراطات العامة للاكواب والعبوات المصنوعة من البلاستيك الصلب ونصف الصلب المستخدمة مرة واحدة لتعبئة المنتجات الغذائية.

ب. عبوات البولى إيثلين وترفثلات امستخدمة فى تعبئة المواد الغذائية.

وفيما يتعلق بالمواصفات الغذائية المصرية التى اختيرت حديثاً لمراجعتها أو للمواصفات التى لم يتسنى الانتهاء من مراجعتها فى دراسة اكتوبر ١٩٩٧، فقد استخدم نفس المنهج المتبع من قبل. حيث تعتبر نقطة البداية هى المواصفات القياسية المصرية الراهنة، والنموذج المعيارى المبنى على "نظام كودكس لمواصفات السلع الغذائية"، وفى بعض الاحوال تم استخدام النموذج المبدئى للمواصفات المصرية الذى تم اعداده بواسطة خبراء الدراسة واعضاء اللجنة الفنية المختصة بالهيئة المصرية للتوحيد القياسى. وقد تم تقييم كل عنصر من عناصر المواصفات الراهنة من حيث مدى ملاءمتها لاهداف المشروع – وهى العمل على الفصل بين المواصفات الخاصة بعناصر الجودة غير الاساسية والمواصفات المتعلقة بالامان والمتطلبات التكوينية الاساسية. وكانت المواصفات القياسية المصرية الراهنة قد تمت صياغتها بناء على النموذج المعيارى "لكودكس". وكلما سمح الوقت كانت المواصفات القياسية المصرية اتى تمت صياغتها تعاد الى اللجنة الفنية المختصة من اجل المراجعة النهائية.

وفيما يختص بالمواصفات القياسية المصرية التى تم اعدادها خلال دراسة أكتوبر ١٩٩٧، فقد تمت مراجعتها من جانب اللجان الفنية المختصة فى ضوء التعليقات التى أثيرت حول مسودة كل مواصفة من الاطراف المحلية والدولية المعنية، وعلى تعقيبات الخبراء المختصين الذين قاموا باعداد الدراسة. وكان القصد من ذلك هو الوصول الى مسودة نهائية للمواصفات المعنية لرفعها الى الجهات المختصة للحصول على موافقتها باعتبارها مواصفة فى صورتها النهائية.

وفى بعض الحالات مثل المواصفات المصرية الخاصة بعبوات المواد الغذائية، فقد تم الوصول الى تقييم مكتوب للمواصفات كناتج نهائى لعملية المراجعة. وفى معظم الحالات، سوف يتطلب الامر إجراء المزيد من المراجعات لمسودات المواصفات التى تم اعدادها خلال هذه الدراسة.

## نتـــائج الدراســـة:

استطاع اعضاء اللجان الفنية المختصة بالهيئة المصرية للتوحيد القياسى، وبمساعدة الخبراء القائمين بهذه الدراسة، مراجعة عدد (٢٢) مواصفة قياسية مصرية للسلع الغذائية من اصل عدد (٣٣) مواصفة غذائية او خاصة بعبوات المنتجات الغذائية، كان قد تم اختيارها من قبل لمراجعتها. وقد تضمنت هذه المواصفات ما سبق مراجعته فى أكتوبر ١٩٩٧، بالاضافة الى ما تم اختياره من مواصفات اخرى لمراجعتها إذا اتاح الوقت ذلك. يضاف الى ذلك، اثنين من المواصفات الجديدة تماماً المبنية على نظام كودكس للسلع الغذائية، وهى الالبان المخمرة، وشرائح الاسماك المجمدة، وهى سلع لاتوجد مواصفات قياسية مصرية للتعامل معها. وعلى ذلك، فقد تمت مراجعة عدد (٢٤) مواصفة من اجمالى مقداره (٣٥) مواصفة فى اطار هذا المشروع.

وقد تم اعداد مسودات منقحة لعدد (١٣) مواصفة قياسية مصرية تمت مراجعتها خلال أكتوبر ١٩٩٧ وهى: اللبن البودرة، الجبن المطبوخ، الجبن الجاف، اللحوم المجمدة، البرجر البقرى مجمد، عصائر الفاكهة، الفاكهة المعلبة، المربات والجيلى، المارملاد، منتجات الطماطم المركزة، الطماطم المعلبة، الكاتشب، العجائن الجافة. ويضم الملحق رقم (٣) بالتقرير الرئيسى للدراسة هذه المسودات المنقحة للمواصفات المذكورة.

كما تم اعداد مسودات مبدئية لعدد (٦) مواصفات قياسية مصرية للمنتجات الآتية: السالمون المعلب، الاسماك المدخنة، اسماك التونة والبونيتو، الجمبرى المجمد، الاسماك المجمدة، الانشوجة المعلبة. ويشتمل الملحق رقم (٣) بالتقرير الرئيسى على هذه المسودات، بالإضافة الى المواصفتين الجديدتين للالبان المخمرة، وشرائح الاسماك المجمدة.

وفيما يتعلق بالمواصفة الخاصة بالبن ومنتجاته، فقد تمت مراجعتها مرة اخرى دون تحقيق اى تقدم. وقد تم اعداد مسودة للمواصفات من جانب الخبراء القائمين بالدراسة للبن الاخضر والبن المحمص، وللبن سريع الذوبان، ولم تتعامل معها اللجنة الفنية المختصة بالهيئة المصرية للتوحيد القياسى. ويتضمن الملحق رقم (٤) بالتقرير الرئيسى هذه المسودات.

كما تمت مراجعة اثنتين من المواصفات الخاصة بالعبوات وهى:

أ. الاشتراطات العامة للأكواب والعبوات المصنوعة من البلاستيك الصلب ونصف الصلب المستخدمة مرة واحدة لتعبئة المنتجات الغذائية.

ب. عبوات البولى إيثيلين وترفثلات المستخدمة فى تعبئة المواد الغذائية.

ولكن لم يتم عمل مسودة منقحة للمواصفات القياسية المصرية المعنية.

ولم تتم مناقشة عدد (١١) مواصفة قياسية مصرية بسبب ضيق الوقت، وهى: الزبادى، الزبادى المطعم المحلى، الالبان المركزة، اللبن المطعم المحلى، الكبد المجمد، الكلاوى والقلوب المجمدة، اللحم المفروم الصافى، اللحم المفروم المخلوط بالصويا، السجق المعلب، السجق المجمد، الكفتة، الارانب والدواجن المجمدة. ويضم الملحق رقم (٤) بالتقرير الرئيسى مسودات المواصفات التى اعدها خبراء الدراسة للعديد من منتجات اللحوم التى لم تتم مناقشتها، وكذلك المسودة الخاصة بمواصفات الالبان المركزة، والشاى، ومشروبات عصائر الفاكهة الخالية من الكربون، وقد تم اعطاء هذه المسودات الى اللجان الفنية المختصة بالهيئة للتوحيد القياسى.

## الخلاصة والتوصيات:

### المجالات التى تحقق فيها تقدماً ملموساً:

تم تحقيق تقدم ملموس فى مراجعة المواصفات الغذائية فى بعض المجالات. وبناء على الدراسة التى بدأت فى أكتوبر ١٩٩٧ لمراجعة المواصفات القياسية المصرية، وعلى الملاحظات التى تم الحصول عليها من الاطراف المعنية بالموضوع، فقد تم التوصل الى اتفاق عام نهائى من جانب اللجان الفنية المختصة (بالرغم من بعض التحفظات التى أبداها الخبراء القائمون بالدراسة، بالنسبة للعديد من المواصفات منها اللبن البودرة، والجبن المطبوخ، والجبن الجاف، وعصائر الفاكهة، ومنتجات الطماطم، والمربات والجيلى، والمرملاد، والعجائن الجافة. يضاف الى ذلك، اجراء مراجعة مبدئية ناجحة بالنسبة للعديد من منتجات الاغذية البحرية متضمنة السالمون المعلب، والتونة المعلبة، والاسماك المدخنة، والجمبرى المجمد، وشرائح الاسماك المجمدة، والأنشوجة المعلبة.

### إستمرار السياسات العامة والتى اعاقت التقدم:

فى دراسة النظام المصرى للرقابة على الجودة التى اجريت عام ١٩٩٦ وعنوانها: "دراسة بحثية عن نظام الرقابة على الجودة فى مصر" لوحظ ان مصر تستخدم نظام المواصفات السلعية متضمنة تلك المتعلقة بالسلع الغذائية – لتحقيق اغراض متعددة.

وبناء على نتائج دراسة عام ١٩٩٦، والملاحظات الاضافية التى أثيرت خلال دراسة مراجعة بعض المواصفات القياسية المصرية فى عام ١٩٩٧، وخلال الدراسة الحالية، فقد ظهر بالنسبة لقطاع الغذاء، أنه بالاضافة الى ضمان السلامة الاساسية للسلعة، وتطبيق القواعد الخاصة بالنسب المسموح بها من بقايا المبيدات الحشرية، واساليب التصنيع الجيدة، والاستخدامات المسموح بها للإضافات الغذائية، ولتحديد عناصر المكونات الاساسية للسلع، نجد ان المواصفات القياسية المصرية تستخدم لتحقيق عدة أغراض إضافية تشتمل على ما يلى:

- تنفيذ السياسة الصحية القومية.
- المساعدة فى ضمان حماية المستهلك بدلاً من الاعتماد على وجود قوانين شاملة للغـــش والمواصفـــات المذكورة على السلعة.
- المساعدة فى ضمان حماية المستهلك بدلاً من الاعتماد على برامج تعليم المستهلكين.
- المساعدة فى ضمان سلامة المنتجات بدلاً من التركيز على قضايا معينة متعلقة بالبنية الاساســـية التـــى ينبغى تواجدها لمنع المنتجات غير الامنة والفاسدة. مثل هذه القضايا تشتمل على وجود نظم لتقديم تحكـــم سليم فى درجة الحرارة خلال التوزيع، والنقل، والبيع بالتجزئة، والنقل الصحى، وقواعد الرقابة الصحية فى منشآت الجملة والتجزئة.

وهناك ملاحظات إضافية تم رصدها خلال الدراسة السابقة للمواصفات، وهى تضم النقاط الآتية:

- بينما تكون المواصفات مطلوبة غالباً لمجموعة من الاسباب، فيبدو أن هناك حاجة قوية داخـــل النظـــام المصرى لوجود والحفاظ على وجود مواصفة خاصة بكل سلعة. وغالباً ما تنتهج النظم الاجرائية عمليات الرقابة بشكل شامل، على حين أن تطبيقها على منتجات محددة قد يكون منهجاً أفضل، بدلاً من الاستخدام العريض للمواصفات السلعية.
- استمرار مصر فى استبقاء نظم الفحص والرقابة المتعددة للسلع بدلاً من تخويل المســـئولية الـــى جهـــة وحيدة قادرة على ذلك.
- التطبيق التمييزى للمواصفات على السلع المستوردة فى مواجهته المنتجات المحلية. فعلى سبيل المثـــال، مواصفة اللحوم المجمدة تطبق بشكل وحيد على المنتج المستورد، وتتغاضى عن منتجات اللحوم المماثلـــة المنتجة محلياً.
- وجود اتجاه الى وضع شروط داخل المواصفات مبنية على معلومات علمية ضعيفة أو غير كاملة.

وتمثل النقاط السابقة مجالات هامة للسياسة المحلية التى تؤثر فى النهاية على التجارة والسياسة الاقتصاديـــة من خلال وضع مواصفات شاملة لسلع غذائية بشكل إجرائى مبالغ فيه. والنتيجة النهائية لهذا الامر هى ارتفاع تكلفة المنتجات، ووجود تشكيلة سلعية محدودة أمام المستهلك، والاكثر اهمية هو وجود امكانية حقيقية لتطبيـــق مستويات ضيقة لسلامة السلع الغذائية، حيث يتم تكريس الموارد تجاه عناصر الجودة غير الاساسية.

وعلى حين حققت الدراسة الحالية والدراسة السابقة التى تمت فى أكتوبر ١٩٩٧ نجاحاً حقيقياً وتقدمـــاً فـــى تحديث المواصفات القياسية المصرية للسلع الغذائية وفى الغاء بعض عناصر الجودة غير الضرورية، فإنه من الواضح أن الفلسفات الحاكمة للعمل، والتى تمت الإشارة إليها فى دراسة عام ١٩٩٦ لا تـــزال تقيـــد بشـــدة فرص النجاح فى تحقيق مواصفات منقحة تتمشى مع المعايير الدولية وتتوافق مع التزامـــات مصـــر تجـــاه اتفاقيات العوائق الفنية على التجارة TBT والاشتراطات الصحية الصحة النباتية والحيوانية SPS، ولا يبـــدو ان اللجان الفنية المختصة فى الهيئة المصرية للتوحيد القياسى – فى معظم الحالات –لديـــها الـــتزام حقيقـــى جوهرى لاصلاح عملية وضع المواصفات القياسية، والعمل على إزالة عناصر الجودة غير الضرورية. حقـــا ،لقد لاحظ بعض أعضاء اللجان الفنية انه ربما يكون السبيل الوحيد لحل قضية المواصفات الراهنة فى مصـــر هو الاحتكام الى آليات منظمة التجارة العالمية WTO. ويبدو هذا الامر صحيحا علـــى وجـــه الخصـــوص بالنسبة للسلع التى لا تتواجد بالنسبة لها مواصفات طبقا لنظام "كودكس" (ومثال ذلك :اللحوم والبن ).

ومن امثلة الصعوبات المصاحبة للسياسات العاملة والتى تمت ملاحظتها خلال الدراسة الراهنة ،القضايا التالية:

- القضية الاولى: متطلبات تحديد مستوى الدهون فى الذبائح والقطع الأساسية لمنتجات اللحوم ، تكون مرتبطة بمنع الكوليسترول المرتبط بالمشاكل الصحية للمصريين .

ويمثل هذا الامر استخداما للمواصفات المصرية لتنفيذ السياسة الصحية القومية. واذا كان لمثل هذه السياسة ان تستمر وهى تمثل تحديا لاتفاقية العوائق الفنية على التجارة ، عندئذ ينبغى ان تكون مصر قادرة على الايضاح العلمى بان مستوياتها العالية لحماية الصحة (اى: مستويات محددة من الدهون لا تطبقها الدول الاخرى) يمكن تبريرها بقضايا صحية مرتبطة بالكوليسترول وهو أمر يرتبط بشكل وحيد بشعب مصر (بالمقارنة بشعوب الدول الاخرى.)

- القضية الثانية: متطلبات تحديد مستوى الدهون عى الذبائح والقطع الاساسية لمنتجات اللحوم للحماية من الغش الاقتصادى للمستهلك .

ويمثل هذا الامر استخداما للمواصفات القياسية المصرية بدلا من وجود قوانين قوية لمكافحة الغش بدرجة تكفى لردع البائعين المتلاعبين . يضاف الى ذلك، استخدام هذه المواصفات بدلاً من استخدام برامج ملائمة لتعليم المستهلك وإعلامه بما هو مقبول أو غير مقبول (من الناحية الظاهرية) لمستويات الدهون فى اللحوم.

- القضية الثالثة: متطلبات تحديد مستوى الدهون فى منتجات اللحوم من أجل منع الآثار الصحية الضارة بالمستهلك نتيجة الوجود المفرط لبقايا المبيدات الحشرية، والدهون الفاسدة، والفساد الميكروبى و/أو المرض.

ويمثل هذا الامر استخداماً غير ملائم للمواصفات القياسية المصرية بطرق متعددة. فالحدود القصوى المسموح بها من بقايا المبيدات موجودة بالفعل فى المواصفات التى حددتها الهيئة المصرية للتوحيد القياسى. وينبغى ان تكون هذه الحدود هى آلية الحماية ضد وجود مستويات مفرطة من بقايا المبيدات الحشرية، وليس حدود مستوى الدهون. وإذا كانت الحدود القصوى لنسب بقايا المبيدات غير كافية، فينبغى تحديث هذه النسب وليس مستويات الدهون. إن قضايا الدهن الفاسد والفساد الميكروبى هى أمور ترتبط بالتحكم فى درجة الحرارة، ولعمليات التداول والنواحى الصحية بالنسبة للفساد الميكروبى. ويكون أكثر ملائمة أن يتم التعامل مع هذه الامور عن طريق برامج الفحص الكافية، والبرامج التعليمية، وتحسين البنية الاساسية لانشطة التوزيع والتجزئة.

- القضية الرابعة: متطلبات الرقابة على اللون فى البن المحمص لمنع الإصابة بالسرطان.

ويعتبر هذا الامر مثالاً على وضع شروط مبنية على معلومات علمية ضعيفة أو غير كافية. وعلى حين تولد عملية التحميص بعض المركبات المسببة للسرطان، فان القضية ببساطة ليست مجرد وجود هذه المركبات

فى البن. وإنما القضية الهامة هى نسبة تركيز هذه المركبات فى مشتقات البن المحمص، واستنشاق نواتج التحميص، أو التعرض لهذه المركبات بسبب الاستهلاك لفترة زمنية طويلة. إن الامر المطلوب قبل وضع مواصفة معينة تتعلق بالالوان الداخلة فى البن هو عملية توثيق من خلال اجراءات كافية لتقييم المخاطر الخاصة بمستويات معينة من المركبات المسببة للسرطان فى القهوة التى يستهلكها المصريون، والتحقق انها مرتفعة بدرجة كافية لتوليد اخطار رئيسية مسببة للسرطان.

- القضية الخامسة: اعتبار الملاحق الاختيارية الخاصة بمنتجات الالبان والاغذية البحرية، وغيرها من المنتجات الغذائية كمواصفات الزامية.

إن المنهج الحالى الذى يستخدم نظام "كودكس"، يقوم على وضع العناصر التى تخرج عن نطاق اتفاقات الاشتراطات الصحية والصحة النباتية والحيوانية، والعوائق الفنية على التجارة، فى ملحق كل مواصفة قياسية. وشروط هذه الملاحق هى اعتبار هذه العناصر فى المواصفة باعتبارها امور تجارية يتم تحديدها بين المشترى والبائع. إن مسودة المواصفات القياسية المصرية التى تم اعدادها خلال دراسة عام ١٩٩٧، وخلال الدراسة الراهنة، قد استخدم فى إعدادها منهج كودكس لتطوير المواصفات.وإذا جعلنا الشروط الموجودة فى الملاحق إجبارية (أو بنقل بعض الشروط من الملاحق ووضعها فى صلب المواصفة القياسية، وهو ما حدث فى بعض المواصفات ومن ضمنها منتجات الألبان ومنتجات الطماطم)، تكون مصر قد حققت فى الواقع تقدماً فعلياً ضئيلاً فى عملية مراجعة نظام مواصفاتها القياسية، وبشكل اساسى يكون كل ما تم انجازه هو بعض التحديث للشروط الفنية لسلعة ما، واعادة صياغة المواصفة القياسية. ويبدو ان هذا الامر يعكس اتجاه مصر لعقد العزم على ذلك بشكل قوى.

ومن الامثلة المحددة على ذلك منتجات الالبان فى المواصفات القياسية المصرية. ففى المواصفة القياسية الخاصة باللبن البودرة، أوصى الخبراء بأن الامور الخاصة بالانتشار فى الماء، واللون، والرائحة والطعم، لم تكن ضرورية لتحديد هوية او نوع اللبن البودرة، وينبغى نقلها الى الملحق الاسترشادى. وبدلاً من ذلك، نجد أن اللجنة الفنية للالبان ومنتجاتها، التابعة للهيئة المصرية للتوحيد القياسى قد استبقت الامور الخاصة بالانتشار، واللون، والرائحة والطعم داخل المواصفة القياسية، بالاضافة الى عودة المتطلبات الخاصة بالقابلية للذوبان ودرجة الحمضية من الملحق الى صلب المواصفة. وكان الجدل بشأن ذلك يشير الى اعتبار هذه التوصيات اما ضرورية بالنسبة لمصنعى الألبان المصريين (خاصية الانتشار)، أو كانت ضرورية لجودة المنتجات (درجة الحمضية).

## الخطوات التالية:

ينبغى ان نعترف بما يلى:

١- هناك احتياجات للدول الآخذة فى النمو مثل مصر والتى تتطلب ادخال شروط معينه فى مواصفات السلع، والتى قد لا تتواجد فى نظام مواصفات كودكس أو المواصفات التى تطبقها الدول المتقدمة.

٢-تقدم هذه الدراسة مجموعة من المواصفات القياسية التى لازالت فى مرحلة كتابة المسودات وتخضع لمزيد من المراجعة من جانب الهيئة المصرية للتوحيد القياسى، ولازال خبراء الدراسة قلقين بخصوص السياسات التى تطبقها مصر بشأن مواصفات السلع الغذائية، حيث لا تسمح بقدر كاف بإنشاء العديد من المواصفات بشكل ذات معنى.

## التوصيات:

١-ينبغى التوقف عن مراجعة المزيد من المواصفات القياسية المصرية لأن خبراء الدراسة لن يكونوا منتجين بشكل كاف مالم تحل قضايا السياسات مثل تلك المذكورة عاليه، وذلك على المستوى الوزارى. وبدون هذا التوجيه، يعتقد الخبراء القائمين بالدراسة أن الفلسفة لدى اعضاء اللجان الفنية فى الهيئة المصرية للتوحيد القياسى سوف تجعل التقدم صعب التحقيق. وفى هذا الصدد، يكون من الضرورى أن تؤخذ فى الاعتبار الشروط الخاصة باتفاقات القيود الفنية على التجارة TBT، والاشتراطات الصحية والصحة النباتية والحيوانية SPS، ومضامينها بالنسبة لالتزامات مصر كدولة موقعة على اتفاقات جولة أورجواي لاتفاقية الجات. إن القضية ليست هى ضرورة احداث تغيير كامل فى السياسات (بمعنى: استخدام المواصفات القياسية لتنفيذ السياسة الصحية القومية) ولكن القضية تتعلق بما اذا كانت مثل هذه السياسات تستطيع – فى شكلها الراهن – أن تتمشى مع مسؤليات مصر فى ظل اتفاقية الجات. فاذا لم تكن هذه السياسات تتمشى، عندئذ يكون التغيير ضرورياً.

٢-لكن يتم تنفيذ التوصية الاولى، يوصى الخبراء القائمون بالدراسة بعقد مؤتمر على مستوى عالى (لمدة يومين مثلاً) يضم السادة الوزراء ووكلائهم المعنيين، ورؤساء الجهات الاخرى المعنية، مثل: وزارة الصناعة (متضمنة الهيئة المصرية للتوحيد القياسى)، وزارة الصحة، وزارة التجارة والتموين (مشتملة على الهيئة العامة للرقابة على الصادرات والواردات)، وزارة الزراعة. ويجب ان يكون تركيز هذا المؤتمر على تلك السياسات ذات الاهمية بموضوع وضع المواصفات القياسية، على النحو المذكور فى هذه الدراسة. ومن المفضل ان يتم عقد مثل هذا المؤتمر فى مكان خارج القاهرة، حتى يكون اكثر تركيزا، واقل عرضه لقطع المناقشات لأمور طارئة.

ويعتقد الخبراء القائمون بهذه الدراسة انه قد يكون من المفيد لمصر ان تأخذ فى الاعتبار عدة انشطة يمكن أن تساعد على وضع بعض قواعد الارشاد والتوجيه بالنسبة لأى عمل مستقبلى يتعلق بمراجعة المواصفات القياسية المصرية، ولإثراء القدرات العلمية المصرية التى تحتاج اليها لوضع ومراجعة المواصفات القياسية. وفى هذا الشأن، تقدم التوصيات الاضافية التالية.

٣-ضرورة الاخذ فى الاعتبار تطوير المبادئ الارشادية لعمل اللجان الفنية للهيئة المصرية للتوحيد القياسى. وتتضمن هذه المبادئ الارشادية، على سبيل المثال، استخدام نظام مواصفات كودكس، والنصوص المرتبطة به الى اقصى حد ممكن. ويجب أن تتضمن هذه المبادئ ايضاً عملية ارشادية تتعلق بعلاقة السياسة القومية فى مجالات مثل الصحة، والسلامة، وحماية المستهلك، وربما التنمية الاقتصادية، بعملية وضع المواصفات القياسية. ولقد وجدت الهيئة القومية للاغذية فى كل من استراليا ونيوزيلندا مثل هذه

المجموعة من المبادئ مفيدة فى عملية تطوير المواصفات الغذائية، وذلك كجزء من برنامج مشترك بين استراليا ونيوزيلندا للرقابة على الاغذية. ومبادئ هذه الهيئة تشتمل على النقاط الاربع الآتيه:

- تقليل مستوى الوصف الموجود فى المواصفات القياسية من اجل تيسير عملية التحديث بالسماح بوجود مدى واسع من حيث استخدام المكونات والاضافات، ولكن مع الاخذ فى الاعتبار الزيادة المحتملة للحاجة الى معلومات المستهلك.
- تطوير المواصفات التى يكون من السهل فهمها، وجعل التعديلات بشكل واضح مستقيم المعنى.
- إحلال المواصفات التى تنظم غذاء الافراد بالمواصفات التى تنطبق على جميع الاغذية أو مدى معين منها.
- الاخذ فى الاعتبار امكانية تطبيق قوانين الصناعة كبديل للعملية الاجرائية.

ويشجع برنامج الهيئة القومية للاغذية فى استراليا ونيوزيلندا على الاتساق بين المواصفات الغذائية المحلية والمواصفات الغذائية العالمية عندما يكون هناك اختلاف بينهما.

٤- بالنسبة للمواصفات التى تحتمل الجدل، ينبغى الحصول على مراجعة خارجية على نفس المستوى سواء من الحكومات أو المنظمات الاخرى بخصوص المواصفات التى تعاد صياغتها. ويجب أن تكون سكرتارية كودكس إحدى هذه الجهات التى تقوم بالمراجعة. مثل هذه المراجعة الخارجية يجب ان تتضمن رغبة حقيقية من جانب مصر فى أخذ التعليقات التى تحصل عليها، وعمل تبرير موضوعى (متضمناً النواحى العلمية كلما احتاج الامر ذلك) عن سبب استبقاء الشروط التى أوصت الدراسة الحالية بالغائها او تغييرها. ويجب أن تكون هذه المراجعة بمثابة اضافة الى عملية الإعلام المعتادة لمنظمة التجارة العالمية بما يحدث فى هذا الخصوص.

٥- الاخذ فى الاعتبار امكانية مطالبة سكرتارية كودكس بتطوير مواصفات جديدة حيثما تكون مثل هذه المواصفات مفيدة لمساعدة مصر فى الوصول الى مواصفات عندما يكون الوصول الى اتفاق عام بشأنها امراً صعباً. وهذه المجالات، يمكن ان تشتمل على البن ومنتجاته، واللحوم ومنتجاتها متضمنة لحوم البقر المجمدة. إن استخدام الخبرة الدولية فى بيئة محايدة غالباً ما يكون مفيداً فى حل القضايا المعقدة والصعبة.

٦- إعداد ملخصات عمل فنية عن المجالات المحددة المتعلقة بالعلم والصحة المرتبطة بالمواصفات القياسية، والتى تمثل صعوبة فى تحقيق النجاح فى عملية مراجعة المواصفات. ومن هذه المجالات، العلاقة بين دهون اللحم ومستويات الكوليسترول لدى الشعب المصرى، واحتمال وجود مواد مسببة للسرطان ناتجة عن عملية تحميص البن. ويجب أن تكون مثل هذه الملخصات الفنية قائمة على ارضية علمية صلبة، وكاملة، وغير متحيزة، وتستخدم المبادئ الدولية المعترف بها فى تحليل المخاطر.

٧- تدعيم القدرات المصرية فى مجال تقييم الخطر متضمنة تلك الامور المتعلقة بالمعلومات الخاصة بالاستنشاق، وتقييم المخاطر. وقد يكون من الملائم ايضاً ان تؤخذ فى الاعتبار مجالات الخطر النسبى فيما يتعلق بالمواصفات القياسية المصرية للسلع الغذائية.

وفى الختام، ومع الاعتراف بأن مسودات المواصفات القياسية المصرية المنقحة تمت من خلال هذه الدراسة، فهى لازالت مسودات للمواصفات تخضع لمزيد من المراجعة، ومما يدعو الى الاحباط، انه بعد عامين من العمل فقد تحقق قدراً ضئيلاً من التقدم فى تصحيح أوجه القصور التى تمت الاشارة اليها فى تقرير عام ١٩٩٦ بعنوان (دراسة بحثية عن نظام الرقابة على الجودة فى مصر.) فيما يتعلق بمواصفات المنتجات الغذائية. ولازالت شروط الجودة غير الضرورية موجودة فى المواصفات، فى توصيات اللجان الفنية التابعة للهيئة المصرية للتوحيد القياسى.

وقد يكون من الملائم وقف الانشطة الخاصة بعمليات مراجعة المواصفات،على الأقل لفترة زمنية،ثم اعادة تقيم الموقف فى ضوء التزام مصر بضرورة احداث اصلاح ملموس فى مجال مواصفاتها الخاصة بالسلع الغذائية. والمؤتمر المقترح،والمشار إليه فى التوصية الثانية عاليه، قد يكون من وجهة نظر الخبراء القائمين بالدراسة – خطوة مهمة تالية لتحديد منهج العمل المستقبلى فى هذا الشأن. ومرة اخرى،ومن وجهة نظر خبراء الدراسة،ينبغى على مصر ان تظهر اهتمامها والتزامها باجراء اصلاح اجرائى فيما يتعلق بمجال المواصفات القياسية للمنتجات.

والنقطة التى تقلق الخبراء القائمين بالدراسة هى ان العديد من الشركاء التجاريين المهمين لمصر،قد اظهروا شعورهم بالاحباط بسبب العوائق غير التعريفية الناشئة عن سياسة مصر الحالية، التى تجعل مواصفات الجودة غير الضرورية ملزمة، وهى امور لا ترتبط باهتمامات قائمة على ارضية علمية صلبة فيما يتعلق بالصحة والسلامة.

وفى ضوء قيام مصر بالتوقيع على اتفاقيات الجات ومنظمة التجارة العالمية، فهى ملزمه بالغاء العوائق غير الضرورية وغير المبررة على التجارة فاتفاقات منظمة التجارة العالمية تصرح بوجود تدابير علاجية ضد الدول الاعضاء التى يزعم انها لم توف بالتزاماتها وتعهداتها، اذا نتج عن ذلك الغاء او إعاقة حقوق الدول الاعضاء الاخرى فى هذه الاتفاقات. وعلى حين يظهر الشركاء التجاريين الاساسيين لمصر، قدرا كبيرا من الصبر فى السماح لها باصلاح نظامها الراهن للمواصفات القياسية والرقابة على الجودة، فهناك اتفاق عام على ان العديد من عناصر النظام غير متسقة مع اتفاقات الاشتراطات الصحية والصحة النباتية والحيوانية، واتفاقات العوائق الفنية على التجارة فى ظل منظمة التجارة العالمية وحتى يتم تفادى التدابير العلاجية التى تتخذ ضد مصر من جانب شركائها، فمن الضرورى ان تظهر مصر تركيزها والتزامها وتحركها تجاه احداث إصلاح إجرائى فى مجال المواصفات القياسية للسلع، والا فان الشركاء التجاريين لمصر قد يفقدون صبرهم فى المستقبل القريب، ويبداون فى البحث عن تدابير علاجية فى ظل آلية منظمة التجارة العالمية لفض المنازعات.