

PN-ABC-320

**NUTRITION EDUCATION**  
**FOR**  
**FAMILY PLANNING WORKERS**

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## ACKNOWLEDGMENTS

Development Associates is pleased to make available to trainers and educators from maternal child health and family planning programs the manual "Nutrition Education for Family Planning Workers". We hope that both the subjects covered and the teaching ideas that are included will be of interest and that education and training personnel in health programs will find them easy to use.

As is frequently the case with manuals, this one is the product of the collaboration of many people. Drafted in English by Sally S. Smith, MPH, a Development Associates' consultant, it was translated into Spanish by Ms. Eugenia Monterroso, Non-Clinical Training Specialist of our regional training project for personnel in family planning programs.

The first Spanish draft of this document was reviewed by participants in a workshop on nutrition and family planning conducted in Guatemala in September, 1984, by Development Associates and the Asociacion Pro-Bienestar de la Familia de Guatemala (APROFAM) with collaboration from the Institute of Nutrition of Central America and Panama (INCAP). The participants, who represented programs in Bolivia, Brazil, Ecuador, El Salvador, Guatemala, Paraguay and Peru, gave many helpful suggestions concerning revisions that would make the manual more useful.

After the workshop, the Centro de Apoyo de Lactancia Materna (CALMA) of El Salvador carried out an overall review of the manual under a contract with Development Associates. The staff of CALMA incorporated suggestions made by the workshop participants and applied their extensive professional experience in nutrition to clarify concepts and expand on key themes. Unfortunately, for reasons beyond our control, the manual had to be published without the illustrations that were suggested by CALMA. Thus, we recommend that each instructor apply creativity in developing illustrations for the subjects presented. Finally, we would like to acknowledge the support of staff from the home office of Development Associates in the final review: Ann Lion, Materials Specialist, and our Administrative Assistants, Teresa Copping, Magaly Villamizar and Neisa Roman. Likewise, we

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## INTRODUCTION

The primary responsibility of family planning workers is to provide contraceptive services and counseling to families in their community. Any other services they are trained to provide must fit the time and resources they have available, and must not interfere with their primary purpose. Such is the case with nutrition services, and this has been the dominant consideration in the development of this training program.

There are many reasons why the family planning setting is appropriate for nutrition services.

First, women of childbearing age and young children are two of the population groups most at risk for malnutrition, and the consequences of malnutrition in these two groups are of particular concern. Malnourished women are at higher risk for complicated pregnancies, low birthweight babies, sickness, and death. Malnourished children may suffer retarded growth, delayed mental development, more illness, and death. The family planning setting provides access to these two high-risk groups.

Nutritional counseling within the family planning setting may help a woman to improve her health status, increasing her chances for a healthy, normal pregnancy, and increasing her ability to care for those children she already has. Children benefit from these nutrition services because their chances of being born strong and healthy improve with their mother's improving health. In addition, attention is focused on children at critical periods - when they are first born, when they are being weaned, when their mother is considering having another child. The child faces a high risk of malnutrition at these critical points, points when the mother is often in contact with the family planning worker.

In addition, women face nutritional risks from certain contraceptives. Provision of nutrition counseling within the family planning context can help to prevent or alleviate such problems. It is important that both family planning workers and women understand how contraceptive methods may affect them, so that an informed choice can be made. The effects of contraceptives on nutritional status must be taken into account when considering the long-term health of a woman.

The purpose of this training program is to enable family planning workers at the field level to incorporate basic nutrition counseling into their usual family planning activities. It has been designed with their time and workload constraints in mind. The information covered has purposely been kept simple and easy to understand. It is designed to provide the family planning worker with a basic understanding of: nutrition and malnutrition; the special dietary needs of mothers and children; the inter-relationships of nutrition and family planning; the specific nutritional effects of contraceptive methods; the importance of breastfeeding and counseling and teaching skills that they may use within their own work setting. It is designed to provide them with opportunities to share their knowledge, use new skills and information, and develop ideas appropriate to their own individual work situation.

The reference materials listed under each task provide a great deal of indepth information on nutrition, including specific diets for children, quantitative nutrient requirements, the dietary requirements of pregnant and nursing mothers, problems associated with breastfeeding, etc. Both trainer and trainee can locate material within these references to further their knowledge about nutrition, and to give them as much detailed information as they may wish to use. This detailed information has not been included in this curriculum, as it is readily and easily available in numerous sources. Rather, the contents of this training program have been kept general, simple, and basic, to enable the family planning worker to utilize the information within the constraints of their working situation.

## CONTENTS

The curriculum is divided into five units. Each of the first four units covers a different aspect of nutrition within the family planning context. The fifth, and final, unit contains evaluation activities for all the preceding units.

Unit I provides an introduction to nutrition, covering the basic food groups and the concept of a balanced diet, the special dietary needs of pregnant mothers, lactating women and young children, signs and consequences of malnutrition and simple physical assessment techniques to determine nutritional status.

Unit II covers the broad inter-relationships of nutrition and family planning. It is information primarily intended for use at the community level. Topics covered include the effects of age, spacing, parity, and family size on the nutritional health of the mother and child; breastfeeding, nutrition, and family planning interactions; and teaching methodologies for use in the family planning context to teach nutrition.

Unit III focuses on the special effects of contraceptive methods on the nutritional health of the individual woman. Topics covered include the nutritional effects of contraceptives, contraceptives and the breastfeeding woman, counseling the breastfeeding woman about family planning, and community resources and referral. It is designed to address the nutritional problems that might be encountered in the one-on-one family planning counseling situation.

Unit IV reviews successful breastfeeding. Common myths and misunderstandings regarding breastfeeding are discussed as well as preparation for breastfeeding and the causes of, and solutions to, common problems encountered by breastfeeding women.

Unit V provides evaluation instruments for an overall summary review of the four previous units, including a final evaluation that can also be used as a pretest. In addition, several summary activities are included to help trainees review all the material of the four units and creatively apply the new knowledge they have acquired.

Appendix I provides a detailed outline of the contents of the units, including the tasks covered in each unit and the corresponding learning objectives for each one.

Appendix II offers a glossary of some of the technical terms that are to be found in the text.

## ORGANIZATION OF THE UNITS

Following a brief introduction, each unit has a Pre-test. The questions on the pre-test cover the most important ideas found in the complete unit. The use of the pre-test can help the instructor determine which areas need emphasis and in-depth explanation as well as define the range of knowledge found among the trainees.

The Pre-test is followed by a series of Tasks which include the teaching materials. Each Task represents a function that could be assigned to a family planning worker, depending on his/her work site and job responsibilities. Some of the functions are more appropriate for workers in general maternal-infant care programs, whereas others can be easily incorporated into the activities of field personnel working in vertical family planning programs. For example, the task of educating pregnant women regarding preparation for successful breastfeeding is more appropriate for a worker involved in providing prenatal care than for a volunteer distributor in a community-based family planning program.

The following teaching materials are found under each Task:

- o Purpose
- o Learning Objectives
- o References
- o Important Ideas
- o Suggested Activities
- o Suggested Teaching Materials

The first of these, Purpose, describes the use of the material that follows under that task. The purpose may be related to teaching facts, analysis of attitudes, applying material learned previously, or the practice of skills.

The explanation regarding the purpose of the lesson is followed by a series of Learning Objectives. These describe what the trainee should be able to do after finishing the lesson.

Listings of References are given for each task to provide both the instructor and the trainee with sources of additional information on the subject being addressed.

These are followed by a series of Important Ideas which highlight the basic information that the trainees should know in order to carry out the task. Instructors are encouraged to add more key ideas, as appropriate, to supplement those given in the text.

After the section on important ideas, a variety of Suggested Activities are given. These are designed for presenting the information covered under Important Ideas in a variety of ways to motivate trainees to think about different means of applying this information to their work. The important ideas can be presented alone, or in the context of one or more of the activities. The activities can and should be adapted to local circumstances and customs. The suggested activities should be seen as examples of different ways of teaching nutrition (trainers should feel free to use the curriculum creatively, making their own adaptations).

The activities described employ a wide variety of teaching techniques. The curriculum has been purposely designed to involve trainees in the learning process as much as possible, keeping to a minimum the use of passive techniques such as lectures. In view of the fact that the trainees will be called upon to share their knowledge in a variety of settings when they return to work, they should be motivated to experiment with a variety of teaching methods. What better way of learning teaching techniques than to follow the example of their own trainers! Thus, instructors are encouraged to be innovative, using the Suggested Activities to stimulate their own creativity and actively involve trainees in sharing their own knowledge, skills and experiences.

Following the suggestions on training activities, there is a list of materials that the instructor would need to carry out the activities. This list is titled Suggested Teaching Materials. The units end with suggestions regarding different Evaluation Activities that can be flexibly applied depending on the depth and formality of evaluation desired. The evaluation activities are designed to measure the degree to which the trainees have learned the information presented and can apply it in solving problems. As is the case with the pre-test, important concepts and ideas from the complete unit are incorporated into the evaluation activities. These activities can be combined with the application of the pre-test (used as a post-test), or be used as supplemental material to make the evaluation process more dynamic and interesting.

#### REFERENCES

1. Nutrition for Developing Countries - M. King. Oxford University Press. London. 1972.
2. Where There is No Doctor - D. Werner. The Hesperian Foundation. 4th Edition. 1980. (The Hesperian Foundation, P.O. Box 1692, Palo Alto, California 94302 U.S.A.)
3. The Womanly Art of Breastfeeding - La Leche League International. 3rd Edition. 1981. (La Leche League International, 9616 Minneapolis Avenue, Franklin Park, Illinois 60131, U.S.A.)
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16. Helping Health Workers Learn - D. Werner and Bill Bower. The Kesperian Foundation. 1982.

#### SPECIAL NOTE

Specific references given in the Units are for the Spanish-language editions of all the reference books. Page numbers may not be identical in the English-language version of each book.

UNIT I

INTRODUCTION TO NUTRITION

## INTRODUCTION

This unit covers basic concepts of nutrition, the special dietary needs of women and children, causes and symptoms of malnutrition, and simple physical assessment to determine nutritional status. It is intended to provide family planning workers with very basic knowledge about nutrition, enabling them to identify special dietary problems and to counsel clients on diet improvements. The five components of this unit follow: a pre-test, three tasks, and suggestions concerning evaluation activities.

UNIT I

PRE-TEST

In order to determine to what extent the group is familiar with basic nutrition concepts and information, it is suggested that a brief pre-test be conducted. This will also indicate to the trainer differences in knowledge within the group. More knowledgeable individuals can be utilized as additional resource people and assistants. This can help encourage group cohesiveness and participation.

The following questions are suggested. They may be put to the group as a whole, orally, or to individuals, orally or in written form.

1. Name the three food groups. Name two foods that belong to each group.
2. What types of food should a person eat every day in order to be healthy?
3. Name five foods that are important for health.
4. Name two foods that a 6-month-old child should be eating.
5. Describe how the diet of a woman should change when she becomes pregnant.
6. State two causes of malnutrition.
7. Describe two symptoms or signs of malnutrition.
8. State two results of malnutrition in children.
9. State one way in which a food taboo might influence malnutrition.
10. What is nutrition education?

UNIT I

**TASK 1:** Communicate correct information about the basic food groups, what foods belong to each group, and how each group contributes to a healthy body.

**PURPOSE:** To teach the family planning worker to classify foods so that this information may be transmitted to others.

**LEARNING**

**OBJECTIVES:** Following this lesson, trainees should be able to:

- 1a. Name the three major food groups by their nutritional function.
- 1b. State two categories of food that fit into each food group (Ex: grains, meats, etc.).
- 1c. Describe what function each food group performs in the body.
- 1d. State the reason why iron is important and name three foods that provide it.
- 1e. Name five locally available foods that fit into each food group.

**REFERENCES:**

- o Nutrition for Developing Countries - M. King, pp. 50-60<sup>\*</sup>.
- o Para la Educadora del Hogar - E. Gally, pp. 25-33.

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\* Page numbers correspond to Spanish-language edition of this book.

**IMPORTANT IDEAS:**

1. A good diet is important for health.
2. Nutrition education teaches us how to have a good diet using locally available foods.
3. To have a good diet, we must eat a variety of foods.
4. Food can be thought of in three groups:
  - a. energy foods
  - b. body-building foods
  - c. protective foods
5. Energy foods provide our bodies with fuel to do work. Examples of energy foods are:

grains  
cereals  
oils and fats  
sugar  
roots  
tubers

6. Body-building foods help the body grow and repair itself. Examples of body-building foods are:

meat: beef, fish, chicken, etc.  
eggs  
milk  
beans  
cheese

7. Protective foods help maintain the body's health. Examples of protective foods are:

fruits  
vegetables

8. Iron is a mineral that the body needs to form blood. It is especially important that menstruating women and young children eat enough food with iron. Examples of foods with iron are:

meat - especially organ meats  
fish  
dark green vegetables (spinach, swiss chard, radish leaves)

9. It is important that people eat foods from each of the three groups, plus foods with iron, every day.

10. Some things we eat have little value for our bodies. Examples are: soda, beer, tea, coffee, candy.

11. Some foods fit into more than one of the food groups. For example, beans fit into both the body-building and protective groups and rice fits into the energy and protective food groups.

12. Mothers and children have special dietary needs, which we will discuss later.

The above points may be presented in a variety of ways.

It is suggested that a question and answer discussion with the help of visual aids will help the trainees to grasp and remember the concepts. Food samples or pictures of foods, and a flip chart, blackboard, or flannel board may be useful teaching aids. Following presentation of the above, one or more of the suggested activities listed below can be carried out to reinforce the lesson and enable the learners to apply their knowledge to their local setting.

**SUGGESTED ACTIVITIES:**

1. Divide the group into four sections. Assign a food group (energy, body-building, protective, iron) to each group and ask them to list all local foods they can think of that would fit into that category. Allow 10-15 minutes, then have each group present their list to the entire group, asking for further additions, deletions, differences of opinion. Which foods fit into more than one group? Discuss.
2. Divide the group into teams of 3-4 people. Ask all of the teams to consider the following: When returning to their communities they will be talking with the community about food groups and which foods fit into them. What would be an appropriate teaching aid to use? Ask each team to design such an aid and present it to the entire group for commentary and critique.
3. Give each individual or small group a list of locally available or familiar foods. Ask them to indicate into which category each food should go. Which foods go into more than one category? Ask them to plan a balanced diet for a family for one day using foods from all categories.
4. Have each person write down the everyday diet of their community, and then indicate into which categories the foods should go. Is there anything missing in the diet? Are there foods available that people do not eat? Why not? Do people eat more foods from some groups than from others? Does the local diet change with the change of seasons?

**MATERIALS SUGGESTED:**

Blackboard, flipchart, or flannel board

Food pictures or food samples

Large paper

Markers, pens, chalk, or other writing instruments

UNIT I

**TASK 2:** Describe the special dietary requirements of mothers and children.

**PURPOSE:** To teach the family planning worker the special dietary needs of mothers and children so that this knowledge may be transmitted to others.

**LEARNING**

**OBJECTIVES:** Following this lesson, trainees should be able to:

- 2a. Name the best food for an infant 0-4 months old.
- 2b. State two essential components of the diet of an infant 6-12 months old.
- 2c. State four essential components of the diet of a 6-12 months old infant and state the order in which they should be added to the diet.
- 2d. Name the food group of greatest importance in the diet of a 1-5 year old child.
- 2e. Name the two food groups of greatest importance in the diet of a pregnant or nursing mother.

**REFERENCES:**

- o Nutrition for Developing Countries - M. King, pp. 79-94\*.
- o Para la Educadora del Hogar - E. Gally, pp. 33-40.
- o The Womanly Art of Breastfeeding - La Leche League International, pp. 33-45\*.

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\* Page numbers for Spanish edition.

**IMPORTANT IDEAS: Objectives 2a.; 2b.; 2c.; and 2d.**

1. Breastmilk is the only food a baby needs for the first 4-6 months of life.
2. Breastmilk provides all the nutrients the baby needs for growth and development, plus it is clean, always ready, and has special properties which help protect a baby from sickness.
3. If bottlefeeding is necessary, special care must be taken to make sure the bottle and the milk are clean, and that the formula is mixed with the correct amount of boiled or potable water.
4. Between 4 and 6 months of age, a baby begins to need more than just breastmilk.
5. Foods should be introduced slowly, one at a time, to the diet of the breastfeeding child.
6. Porridge and cereal are the first foods that should be introduced, fed to the baby with a spoon after normal breastfeeding.
7. Once the baby is used to porridge, fruits and vegetables may be introduced, one at a time, mashed and made easy to digest.
8. After the baby is used to porridge and some fruits, body-building foods such as mashed boiled eggs can be introduced slowly, as long as they are prepared in a way that is easy for the child to ingest.
9. Breastfeeding should continue for two to three years if possible. It is a very important body-building food for the rapidly growing child.
10. A small child must eat frequently (at least 4 or more times per day). Its stomach is small and it cannot eat enough to be healthy if it only eats 2-3 times per day.
11. By one year of age a child should be eating most of the foods the family eats, well mashed, and with very little salt or spices.

12. A child 1-5 old years needs extra body-building foods so he can grow well. The family must make sure he gets enough body-building foods to eat.

The above may be presented in several smaller lessons. It is suggested that a question and answer discussion may be a good technique, both to build on what the trainees already know and to involve them more actively in the learning process. Visual aids--pictures, food samples, or other appropriate aids--may be used to emphasize the above points.

#### SUGGESTED ACTIVITIES:

1. Give each person a sheet of paper, divided into three columns marked 6 months, 1 year, 4 years. Under each heading have trainees write down the normal diet of a child that age in their community. Make sure they indicate if milk (bottle or breast) is a part of the diet. At the bottom of the page have each person list: (1) How long are children breastfed?; (2) When are other foods introduced in the diet?; (3) What is the first food a child eats?; (4) Are there any foods infants/children are not allowed to eat? Why not?

In small groups or as a whole group, discuss these diets. Are they adequate? How could they be improved? Are there available foods that children don't get that they could or should get?

2. Have trainees imagine that they are talking to a mother about infant diet. What kinds of questions or problems might the mother have with the diet? Have trainees write down the questions or problems they think of and possible solutions. Open a discussion, asking for examples. Can the whole group think of helpful answers to these questions/problems? It may be helpful to role-play a mother and family planning worker talking, to give practice in answering these questions.
3. Show pictures or samples of different foods. Ask the group if this is an appropriate food for a 2-week old baby, 3-month old, 4-month old, 8-month old, 1-year old, etc. Ask how each food should be prepared for a baby (juiced, mashed, small pieces, or some other form of preparation).

**IMPORTANT IDEAS: Objective 2e.**

1. A mother must have a varied and balanced diet if she wants to have strong healthy children.
2. A pregnant or nursing mother particularly needs to eat extra body-building foods to help her baby grow.
3. She also especially needs lots of protective foods like green leafy vegetables and citrus fruits to keep herself and her baby healthy.
4. The beginning of a pregnancy is a good time to correct faulty eating habits a woman may have so that by the fourth month when the baby begins to grow rapidly she will be consuming an optimal diet for the remainder of the pregnancy.
5. A nursing mother should drink extra water, juices, soups, or milk to help her produce enough milk.

**SUGGESTED ACTIVITIES:**

1. Have the class describe the normal diet and eating habits of women in their community (for example, do the women eat after the men are finished? etc.). Is this diet adequate? How might it be improved? Are there customs or taboos that keep women from eating certain foods? Which foods? When are these foods prohibited (during pregnancy, breastfeeding, menstruation)?
2. Keeping local customs and available foods in mind, have small groups of 3-4 trainees plan a daily or weekly menu for a pregnant or lactating woman. What should be eaten at the usual meal times? What should be added to the normal diet, and when? The menus may then be presented for general discussion.
3. Pair off. Have each pair write a dialogue between a mother and family planning worker in which the family planning worker is trying to give the mother nutritional advice. Have each pair present their dialogue. Have the group discuss any problems that might arise, and possible solutions.

**SJGGESTED MATERIALS:**

Pictures or samples of foods

Baby pictures

Pictures of pregnant or nursing mothers

Flannel board, chalkboard, or flipchart

UNIT I

**TASK 3:** Describe in basic terms the causes and the results of malnutrition.

**PURPOSE:** To teach family planning workers the basic signs and consequences of malnutrition so that they can effectively counsel and give nutritional advice and refer problem cases to professional services.

**LEARNING**

**OBJECTIVES:** Following this lesson, trainees should be able to:

3a. Name two causes of malnutrition.

3b. State two results of malnutrition,

1) in children

2) in mothers.

3c. Given a sample diet, identify the missing components.

3d. Describe three important local taboos and customs that influence malnutrition.

3e. State three physical signs or symptoms of malnutrition.

**REFERENCES:**

- o Child Health in the Tropics - D.B. Jelliffe, pp. 53-68\*.
- o Review of Nutrition and Diet Therapy - S.R. Williams, pp. 160-172\*.
- o Where There is No Doctor - D. Werner, pp. 1-11, 107-124\*.

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\* In Spanish edition

**IMPORTANT IDEAS: Objectives 3a.; 3b.; 3c.**

1. Malnutrition is caused by the lack of essential parts of the diet.
2. The most common nutritional shortcomings are:
  - a) Too little food or lack of food - this can cause marasmus or protein-calorie malnutrition (PCM).
  - b) Lack of a specific element that is important in the diet. Examples are:
    - o Lack of body-building proteins--this can lead to "Kwashiorkor," also known as "the sickness which comes to the child taken from the breast," when other foods with little protein are substituted for breast milk.
    - o Lack of iron--this can lead to anemia. More foods containing iron should be consumed.
    - o Lack of iodine--this can lead to goiter. The use of iodized salt prevents this problem.
    - o Lack of Vitamin A--this can lead to night blindness and other eye problems. More protective foods should be eaten, especially those that are dark green or yellow.
3. Lack of body-building foods may cause underweight babies and growth failure in children and insufficient or less nourishing breastmilk in mothers.
4. Certain problems with the skin, eyes, teeth, hair, and bones may be the result of a lack of protective foods.
5. In children, malnutrition results in:
  - a) failure to grow and weight loss
  - b) frequent illness, which results in further weight loss
  - c) mental damage, reduced learning ability

6. In mothers, malnutrition results in:

- a) underweight babies
- b) insufficient breastmilk (in severe cases)
- c) frequent illness
- d) lack of energy for work and child care

The above may be presented separately or in the course of the suggested activities listed below. It is suggested that frequent involvement of the trainees through questions and discussion will help keep them motivated and willing to learn. The assistance of visual aids may also help to reinforce the points covered.

**SUGGESTED ACTIVITIES:**

1. Using country-specific data, have individuals or groups identify the most prevalent types of nutritional deficiencies in the country (PCM, Vitamin A, Iodine, etc.). Are foods available locally which could correct these problems? What foods? Why aren't they currently eaten? (expensive, taboos, seasonal variation in availability, etc.)
2. Divide the group into three-to four-person small groups. Have each group develop two "case studies" of an individual diet, with some form of malnutrition in the diet.

**Example:** Maria is a mother currently breastfeeding her second child, who is 6 months old. For breakfast, Maria drinks a cup of tea and eats two tortillas. For lunch, she eats \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_. For dinner, she usually has \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_.

Have each group present their cases to the entire group, asking that the whole group identify the dietary problem, offer possible solutions, note any special considerations (i.e., breastfeeding mother), and indicate what available food might solve the malnutrition problem.

3. Use food pictures or samples to show various combinations of food, suggesting them as a diet. If a person ate this diet, would they be healthy? If not, what might be wrong with them? What food(s) might fill the gaps in this diet?

4. Prepare a "Food Calendar," listing by each month the most abundant and low-cost foods from each food group that are available seasonally. For example:

	<u>Body-building</u>	<u>Energy</u>	<u>Protective</u>
January	Cheese Eggs Fish	Potatoes Rice	Green beans Oranges Carrots Swiss chard

Ask the group to identify foods available in each season that would help prevent nutritional deficiencies.

**IMPORTANT IDEAS: Objective 3d.**

1. All people have customs and traditions related to food.
2. It is important to understand these customs in order to give nutrition advice that is acceptable and will be followed.
3. Some of these customs are health-protecting and people should be encouraged to continue them (for example, drinking lots of coconut milk for kidney problems).
4. Some of these customs are harmful or detrimental to health. People should be encouraged to change harmful customs (for example, keeping menstruating women from eating citrus fruits).
5. In many communities there are myths or taboos that prohibit people, or certain groups of people, from eating certain foods (for example, breastfeeding women should not eat avocados because the milk would turn green).

**SUGGESTED ACTIVITIES:**

1. Have the group discuss food customs of their country or local community. Compile a list together of customs that are helpful, those that are harmful, and those that are neutral. Have trainees think about those customs that especially affect women and young children. What helpful customs should be encouraged? Can harmful customs be discouraged? If so, how?

2. Divide a chalk board or large piece of paper into 3 columns labeled: Children, Women, and Men. Ask the group to tell you: Are there some foods particularly eaten by one group? Are there some foods not allowed to be eaten? Why not? Discuss which food customs and traditions go along with the knowledge about nutrition that has been learned. Discuss whether some of the food taboos cause malnutrition or other problems. Discuss how beneficial customs can be reinforced, or harmful ones changed. How easy is this to do? (This may also be done in small groups, by geographic region, or by individuals for their community).
3. Show pictures or samples of known "taboo" foods. Ask the group if everyone can eat this food. Who can't? When is it taboo? Why? Does this cause any nutritional problems? If so, how can the problem be solved? What other foods could one eat instead?
4. Pair off. Have individuals interview each other about the normal daily diet in their community. Ask general questions about what a person would normally eat in a 24 hour period (i.e., What does someone eat for breakfast? dinner? in-between? etc.) Ask for quantities as well as what items. Have each individual then assess the other's diet, suggesting any improvements. The pair may also discuss any food customs that may be important in this dietary assessment.
5. As a "homework" assignment, have each individual interview a mother about her diet or her child's diet. Try to determine what the person ate in the last 24 hours. Keep questions general--you don't want people to tell you what you want to hear, you want them to tell you the truth. Have the class assess the interviews--was it easy to get information from people? Did they talk openly about what they eat? What problems did you encounter? How might these problems be avoided or solved?

**IMPORTANT IDEAS: Objective 3.e.**

1. There are many signs and symptoms of malnutrition which we can look for to tell us about nutritional status.

2. In children, the best way to monitor nutritional status is to regularly measure weight and height and to chart growth. But there are also simple observations you can make that will help you identify a malnourished child.
3. In general, a healthy person acts alert and lively. A malnourished person is apathetic, listless, weak.
4. Overall appearance--ask yourself how the person looks--is he or she thin, small, with wasted muscles? Is the person obese? Does he or she appear well-developed, strong-looking? If it is a child, is it very small for its age?
5. Hair--the hair of a healthy person is shiny and lustrous. A malnourished person may have dry, discolored hair.
6. Eyes--a healthy person has shiny, clear eyes. A malnourished person's eyes may look dry. They may look infected, and the person may have trouble seeing at night. You can easily check to see if a person has anemia by looking at the color of the inside of the lower eyelid and of the base of the fingernails. When you gently pull down the eyelid, the inner membrane should look dark pink or reddish. If this and the fingernails are pale, this may indicate anemia.
7. Skin--A healthy person has smooth, clear skin. A malnourished person may have dry skin. He or she may have a rash or eczema and may look pale.
8. Legs and feet--A healthy person has strong legs and feet. A malnourished person may have swollen legs and feet, and the legs may be weak. To check for swelling, press your thumb into the skin near the ankles, and release. Does your thumb print remain in the skin? If yes, the legs are swollen.
9. Digestive system--A healthy person does not have problems digesting food. A malnourished person may have little appetite, vomit if forced to eat, and pass loose, pasty stools with undigested pieces of food.

10. It is important to look for these signs of malnutrition, especially in children, and refer them for treatment.
11. In women, anemia is an especially important problem. Symptoms of anemia are tiredness, lack of energy, weakness, and pale eyelid membranes and fingernails.

**SUGGESTED ACTIVITIES:**

1. Have the class visit the pediatric ward of a hospital, a nutrition rehabilitation center, or a day care center. Ask them to visually evaluate the nutritional status of the children. Which children are malnourished? Which are healthy? After their return to the classroom, have the class discuss their "findings," any disagreements, etc.
2. Bring several children to the class. Have each individual write down an assessment of each child's nutritional status. Have the class compare their findings.
3. In small groups, have the class write a song(s) to help them remember what signs to look for to tell if a person is healthy or malnourished. Have the small groups present their songs to the whole group. The songs can be taken back to each person's community to help everyone learn how to spot malnutrition.
4. Divide the group in pairs. Have the pairs develop a check list for the examination of a child. Beginning with the general appearance of the child they should write down each step to be taken during the examination and the indicators of malnutrition they would look for at each stage of the assessment. Example:

Steps in the Exam

Signs/symptoms of malnutrition

General appearance

apathetic, distracted, not alert

skin

\_\_\_\_\_

eyes

\_\_\_\_\_

hair

\_\_\_\_\_

**SUGGESTED MATERIALS:**

Food pictures or samples

Pictures of malnourished children

Nutritional data from various countries, regions, or communities

Flannel board, chalk board, or flipchart

## UNIT I

### EVALUATION

One or more of the following evaluation activities may be used: There is also a final evaluation of the four units in Unit V.

1. Repeat the Pretest.
2. Give a Post Test in the form of activities such as the following:
  - a. Give each student a list of local foods. Have them categorize the foods according to the three food groups.
  - b. Give each student a list of foods. Have them label what type of food each one is (i.e., grain, meat, etc.).
  - c. Ask the students to write a brief story about a malnourished child that documents two causes of his malnutrition.
  - d. Provide each student with a drawing of a child. Ask them to write on the drawing the physical signs they would look for to evaluate the child's nutritional status.
  - e. Give each student a list of food taboos. Ask that they classify these in three columns as helpful, neutral or harmful.
3. Have each individual design a one-day diet, utilizing locally available foods, for:
  - o a pregnant woman
  - o a three-year old child
  - o an eight-month old baby
  - o a family, consisting of a woman and her two children, one of whom is one year old and breastfeeding, the other four years old.

4. Have the trainees design a short educational activity that they would carry out in their community about nutrition. What information would they include? How would they present it? What materials would they need?

**UNIT II**

**NUTRITION AND FAMILY PLANNING**

## INTRODUCTION

This unit introduces the family planning worker to the interactions between nutrition and family planning. Topics covered are: the effects of age, parity, number of children, and the spacing of pregnancies on the health of the mother and the child; the interactions of breastfeeding, nutrition, and family planning; and teaching skills for effective education and counseling. The primary purpose of this Unit is to enable the family planning worker to understand the more general, population-wide effects of nutrition and family planning, and to communicate this information effectively to the community in which he or she lives.

The Unit includes a pre-test, three tasks, with learning objectives and activities included for each task, and suggestions for evaluation activities.

UNIT II

PRE-TEST

The following set of questions is suggested to determine the initial knowledge of the class.

1. How long does it take for a woman's body to fully recover from pregnancy?
2. What is recommended spacing between pregnancies?
3. Between what ages is it recommended that a woman bear her children?
4. State one effect of family size on the nutritional health of the family.
5. Describe one effect of low birthweight on a child.
6. State 2 ways in which family planning can help improve the nutritional status of mother and child.
7. Explain 2 reasons why breastfeeding is important to a child.
8. What is the "displaced child syndrome?"
9. Name 2 ways that breastfeeding benefits a mother.
10. State 2 risks of bottlefeeding.
11. Name 2 teaching methods, 2 advantages and 2 disadvantages of each.
12. Why is it important to use a variety of teaching methods?

UNIT II

**TASK 4:** Communicate how nutrition and family planning interact.

**PURPOSE:** To teach the family planning worker to identify factors that influence the nutritional status of mothers and their children which family planning might affect, so that they might communicate this information to others.

**LEARNING**

**OBJECTIVES:** At the end of this section, trainees should be able to:

- 4a. State how long it takes for a woman to fully recover from pregnancy and why.
- 4b. Explain 2 ways in which birth-spacing affects the health of a woman.
- 4c. Describe 2 ways in which a woman's age can affect her pregnancy.
- 4d. State 2 ways in which parity affects a woman's nutritional status.
- 4e. Explain 2 ways in which birth-spacing affects the health of a child.
- 4f. State 2 ways in which a mother's age can affect her child.
- 4g. Describe 2 ways in which birth order can affect a child's nutritional status.
- 4h. State 2 reasons for low birthweight.
- 4i. Describe 2 ways in which low birthweight affects a child.

- 4j. Name 3 ways in which family planning can help improve the nutritional status of a woman.
- 4k. State 3 ways in which family planning can help improve the nutritional status of a child.

REFERENCES:

- o Family Planning: Its Impact on the Health of Women and Children - D. Maine, pp. 9-38\*.
- o Healthier Mothers and Children Through Family Planning, Population Reports, Series J, Number 27, May-June 1984.
- o Ejercicios de Participacion Aplicados a Cursos de Planificacion Familiar, APROFAM, 1984.
- o Mothers and Children: Bulletin on Infant Feeding and Maternal Nutrition. Vol. 4, No. 1. 1984.

IMPORTANT IDEAS: Objectives 4a.; 4b.; 4c.; 4d.

1. It is hard on a woman's body to be pregnant, bear a child, and breastfeed.
2. It takes about 18 months for a woman to fully recover from a pregnancy and breastfeeding.
3. A woman who does not get adequate nutrition can become malnourished easily, especially under the extra stress of pregnancy and lactation.
4. A malnourished woman is at higher risk of complicated pregnancy, low birthweight babies, sickness, and death. The risks are even greater if she is very young, is old or has had several closely-spaced children.
5. A malnourished woman's breastmilk may also decrease in quantity and in extreme cases in both quantity and quality.

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\* Spanish edition.

6. Problems for mothers are especially likely if the pregnancies are:

Too soon--having children when the mother is less than 18 years old.

A woman's body is still growing itself. There is increased risk of malnutrition. She needs extra body-building and protective foods.

Too late--having children after age 35.

Increased risk of complicated pregnancies.  
Increased risk of birth defects.

Too many--more than four children.

Each pregnancy makes it harder for the woman to recover.  
Increased risk of malnutrition.  
Less time to spend with each child.  
Less food for each family member.

Too close--less than three years apart.

The woman's body doesn't have time to recover.  
Increased risk of malnutrition.

7. For the best health of mothers and children:

1. Pregnancies at least two to three years apart.
2. Mother between 18 and 35 years old.
3. No more than 4 or 5 children.

The above points are very important and complex. Their presentation within the context of a discussion that involves the trainees may facilitate understanding and relate the concepts to their own context.

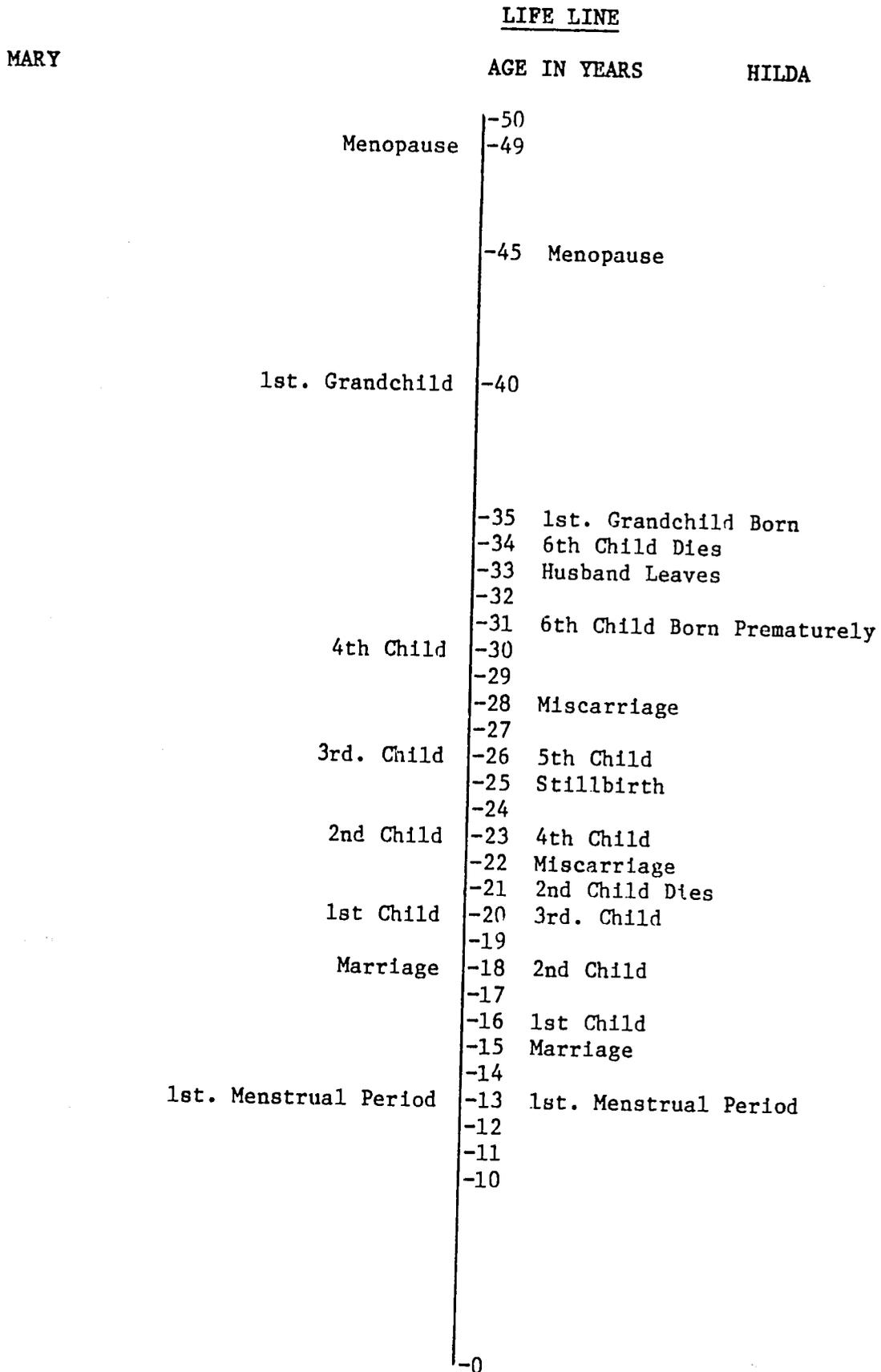
**SUGGESTED ACTIVITIES:**

1. Divide the trainees into three groups, assigning one group the topic "age", another "parity" and the third "birth-spacing". Ask them to discuss cases they

have observed in real life (family members, neighbors, mothers in their community) in which the assigned factor has affected the health of the mother and her children. Ask the groups to present their cases after 20 or 30 minutes of discussion.

2. Have the group discuss ways in which they might convince their communities of the importance of birth-spacing for a woman's health. What points could they raise? What problems might they encounter? What solutions to these possible problems can they suggest?
3. Divide the group into groups of 3 to 4 trainees. Have each group draw a time line to represent the life of a woman in their community. It may help them to think of one particular woman to use as an example. On the line, list 1st menstruation, marriage, pregnancies, menopause, and any other important events. On the other side of the line, show the life of a woman, taking into account what they have just learned about spacing, age, and parity. Have the groups discuss the differences between the 2 women's lives. How might they use this information in their communities? (See examples on following pages).
4. Divide the group into small groups of 3 to 4 trainees. Have each group create a story that explains the benefits of spacing, of childbearing at an appropriate age, and of moderate parity for a woman's health. If in a rural area, they might use examples from farm life or agriculture: what happens when an animal has too many offspring? If she is very young when she gives birth? What does a garden look like when it has many seeds planted too close together? etc. Be creative. Have each group relate its story to the whole group for comments and discussion.

EXAMPLE 1.



EXAMPLE 2:

LIFE LINE  
AGE IN YEARS

CASE A

CASE B

- o Age at marriage or union?
- o Age of the mother when her first child was born?
- o Total number of pregnancies?
- o Current age?
- o What might be her current health status?
- o What is her relationship with her husband or partner?
- o How are relationships with her children?
- o Are her children healthy?
- o How well has the family done? (income, possessions, etc.)
- o Other observations...

Conclusions: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

IMPORTANT IDEAS: Objectives 4e.; 4f.; 4g.; 4h.; 4i.

1. During pregnancy, the child inside the mother also needs food to grow.
2. It gets this food from the mother. This is why the mother must eat extra food during pregnancy--she is feeding two people (however she does not need to eat twice as much).
3. If a woman is malnourished or unhealthy before she becomes pregnant, the baby cannot get the food it needs to grow well when she becomes pregnant. It may be born underweight and small.
4. If she does not eat enough during pregnancy, the baby may also be born small and underweight.
5. A low birthweight baby is more likely to be sick often, and to die.

6. Problems for babies are:

When mothers are:

Too young (under 19 years old)

Too old (over 35 years old)

When pregnancies are

Too many (more than 4)

Too close (less than 18 months apart)

Babies have a higher risk of:

Low birthweight, poorer nutrition.

Birth defects, low birthweight.

The higher birth-order children (the 4th, 5th, 6th child, etc.) are at greater risk of illness, slowed growth, low birthweight. They must compete for mother's care, attention, and food.

Low birthweight.  
Mother may breastfeed only a short time--higher risk of malnutrition.

**SUGGESTED ACTIVITIES:**

1. Have each person list all the ways in which they, as family planning workers, can help solve the problem of low birthweight babies in their community.  
Discuss.
2. Divide the group into groups of 3-4 trainees. Have each group make up a song or poem that explains how spacing, age, and parity can affect a child's health.

Example:     Mother, I want to be strong and healthy.  
              So I can grow up to help you with your work.  
              Please help me to be strong.  
              Make sure you eat lots of good food.  
              And wait for me until my brother is 3 years old.

              I love my brothers and sisters.  
              But if there are too many, you are always tired.  
              And I cannot get enough to eat.  
              So please keep our family small but strong.

              Please don't wait too long for me--I want to  
              know you before your hair turns gray!  
              But don't be too quick--wait 'til you are grown yourself.  
              And please remember once I'm here to give me lots of  
              Your sweet breastmilk.  
              Oh, mother, how I will help you when I grow up,  
              If you help me now to be strong!

3. Have the group develop a diagram or graphics that help show how maternal age, spacing, parity, and low birthweight affect the health of a child. Use pictures. Try to keep it simple. Show it to a group of mothers--can they understand it? Do they have problems with it? Could you use it in your community?

**IMPORTANT IDEAS: Objectives 4j.; 4k.**

1. Family planning can:
  - a. help women and children to have better nutrition and health.

- b. let a woman have longer intervals (3 years) between pregnancies. This allows the woman's body to have time to recover and replenish itself. It helps the child by allowing him to breastfeed longer and to receive more care and nutrition from his mother.
  - c. help a woman to have children at the age when she is strongest and healthiest (18-35). This gives her baby the best chance for a strong, healthy start. It also means that the pregnancy will be less of a drain on her body.
  - d. allow a couple to have a smaller family. Fewer children means the mother has more energy for work and to care for each child. Each child has access to more food, more care, and a better chance to grow up healthy and strong.
  - e. help a woman have strong, healthy babies by making sure she is in good health when she becomes pregnant.
- 2. Spacing, age, and parity are all important for healthy mothers and children.
  - 3. The best for mother and child is:
    - 1) Pregnancies at least 2, and preferably 3 years apart.
    - 2) Bear children between the ages of 18 and 35.
    - 3) No more than 4 or 5 children.

**SUGGESTED ACTIVITIES:**

- 1. Put up 2 pictures that symbolize how family planning can affect a family. For example, pictures of two fields of corn. One field is planted too close together. The plants are thin, crowded, sickly. The other field is well-spaced. The plants are strong and healthy. Ask the group to explain the differences between the 2 pictures, and how they might represent a family and family planning.

2. Divide the group into small groups. Have each group design a poster that explains how correct age, spacing, and moderate parity can lead to healthy mothers and healthy children.
3. Have the trainees write down all the ways they can think of to convince their community that family planning is important to healthy mothers and children. Choose several individuals to role play talking to a community group about family planning and nutrition. Have the rest of the class play the community. What kinds of questions and problems might be raised? How can the family planning worker respond?
4. Divide the group into 5 small groups. Using Ejercicios de Participacion Aplicados a Cursos de Planificacion Familiar (or any training manual with health-related participatory training exercises), assign each group to prepare an exercise for presentation to the whole group on family planning and nutrition. Have one group prepare an icebreaker exercise, another an exercise to introduce a subject, a third group an exercise to explore attitudes and opinions, a fourth group an exercise for indepth discussion of a topic, and a final group an evaluation exercise. Have each group conduct the exercise it developed.

**SUGGESTED MATERIALS:**

Poster board or large paper  
Pens, chalk, pencils, etc.  
Pictures of families, gardens, animals  
Pictures or drawings to illustrate Important Ideas  
Flannel board, chalkboard, or flipchart  
Newsprint, crayons or marking pens

UNIT II

**TASK 5:** Communicate how breastfeeding, nutrition, and family planning interact.

**PURPOSE:** To teach the family planning worker the interactions between breastfeeding, nutrition, and family planning.

**LEARNING**

**OBJECTIVES:** The trainee should be able to:

- 5a. Give 3 reasons why breastfeeding is important to the child.
- 5b. State 1 way in which poor nutrition can affect breastfeeding.
- 5c. Explain the "displaced child syndrome."
- 5d. Describe 2 ways in which family planning can affect breastfeeding.
- 5e. Name 3 benefits to the mother of breastfeeding.
- 5f. Explain 2 reasons for the decline in breastfeeding.
- 5g. Describe 3 risks of bottlefeeding.

**REFERENCES:**

- o Manual on Feeding Infants and Young Children. Cameron and Hofvander, pp. 9-25.\*
- o The Womanly Art of Breastfeeding. La Leche League International, pp. 1-16.\*
- o Pediatric Priorities in the Developing World. D. Morley, pp. 87-108.\*

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\* In Spanish edition

- o Breastfeeding in Practice. E. Helsing, pp. 245-253.\*
- o Breastfeeding, Fertility and Contraception. IPPF, pp. 36-43.\*

IMPORTANT IDEAS: Objectives 5a.; 5b.; 5c.; 5d.; 5e.

1. Breastmilk provides all the nutrients a baby needs for the first 4-6 months of life. After this age, supplementary foods need to be introduced to the child's diet.
2. Breastmilk is always ready to use, it is clean, safe, always at the right temperature, and free.
3. Breastmilk provides extra protection for the baby against allergies and illnesses such as diarrhea.
4. Breastmilk gives babies a strong, healthy start.
5. If a woman is very malnourished, she may not be able to produce enough nutritious breastmilk to feed her child. The child may become malnourished and sick.
6. If a woman is not eating enough, breastfeeding puts an extra strain on her body, and she can easily become malnourished.
7. Often, when a woman becomes pregnant again, she immediately stops breastfeeding. Her earlier child may easily become malnourished because it is now not getting enough body-building foods. This is known as the "displaced child syndrome." If the child is still very young, the danger of becoming malnourished is especially high.
8. For the mother, breastfeeding helps her uterus return to its normal state faster, speeding her recovery.

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\* In Spanish edition

9. Breastfeeding may postpone a woman's ovulation, reducing her risk of pregnancy. Frequent breastfeeding on demand may postpone a woman's period from 2-3 months up to 18 months if breastfeeding continues. But the protection is not complete, and a woman should use another form of contraception to be well protected against pregnancy.
10. Breastfeeding requires no preparation time, and enhances the bond between mother and child.
11. Family planning can help a woman to breastfeed by postponing another pregnancy. This allows her baby to benefit from lengthened breastfeeding and to get a healthier start. This prevents a "displaced child."
12. Adequate child spacing can enable a woman to maintain her own health and nutrition so she is better able to breastfeed.
13. If a woman does become pregnant while she is still breastfeeding, she may continue to breastfeed. But she must now eat large amounts of body-building and protective foods, as she is now feeding three people.

**SUGGESTED ACTIVITIES:**

1. Divide the group into small groups. Have each group develop a visual aid that promotes breastfeeding and family planning. Present to the whole group for commentary and critique.
2. Role play a discussion with a group of mothers about breastfeeding, nutrition, and family planning. Use some of the ideas covered in the Important Ideas. What should the role of the family planning worker be in promoting breastfeeding?
3. Have individuals or small groups design a diet for a breastfeeding mother and her 8-month-old infant. Keep local customs in mind, as well as nutritional needs. What advice would you give this mother about continued breastfeeding? What advice would you give her about family planning? What recommendations would you make concerning her diet and that of her child?

4. Have the group discuss breastfeeding practices when a woman becomes pregnant again. What positive or negative effects might these practices have on the breastfeeding child? What should a family planning worker do in this situation?

IMPORTANT IDEAS: Objectives 5f.; 5g.

1. In many places, the number of women who are breastfeeding is declining.
2. The length of time that women breastfeed is also declining.
3. One of the reasons for this is that people think it is more "modern" and "advanced" to bottlefeed. It is "prestigious" to bottlefeed.
4. Another reason is the easy availability of substitutes, especially powdered milk, which may be provided free by community health centers.
5. Still another reason is that more women are working outside the home, and find it difficult to breastfeed. Many do not know how to store breastmilk.
6. Some women feel that breastfeeding is too time consuming and ties them down too much.
7. Some kinds of contraceptives cause a decrease in breastmilk (See Unit III). Some women prefer to stop breastfeeding in order to use these contraceptives.
8. Bottlefeeding, however, has many risks for the child. Bottled babies are much more likely to get sick, especially from diarrhea.
9. Bottlefeeding does not give the baby the special protection against sickness that breastmilk does.
10. To bottlefeed properly, you must sterilize the bottles, nipples, and other utensils, and keep them very clean and covered all the time. It is often difficult to do this, especially when there are problems getting water and fuel to boil the water.

11. Buying formula or powdered milk can be expensive. Because of this, mothers often dilute the formula with too much water. The baby does not get the nutrition he needs, and may easily become sick and malnourished.
12. It takes time to prepare bottles correctly, and many mothers do not have the time to do so properly. Instead of boiling the bottles, they just rinse them out with water. Instead of using boiled, cooled water to mix with the milk or formula, they use cold water from the tap, stream or well. The baby can become sick very easily.
13. If a child must be bottlefed, then it must be done correctly:
  - a) Hands and all utensils must be clean.
  - b) Bottles, etc., must be sterilized by boiling in water.
  - c) Formula must be prepared with boiled, cooled water.
  - d) The right amount of milk or formula must be used.
  - e) There must be enough money for a constant supply of milk adequate for the child's needs.
14. Breastfeeding should always be encouraged. It is clean, safe, and best for the baby.

**SUGGESTED ACTIVITIES:**

1. Have each individual describe the breastfeeding situation in his or her community. Are fewer women breastfeeding? Are they breastfeeding for a shorter period of time? What are the barriers to breastfeeding? What helps promote it? How might the family planning worker help to overcome the barriers and promote breastfeeding?

2. Have the trainees discuss the bottlefeeding risks in their community. What kinds of milk or formula do women use? Do they use bottles, or cup and spoon? Is water a problem? Is cost a problem? Is fuel a problem? How might these problems be solved?
  
3. Divide the group into small groups. Have each group design an educational activity to promote breastfeeding and explain the risks of bottlefeeding. Have them present their activities to the larger group for discussion and commentary.

**SUGGESTED MATERIALS:**

Poster board or large paper

Pictures or drawings of breastfeeding mothers

Pens, pencils, etc.

## UNIT II

**TASK 6:** Communicate family planning and nutrition information to the community.

**PURPOSE:** To train family planning workers in teaching methods that they may effectively use in community nutrition and family planning education.

### LEARNING

**OBJECTIVES:** The trainee should be able to:

- 6a. Describe 3 teaching methods that one could use in community education.
- 6b. Give 2 advantages and 2 disadvantages of each of the above teaching methods.
- 6c. Design an educational activity for a community group that does not include a lecture.
- 6d. Describe 2 appropriate "teaching aids" to use in community education.
- 6e. Describe 2 ways in which you can assess what your audience has learned.

### REFERENCES:

- o Where There is No Doctor - D. Werner, pp.21-27.\*
- o Helping Health Workers Learn - D. Werner, pp. 178-193.\*
- o Ejercicios de Participacion Aplicados a Cursos de Planificacion Familiar - APROFAM.
- o Para la Educadora del Hogar - E. Gally, pp. 178-193.

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\* In Spanish edition.

**IMPORTANT IDEAS:** Objectives 6a.; 6b.

1. If we want to help people learn about nutrition and family planning, it is very important that we use appropriate teaching methods that will interest and communicate with our "audience."
2. Examples of some teaching methods are given in the table which follows.

TEACHING METHODS

<u>Method</u>	<u>Advantages</u>	<u>Disadvantages</u>
Group discussion--Using questions and answers to get everyone sharing and talking.	Enables many to participate and share their knowledge. Generates new ideas.	Group may be dominated by a few people. Can stray from the topic. Time consuming.
Small group--Divides a large group into smaller units that work together.	Enables everyone to participate. Students help each other to learn.	The whole group cannot share all ideas. Time consuming.
Role play--Acting out the roles of people, things, or events.	Enables students to feel and identify with their role. Enables students to think through and act out real life situations.	Hard with a large group. People may be reluctant to act, or find it difficult to act out an unfamiliar role.
Lecture--Presentation or a talk by one person.	Offers a lot of information quickly to many people. Easy to prepare.	Doesn't involve anyone other than the lecturer. Difficult to do effectively without boring people.
Practical experience--actually performing a task or activity. (Usually following a demonstration).	Good for learning skills.	Requires supervision, materials, and ample time.
Problem solving--Solving real life or hypothetical situations.	Encourages people to confront problems they may face in their community. Encourages people to find solutions.	May be time consuming. People may make mistakes if not properly guided.
Storytelling	Encourages people to put "real life" knowledge to use. Enjoyable for audience.	Presenter must be an entertaining storyteller.
Songs and games	Encourages creativity. Involves people actively. Enjoyable if done well.	Time consuming to organize. Not appropriate in all situations.
Village Theater	Involves many people. Addresses a community problem.	Requires organization, preparation, and interest on the part of the community.

**SUGGESTED ACTIVITIES:**

1. Have the class discuss teaching methods with which they are familiar and have used in their family planning work. What worked? When? Why? What did not work? When and why not? What other methods might they have used?
2. Have the class discuss the teaching methods they have encountered in this course so far. Which ones did they like best? When did they learn the most? Are there other methods they can think of? Discuss when the methods might be appropriate to use and when not. How might these methods be used for nutrition and family planning education in their communities?
3. Divide the group into 4 small groups. Assign 2 teaching methods to each small group. Have each group prepare a short example of their teaching method, with nutrition education as the topic. Present to the whole group for commentary and critique. Did the whole group understand what was being taught? Was information clear, interesting, useful? What was good about the demonstration? How might the demonstration have been improved? Would this be appropriate in your community?
4. Divide the group into small groups of 3-4 trainees . Assign each group a situation in which they might be called upon to give nutrition education. Have each group discuss and then develop a role play of an appropriate teaching method for the situation. Perform for the entire group, with follow-up discussion and critique. Examples of specific situations might be:
  - a. You are to meet with a local woman's group to discuss the effects of birth spacing on the nutritional health of the mother and child.
  - b. The village health committee wants to discuss breastfeeding and its role in its community.
  - c. A group of interested mothers wants to learn how to plan a diet for themselves and their children.

- d. You are to meet briefly with patients at the health center one morning and discuss how family planning can contribute to nutritional health.
- e. You are to plan an activity for a village fair that will help people remember how family planning can help make healthier babies.
- f. You will carry out a home visit to a family with seven young children whose mother has requested family planning advice.

**IMPORTANT IDEAS:** Objectives 6c.; 6d.

1. One of the most important aspects of teaching is being prepared.
2. Before engaging in any teaching activity, you must think about:
  - a. What is the purpose of this activity?
  - b. What do you want your learners to know at the end?
  - c. What are the main points you want to cover?
  - d. What teaching method(s) should you use?
  - e. How should you organize your activity?
  - f. How should the space be arranged--where should people sit or stand? Where should you sit or stand?
  - g. How long will it last?
  - h. How will your learners be involved?
  - i. What teaching aids will you need or want to use? Do you need to prepare them ahead of time?
  - j. How will you know if the learners learned what you wanted them to learn?
3. Teaching aids are very valuable for reinforcing and stimulating learning.
4. The variety of teaching aids you can use is limited only by your own imagination and creativity.
5. Teaching aids that can be easily made or obtained, are inexpensive and can be easily understood are best to use. Those that involve more than just looking

at them reinforce learning and encourage participation. Learning by doing is very effective.

6. Making teaching aids can be a learning activity in itself.
7. Some examples of teaching aids are pictures, models or samples, puppets, costumes, dolls, charts, and anything else you can think of.

**SUGGESTED ACTIVITIES:**

1. Divide the group into several small groups. Using examples from Objectives 6a. and 6b., Activity 4, assign each group to outline an educational activity for that situation. Have all groups present their outlines to the whole group for discussion and critique.
2. Have the group discuss teaching aids which they have already used in their work. How were they helpful? Did the audience respond? What were the disadvantages of using them? What other aids might they have used?

**IMPORTANT IDEAS: Objectives 6e.**

1. It is very important to assess and evaluate how much of what you have taught has been learned. This helps to improve your teaching and helps you to better meet the needs of the students.
2. One way to evaluate is to ask individuals questions about material covered in the learning activity. This may be done informally (orally) or formally (as in a written test). Can they answer the questions correctly?
3. Another way to assess learning is to see if students can apply what they know to a new situation or problem, and solve it. This encourages people to use their knowledge actively.
4. Students can ask each other questions about what they have learned, or role play back what they learned.

5. Evaluation should be a part of every learning experience, for the benefit of both the student and the teacher.

**SUGGESTED ACTIVITIES:**

1. Divide the group into small groups. Have each group develop an evaluation of Unit II. Have the groups carry out their evaluation with the whole group. Discuss the evaluations - did they assess what was learned? Did they give feedback to teachers and learners? What was good about them? How could they be improved?
2. Divide the group into small groups. Ask each of the groups to adapt or develop a participatory training exercise of the type that are found in Chapter V of Ejercicios de Participacion Aplicados a Cursos de Planificacion Familiar (team games, quizzes organized by students, tossing a question ball, etc.) The exercise they prepare should deal with one of the subjects covered in Unit II. Have the groups conduct the exercises they developed with the whole group. Discuss the exercises and how they might be used with a community group.

**SUGGESTED MATERIALS:**

Pictures

Teaching aids to demonstrate teaching methods

Paper, poster board, flannel board, chalk board, flip chart.

## EVALUATION

1. Repeat the Pretest.
2. Have each individual describe in his/her own words the interactions of age, spacing, family size, and parity on the health of the mother and child. This may be done in story form, narrative, or in any other appropriate form.
3. Have the class design a theater skit for presentation to the community on nutrition and family planning. What topics should be addressed? How? What materials are needed?
4. Ask each student to list 5 questions that cover the material in this unit for inclusion in a quiz. Select 25 questions from the student lists and give them in the form of a quiz.

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**UNIT III**

**NUTRITIONAL EFFECTS OF CONTRACEPTION**

## INTRODUCTION

This Unit covers the specific effects of various methods of contraception on the nutritional status of women and children. Topics covered include: the nutritional effects of contraceptives; breastfeeding and contraception; contraceptive counseling for the breastfeeding woman; and community resources and referral.

The purpose of the Unit is to enable family planning workers to counsel women effectively about nutrition and nutritional health within the context of the family planning setting, and to motivate them to use available community resources to improve the nutritional status of program clients and their families.

The unit includes a pre-test, three tasks with learning objectives and suggested activities for each, and final evaluation activities.

### UNIT III

#### PRETEST

The following questions are suggested to determine the initial knowledge of the trainees about the topics covered in this unit.

1. State 2 nutritional effects of combined oral contraceptives.
2. State one nutritional effect of an IUD.
3. What negative nutritional effects do other methods have?
4. Describe the contraceptive effect of breastfeeding.
5. Name one effect of combined pills on breastfeeding.
6. Explain the effect of anesthesia on breastmilk production after Cesarean or post-partum sterilization operations.
7. Name two nutritional problems that could affect a woman's choice of a contraceptive method.
8. State 3 points that a family planning worker should raise in a counseling session with a breastfeeding mother.
9. Describe 3 resources for nutritional advice, information, or help in your community.
10. Why is referral and cooperation among community resources important?

### UNIT III

**TASK 7:** Communicate the nutritional effects of various contraceptives to prospective and current family planning users.

**PURPOSE:** To teach family planning workers about the nutritional effects of contraception so they may communicate them to family planning users.

#### LEARNING

**OBJECTIVES:** Following this lesson, trainees should be able to:

- 7a. State 3 nutritional effects of combined pills.
- 7b. Describe the nutritional effects of progesterone--only contraceptives (pills, mini-pills, medicated IUDs, injections, implants).
- 7c. State a possible effect of an IUD on a user's nutritional status.
- 7d. Describe the nutritional effects of barrier and fertility awareness methods.
- 7e. Describe a possible nutritional effect of post-partum sterilization.

**REFERENCES:** Contraceptive Technology, Chapter 24 - R. Hatcher, Et al.

#### IMPORTANT IDEAS:

1. It is important to consider a woman's nutritional status in choosing a contraceptive to avoid problems which could affect her health.

2. Four conditions in particular should be considered when providing contraceptive counseling.

- a) Is the woman overweight or obese?
- b) Is the woman anemic (pale, tires easily, pale nails and eyelid membranes)?
- c) Is the woman malnourished (very thin, weak, appears frail)?
- d) Is the woman breastfeeding?

3. Combined oral contraceptives may:

- a) Be dangerous for the very obese women with a family history of diabetes.
- b) Cause weight gain or weight loss.

A weight gain can be due to increased appetite and an increase in the amount of food the woman is eating, or it can be due to retention of fluids. A user of combined oral contraceptives who is gaining weight should be counseled to use less salt and eat smaller quantities of fatty foods and sweets. If the user is losing weight, this can be corrected by increasing the amount of food consumed.

c) Increase the need for protective foods:

It is especially important for the user of combined pills to eat sufficient quantities of fruits and vegetables, particularly citrus fruits and dark green and yellow vegetables. A symptom of a lack of protective foods is a feeling of depression or apathy for no apparent reason.

d) Decrease the risk of anemia:

The pill reduces the monthly menstrual blood loss which causes a loss of iron. Family planning workers should encourage women to take the seven non-contraceptive pills in twenty-eight day pill packs as they usually contain iron. The additional iron helps strengthen the woman's reserves of this important dietary element.

e) Reduce maternal milk production. (See Task 8).

4. Progesterone-only contraceptives have no known negative nutritional effects on women. They may help reduce menstrual blood loss and decrease risk of anemia. These include mini-pills, injections, implants, and medicated IUDs.
5. Non-hormonal IUDs, such as the Lippes Loop, can cause increased menstrual blood loss and higher risk of anemia. Women using the IUD should eat extra iron-rich foods. A woman who is already anemic and wants an IUD should be evaluated by a nurse or physician. It may be necessary to treat the anemia before the method is provided.
6. IUD insertion in a very obese woman can be complicated by the difficulty the physician may have in palpating the exact position of the uterus.
7. Barrier and fertility awareness methods of contraception have no negative effects on nutritional status. These may be good choices for women in poor nutritional health, although the increased risk of pregnancy with less effective methods must also be considered. Contraceptive counseling for malnourished women should include ample advice on ways of improving their nutritional status.
8. Sterilization has no known negative nutritional effects on women. However, it may affect the initiation of breastfeeding and nutrition of the newborn child (See Task 8).

**SUGGESTED ACTIVITIES:**

1. Have the group discuss contraceptive choices for 1) an overweight woman; 2) an anemic woman; 3) a malnourished woman. What are the pros and cons of each method with respect to these particular problems?
2. Have the group design a chart of family planning methods, and their advantages and disadvantages. Include nutritional effects. This chart may be used to help counsel women.

3. Divide the group into small groups of 3-4 trainees. Present each group with one of the following cases (or one that you devise yourself). Have them discuss and decide upon the advice they would give. Have each group present their case for discussion with the whole group.

CASE 1:

Mrs. A, a Lippes IUD user, complains that she is tired all the time and has trouble doing her daily work. You check the inside of her lower eyelids and find them very pale. You tell her that she appears to be anemic and should go to the doctor. She says she will not go to the doctor because he may remove the IUD. Her husband does not know she is using the IUD. He is against family planning. This is the only method she can use without his knowledge or consent.

CASE 2:

Mrs. L. began taking the combined pill two months ago. She is complaining of depression, feeling irritable, and of gaining weight. Her husband tells her that it is her punishment for taking the pills, and she should stop. All her friends are on the pill, and have no problems. She doesn't know what to do, but she does not want to change her method.

CASE 3:

Mrs. B. is 15 years old and just married. She and her husband want to be "modern" and plan their family. Mrs. B. is quite thin and looks rather tired. She is busy in her new home, but she is young and tends to be somewhat irresponsible and forgetful. Her husband agrees with family planning, as long as he doesn't have to do anything himself.

CASE 4:

Mrs. C. has just delivered her fifth child, whom she is breastfeeding. She is tired of having children, but her husband is totally against family planning; so whatever she does must be without his knowledge. She cannot come back to the clinic often because she lives a distance away. She wants to get something before she leaves the hospital with her new baby.

CASE 5:

Mrs. R. is a 38 year old woman with 2 children. She is quite obese. She wants to plan her family, but would like eventually to have another child. All her friends take the pill and she wants it, too. She has heard bad things about the IUD - it causes bad cramps and bleeding.

4. Have the group debate the importance of iron status in choosing a contraceptive method. How prevalent is anemia in their communities? What other considerations should be taken into account?

5. Have the group discuss how important nutritional effects and status should be in choosing a contraceptive method. Is it important? Why or why not? What kind and how much information should you give your clients?

**SUGGESTED MATERIALS:**

Examples of contraceptive methods or pictures

Pictures of women to go along with Case Studies

Poster board or large paper

Writing utensils

UNIT III

**TASK 8:** Communicate the interactions of breastfeeding, contraception and nutrition.

**PURPOSE:** To teach family planning workers to provide counseling on contraceptive choices for breastfeeding women.

**LEARNING**

**OBJECTIVES:** Trainees should be able to:

- 8a. Explain the contraceptive effect of breastfeeding.
- 8b. State 2 factors that help prolong the contraceptive effect of breastfeeding.
- 8c. Describe the effect of combined pills on breastfeeding.
- 8d. Name two responsibilities of a family planning worker when counseling a woman who is breastfeeding.
- 8e. State 3 important points that should be covered in a counseling session with a breastfeeding woman on contraceptive choices.

**REFERENCES:**

- o Manual on Feeding Infants and Young Children, Cameron and Hofvander, pp. 9-20\*.
- o Breastfeeding in Practice - E. Helsing and F. King, pp. 79-80\*
- o Breastfeeding, Fertility and Family Planning - IPPF, pp. 36-43.\*
- o Para la Educadora del Hogar - E. Gally, pp. 174-178.

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\* In Spanish edition.

**IMPORTANT IDEAS: OBJECTIVES 8a.; 8b.; and 8c.**

1. Breastfeeding inhibits the return of ovulation and menstruation, thus producing a contraceptive effect.
2. This contraceptive effect of breastfeeding may last anywhere from a couple of months to two years.
3. Frequent, day and night, on-demand suckling helps prolong this contraceptive effect. Full breastfeeding with no supplementation also helps prolong it.
4. Breastfeeding should not be counted on as a fully reliable contraceptive for the individual woman, particularly after the first few months and when supplementary foods are introduced. Breastfeeding women should be encouraged to utilize another form of contraception to be more fully protected from pregnancy.
5. Combined oral contraceptives are inappropriate for the woman who is starting to breastfeed as they can reduce the quantity of milk she produces. The effect is especially pronounced if a woman begins taking the pills in the first few weeks following delivery.
6. The hormones found in various contraceptives (pills, injections and mini-pills) are passed in small quantities through the mother's milk to the baby. The possible long-term effects of this are not currently known.
7. IUDs do not effect milk production, but some users feel mild cramps when the baby suckles.
8. Barrier methods (condoms, diaphragms, foams, creams, jellies, sponges or suppositories) have no adverse effects on breastfeeding.

9. The use of fertility awareness methods can be difficult for the breastfeeding woman, especially if she does not have previous experience with the observation of signs of fertility. Daily observation is required until menstruation returns and even afterwards, as menstrual periods can be irregular during lactation.
10. A woman who delivers her baby by Caesarean Section or who elects sterilization within the first week of delivery may experience some problems with breastfeeding due to the effects of the anesthesia.
11. The anesthesia passes through the breastmilk and may cause the baby to be sleepy and not want to suckle. This will lead to a decreased milk supply.
12. The post-operative woman should be encouraged to suckle the baby frequently or to manually express her breastmilk to encourage the milk supply.
13. Counseling the breastfeeding woman should also include the other nutritional considerations previously mentioned.

**SUGGESTED ACTIVITIES:**

1. Have the group devise a chart of contraceptives for breastfeeding women, listing advantages, disadvantages, and other considerations for each method. Discuss.
2. Divide participants into small groups of four to five people. Ask them to design a one-page flier on breastfeeding and contraception for distribution in post-partum wards. What information should be included to motivate women to breastfeed? What advice should be given about the use of contraceptives during lactation? Ask the small groups to present their fliers to the large group for review and suggestions.
3. Have the group discuss what problems might be raised in discussing contraception with breastfeeding women. What questions should they ask to

determine how to best counsel a breastfeeding woman about her contraceptive choices? Have the group develop a short interview guide to determine women's current practices and attitudes toward contraceptive use during breastfeeding. What problems might they encounter? How would these be managed?

**IMPORTANT IDEAS: OBJECTIVES 8d.; 8e.**

1. Some women will stop breastfeeding in order to use the combined pill as a contraceptive method.
2. Family planning workers have the responsibility of informing their breastfeeding clients of the pros and cons of their contraceptive choices.
3. Progesterone-only contraceptives may be acceptable alternatives for breastfeeding women who desire hormonal contraceptives.
4. Ultimately, the choice of a contraceptive method is that of the woman, barring medical contraindications.
5. Family planning workers should encourage women to breastfeed as long as possible, using a contraceptive appropriate for the lactating woman, and following the dietary recommendations for breastfeeding women that are found in Unit I.

**SUGGESTED ACTIVITIES:**

1. Divide the group into small groups of 3-4 trainees. Have each group develop a case-study of a breastfeeding woman who desires contraception. Pass the case studies around, and have each group decide how they would counsel the case they are given, both in terms of contraception and nutrition. Perhaps the family planning workers can draw on their own experiences and real cases they have seen in the community.

Example: A woman is 8 months pregnant. She wants to discuss postpartum sterilization. She has 6 children already, ranging in age from  $1\frac{1}{2}$  years to 12 years. She plans to breastfeed, but had trouble with her milk supply with her last child.

2. Select several individuals to role play talking to mothers about breastfeeding and contraception. Have the rest of the group play the mothers, assigning roles from the cases developed in the first activity, or others such as the following:
  - a) A mother who is breastfeeding but must shortly return to her full-time job.
  - b) A woman 8 months pregnant who wants to breastfeed, used the pill before, and wants to go right back on it.
  - c) A woman who is breastfeeding and believes that any contraceptive will poison her milk.
  - d) A mother who is breastfeeding her 6-month-old and is interested in starting contraception.
  - e) A woman who has been told by her doctor that she must have a Cesarean, and is convinced she will have to bottlefeed.
  - f) A woman who is currently bottlefeeding her 2nd child, and is convinced that breastfeeding is "old-fashioned."
  - g) A mother, one month postpartum, who wants contraceptives. She is currently breastfeeding.

What kinds of questions might be raised by the mothers? What responses might the family planning worker give?

**SUGGESTED MATERIALS:**

Contraceptive samples or pictures

Large paper or poster board

Pictures of breastfeeding women

Writing utensils

Pictures for case studies

Flannel board, black board, or flipchart

UNIT III

**TASK 9:** When appropriate, refer clients to other community resources that may aid them with nutritional problems.

**PURPOSE:** To enable the family planning worker to provide clients with referrals to additional resources to deal with nutritional problems.

**LEARNING**

**OBJECTIVES:** The trainees should be able to:

- 9a. Identify 3 types of nutrition services that might be available in a community.
- 9b. State 2 reasons why cooperation between resource people is important.

**REFERENCES:**

- o Para la Educadora del Hogar - E. Gally, pp. 15-18.

**IMPORTANT IDEAS:**

1. As a family planning worker, you may sometimes need to refer your clients to others for more nutritional help or advice.
2. It is important that you know what resources exist in your community and be able to refer your clients when necessary.
3. You should be able to explain to a client how to locate these resources, whom to see, where to go, etc. in order to facilitate the use of these resources.
4. Some examples of community resources might be:

- o Supplemental food distribution program
- o Distribution of nutritional supplements (i.e. vitamin pills)
- o Nutrition education for the public
- o Nutrition education in schools
- o Residential nutrition rehabilitation center
- o Day care nutrition rehabilitation center
- o Agricultural or home economics education
- o Maternal/Child health clinics
- o Family health clinics

**SUGGESTED ACTIVITIES:**

1. Have each individual list all the sources of nutritional help, advice, and information that exist in his/her community. List contact persons, and under a column labeled "If I want to refer Mrs. \_\_\_\_\_, I tell her," and list all information you have: where to go, hours available, whom to see, etc. Have the group members share their lists, making a master list of all possible sources of nutritional aid. Have the group discuss ways to improve referral, communication, and coordination patterns.
2. Divide the group into small groups of 3-4 trainees. Have each group devise a "case study" of a family in need of further nutritional aid or advice. Exchange cases, and devise a "plan of action." What recommendations should be made? What other considerations should be taken into account (i.e., how much time does the woman have to spare? how far will she have to go? how much will it cost her??) Have the whole group discuss the cases and plans of action. What other suggestions can be made?

**SUGGESTED MATERIALS:**

Pamphlets and fact sheets about community nutrition services  
Newsprint  
Marking pens, pencils, etc.

UNIT III

EVALUATION

1. Repeat the Pretest.
2. Have each individual devise a self-quiz for the information in this Unit.  
"What do I need to know in terms of nutrition to counsel women about contraceptive choices?"
3. Have the group devise a check-list for their individual use after a counseling session. What questions might they ask themselves to be sure they covered all the information they learned in this unit?

Example: Did I check Mrs. \_\_\_\_\_ nutritional status?

Did I check her child(ren)'s nutritional status?

Did I mention the nutritional effects of her contraceptive? What did I tell her?

Etc.

4. Refer to Unit V for additional final evaluation activities.

UNIT IV

BREASTFEEDING: GETTING OFF TO A GOOD START  
AND SOLVING COMMON PROBLEMS

## INTRODUCTION

This unit is designed to acquaint the family planning worker with some of the common beliefs about and problems of breastfeeding, as well as with general information about initiating breastfeeding. It is intended to help family planning workers, especially those with access to pre-natal or post-partum services, to promote breastfeeding whenever possible and counsel women on their breastfeeding concerns.

The Unit is composed of a pre/post test, three tasks with learning objectives and activities, and suggested evaluation activities.

UNIT IV

PRETEST

The following questions are suggested to determine the knowledge of the class.

1. State one way of preparing the nipples for breastfeeding.
2. What is colostrum?
3. Name one way in which colostrum is beneficial to the baby.
4. How soon after birth should a baby begin breastfeeding?
5. State one way in which the baby's sucking affects milk production in the mother.
6. What is one advantage of feeding on demand?
7. List two common misunderstandings about breastfeeding.
8. What is the correct information for the two misunderstandings you stated above?
9. State three common breastfeeding problems.
10. Suggest a solution for each of the problems above.

UNIT IV

**TASK 10:** Correct myths and misunderstandings about a woman's ability to breastfeed.

**PURPOSE:** To teach the family planning worker about misunderstandings about breastfeeding so that the correct information may be passed on to others.

**LEARNING**

**OBJECTIVES:**

- 10.a State five myths about breastfeeding.
- 10.b Give a correct explanation to contradict each of the above myths.

**REFERENCES:**

- o The Womanly Art of Breastfeeding. La Leche League International. pp. 46-56 and 92-98.\*
- o Breastfeeding in Practice. E. Helsing, F. King. pp. 33-34\*

**IMPORTANT IDEAS:**

1. There are many misunderstandings about breastfeeding which may influence a woman's attitudes towards and decisions about breastfeeding.
2. As with all customs, some of these misunderstandings may be harmless. Others may be harmful and prevent or stop a woman from breastfeeding.
3. It is important that a woman who is considering breastfeeding be given accurate information, advice, and encouragement to prepare for and ease the initiation of breastfeeding once her baby is born.

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\* In Spanish edition.

4. Below are some commonly held myths about breastfeeding and more accurate information about each one:

MISPERCEPTIONS

CORRECT INFORMATION

- |   |  |
|---|--|
| a. A woman with small breasts cannot breastfeed.  | The size of a woman's breast does not affect her ability to breastfeed.  |
| b. A woman with flat or inverted nipples cannot breastfeed.   | This can make breastfeeding more difficult at first, but by manipulating the nipples and ensuring that the baby takes both nipple and areola (the dark area around the nipple) into his mouth, breastfeeding can be successfully accomplished.   |
| c. A woman can never have enough milk to breastfeed twins.  | A woman with twins can breastfeed. She must be sure to eat and drink enough and to let both babies nurse frequently to build up her milk production.   |
| d. A woman who has difficulty breastfeeding one child will have difficulty feeding subsequent children. | This is not necessarily true. With an adequate diet and confidence, a woman may successful breastfeed, even if she has had difficulties with a previous child.   |
| e. If a woman works outside the home, she cannot breastfeed.  | Working women may breastfeed at night if there is no child care available near their work. They can express milk to be fed to the child while they are away. To express milk, the woman should use her hands or a breastpump to squeeze milk out of her breasts, collecting the milk in a clean container for later use. |

- f. Resumption of sexual intercourse decreases a woman's ability to breastfeed. Sexual intercourse has no effect on a woman's ability to breastfeed, nor does it "poison" the milk.
- g. Breastmilk is too thin and watery to adequately nourish a baby. Although breastmilk may appear thin, it is the best food for a baby, containing all the nutrition he needs, and is most easily digested.
- h. Once a baby is started on a bottle, breastfeeding cannot be initiated. With frequent sucking and perseverance, the milk supply can be established. The baby must be put to the breast frequently when hungry so he will suck vigorously. If he is still hungry, he may be supplemented after breastfeeding until the milk supply is fully established. Use a spoon, a dropper or a cup so that the baby will not become accustomed to sucking the bottle.
- i. Colostrum is bad for the baby. Colostrum is very beneficial to the baby. It contains protective substances which help the baby fight sickness and infection.
- j. A woman who has had a Cesarean or postpartum sterilization cannot breastfeed. The medication from the operation may make the baby sleepy and unable to suck much. If the baby is put to the breast frequently, or the woman squeezes the milk out of her breasts by hand, the milk supply can be established.

k. A woman who breastfeeds  
loses her figure

If a woman wears a good, supportive bra during pregnancy and nursing, the breasts will not lose their shape. Shortly after ceasing to breastfeed, they may seem flabby but they soon regain their normal shape and size.

**SUGGESTED ACTIVITIES:**

1. Divide the group into small groups of 3-4 trainees. Have each group develop a list of commonly held beliefs in their community regarding breastfeeding. Beside each item on the list, indicate the correct information, if the beliefs are false. Emphasize beliefs and information that are correct and encourage breastfeeding. Have the groups share their lists.
2. Have each individual or small group develop a plan for an educational counseling session with an expectant mother on initiating breastfeeding, overcoming fears and myths, the first few days, etc. What points should be emphasized? What questions might the mother raise? How might these questions be answered? Have each group present their plan to the whole group for commentary and critique.
3. Have the trainees design a set of questions to interview women about attitudes toward breastfeeding. What kinds of questions might they ask? What kind of information do they want to obtain? As a homework assignment, have each trainee interview 5 women of reproductive age in the community and report their findings to the whole group.
4. Arrange for the group members to visit a post-partum ward so they can observe education that is offered to the new mothers. When they return, have them analyze what they observed and evaluate the effectiveness of the education given.

**SUGGESTED MATERIALS**

Large paper or poster board

Pictures to illustrate myths and correct information

Writing implements

UNIT IV

**TASK 11:** Communicate information about preparations for breastfeeding and initiation of breastfeeding to prenatal and postpartum clients.

**PURPOSE:** To enable family planning workers to help women establish and maintain breastfeeding.

**LEARNING**

**OBJECTIVES:** At the end of the lesson the trainees should be able to:

- 11a. Explain 2 ways of preparing the nipples for breastfeeding.
- 11b. State the benefit of colostrum to the baby.
- 11c. Indicate how soon after delivery a baby should begin breastfeeding.
- 11d. State how long it takes for a woman's milk to "come in."
- 11e. Describe two effects of the baby's sucking on the mother.
- 11f. Describe two advantages of feeding-on-demand.

**REFERENCES:**

- o The Womanly Art of Breastfeeding, La Leche League International, pp. 29-32, 57-63, and 116-119.\*
- o Breastfeeding in Practice. E. Helsing, F. King. pp. 39-62.\*
- o Child Health in the Tropics, D.B. Jelliffe, pp. 37-42.\*
- o Pediatric Priorities in the Developing World, D. Morley, pp. 87-100.\*

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\* In Spanish edition

**IMPORTANT IDEAS:**

1. It is important to prepare the nipples during pregnancy to make the intitiation of breastfeeding easy once the child is born.
2. It is very important for the woman to feel confident and relaxed about her ability to breastfeed. This is important to the establishment of lactation. Adequate counseling on the advantages and techniques of breastfeeding together with support from her partner, family members and neighbors will help build confidence.
3. Good maternal nutrition throughout pregnancy and during lactation is important to assure an ample quantity of nutritious breast milk.
4. Preparation of the nipples for breastfeeding should begin during the final two months of pregnancy. The woman should pull on each nipple 5 or 6 times a day until it begins to hurt a little. Nipple conditioning may be easier with the application of a lubricant such as mineral oil. She should also roll each nipple between her fingers 4 or 5 times a day.
5. When the baby is born, it should be put to the breast as soon as possible preferably within an hour after birth or at least within six hours after birth. This helps to establish the sucking reflex in the baby and allows the baby to drink the colostrum.
6. Colostrum is the first milk. It is yellowish in color, and only lasts the first two or three days.
7. Colostrum is very beneficial to the baby because it contains special protective substances which help prevent infection and illness in the baby.
8. The newborn baby should be put on the breast frequently in the first few days even though there is little milk. Although there may be only a small quantity of milk initially, it is sufficient for the baby's needs.

9. It usually takes about 2-3 days for the mother's milk to "come in." The breast will become firm and the mother will feel the "let down" reflex when the baby sucks.
10. The baby's sucking influences the mother's milk production. The more sucking, the more milk the mother produces.
11. The baby's sucking also helps the uterus contract and regain its pre-pregnancy size more rapidly. Although this may be somewhat painful at first, it helps speed the woman's recovery and decrease postpartum bleeding.
12. On-demand sucking--allowing the baby to feed whenever he or she wishes--helps to establish an adequate milk supply more quickly and easily. It also helps to prolong the contraceptive effect of breastfeeding.
13. Nipples and breasts should be kept clean with water or a damp cloth. Use soap sparingly or not at all, as it dries out the skin too much. It is very important for the mother to wash her hands before each feeding because her fingers will come into contact with the baby's mouth. Underwear in contact with the breasts should be changed daily during breastfeeding.
14. Breastfeeding alone is sufficient for the baby for the first 4-6 months. After this, supplementary foods should be introduced, but breastfeeding should be continued as long as possible.

**SUGGESTED ACTIVITIES:**

1. Have the group discuss preparations for breastfeeding in their community. What, if anything, is being done? How might helpful practices be encouraged? How might harmful practices be discouraged? What are the practices in regards to breastfeeding in the first few days after birth if the child is born at home? If the child is delivered by a traditional midwife? If the child is born in a health center or hospital? How might women be helped to establish good breastfeeding habits? What community resources might be available for support and guidance?

2. Divide the group into small groups of 3-4 trainees. Have each small group prepare a brief educational activity that combines family planning and breastfeeding advice for a group of newly postpartum women. Have each group present their activity to the entire group for commentary and critique.

**SUGGESTED MATERIALS:**

Pictures of mothers and nursing babies, breasts

Posterboard or large paper

Writing implements

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UNIT IV

**TASK 12:** Counsel women on how to overcome problems encountered in breastfeeding.

**PURPOSE:** To teach family planning workers to recognize and understand common breastfeeding problems so they may counsel postpartum women effectively.

**LEARNING**

**OBJECTIVES:** At the end of the lesson trainees should be able to:

12a. State five common problems encountered in breastfeeding.

12b. State a solution for each of the above mentioned problems.

**REFERENCES:**

- o Breastfeeding in Practice, E. Helsing, F. King, pp. 35-38, 43-46, 63-76 and 83-94.\*
- o The Womanly Art of Breastfeeding, La Leche League International, pp. 101-119.\*

**IMPORTANT IDEAS:**

1. Easily solvable problems are not uncommon in the initial stages of breastfeeding. Both mother and child are going through a period of adjustment to the new situation. Patience and confidence are important.
2. Some problems can be foreseen and avoided if the mother takes care of herself and receives good guidance during the prenatal period.

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\* In Spanish edition.

3. The most important step in counseling women who are encountering problems in breastfeeding is to encourage them and to reinforce confidence in their ability to breastfeed successfully.
4. Some common breastfeeding problems and their solutions are described below:

<u>PROBLEM</u>	<u>SOLUTION</u>
a. The baby has sucking difficulties due to:	
1) Sucking incorrectly (for example, sucks on his tongue or on the nipple alone).	Observe the method of sucking. See if the baby has taken both the nipple and some of the aureola into his mouth and if the sucking position is correct. See if the mother is comfortable.
2) Having previously been bottle-fed.	Put the baby to the breast more often. Supplement breastfeeding with expressed milk. Use a spoon, a dropper or a cup to feed the baby.
3) Being too tired, too weak, or having a stuffed nose.	Put the baby to the breast more frequently for short periods of time.
4) The mother's breasts being congested.	Manually express some milk before breastfeeding the child.
b. Baby too sick to nurse.	Manually express the breastmilk - squeezing the milk out of the breasts with the hands or a breastpump and catch it in a clean container, and give it to the baby directly.
c. Problems with milk flow.	
1) Milk comes out too quickly.	This can be a problem when the milk first "comes in." The baby may have difficulty swallowing the rapid flow. Express a little milk until the flow slows before putting the baby to the breast.
2) Difficulties with the milk flow starting when the baby sucks.	This can be caused by nervousness or lack of confidence on the part of the mother. A mother should feel calm, relaxed, and confident when she nurses. A quiet, familiar place and a few minutes of relaxation before nursing may help a woman to nurse more easily.

PROBLEM

SOLUTION

- 3) Milk dripping from the breasts between feedings. Apply pressure to the breasts for 30 seconds with the hands or with arms crossed over the chest to stop the flow of milk.
- 4) Milk has "dried up." This may be caused by lack of confidence in the ability to breastfeed on the part of the mother, or when the baby is being supplemented with bottles. Encourage confidence. Give supplements, if at all, only after breast-feeding. Milk production can be stimulated by manual expression and by frequently putting the child to the breast. The mother should eat enough and drink plenty of liquids.
- d. Engorgement. Place a warm damp cloth over the breasts, then massage them.
- Manual expression relieves the pain and hard, swollen feeling. Fever is not uncommon, but if it lasts more than 24 hours, consult a health worker.
- Breastfeed more frequently and for longer periods of time.
- e. Mastitis. This is an infection of the breast that may enter through a sore or cracked nipple. The breast becomes hot, red, swollen, and painful. Cold water compresses or ice packs help relieve the pain. See a health worker for medication.
- f. Problems with nipples.
- 1) Flat nipples or inverted nipples. This can be solved by pulling on the nipples several times a day during the last months of pregnancy. Be sure the baby takes nipple and aureola into the mouth. A plastic nursing cup that fits over the breast may also be used initially until the nipples are lengthened and the baby is able to nurse satisfactorily. The mother can also wear a bra that is one size too small with the "nipple" part of the cup cut out. This will put outward pressure on the nipple.

PROBLEM

SOLUTION

2) Nipples too large.

Hold the baby slightly away from the breast so that nipple fits comfortably without choking the baby.

3) Sore nipples due to cracks or fissures.

This is more common early in breast-feeding due to the unaccustomed action of the baby's sucking. Start on the least sore breast.

Expose the nipples to the air each day and apply some vegetable or mineral oil to speed healing. In cases where nipples are extremely sore, feeding the baby expressed milk until they heal sufficiently to resume nursing will keep up milk supply. A little oil rubbed on the nipples after each feeding can help prevent this condition.

4) Thrush

This is an infection in the baby's mouth which has spread to the nipples. Check to see if there are white spots in the baby's mouth. This infection must be treated by a health worker.

g. Mother is sick

1) She is weak but can still hold baby.

In most cases, breastmilk will still be pure even if the mother is sick. The mother should continue breast-feeding.

2) She is too weak to hold baby.

Someone else can hold the baby to the breast.

3) Mother is taking medication or has a contagious disease.

The mother should contact a health worker for advice. If she has tuberculosis, she should stop breastfeeding. The baby should be taken to a wet nurse or given supplements.

**SUGGESTED ACTIVITIES:**

1. Have the group list all the problems of breastfeeding they can think of, in addition to the ones mentioned above. Are there remedies that women in their communities use? What problems have they encountered in their own experience? What solutions might they suggest? How do women in the community solve breast-feeding problems?

2. Divide the group into small groups of 3 to 4 trainees. Have each group make a set of cards - each card listing one breastfeeding problem. Have the group shuffle and draw cards one at a time, suggesting the solution to the problem. Do this until the problems and their solutions are familiar.
3. Pair off. Have each pair role play a family planning worker and new mother with a breastfeeding problem. How can the family planning worker help? What questions or fears might the mother have? Exchange roles.
4. Have the group members discuss their own experience with breastfeeding. What problems or fears did they have? How long did they last? What helped them? What locally available resources might be helpful to a new mother with breastfeeding problems?

**SUGGESTED MATERIALS:**

Small cards or pieces of paper

Large paper or poster board

Pictures of nursing women

UNIT IV

EVALUATION

1. Repeat the Pretest as a post-test.
2. Have each person list those points that should be mentioned in talking to a new mother about breastfeeding.
3. Have the trainees discuss their role in promoting breastfeeding and helping with breastfeeding problems, given their responsibilities as family planning workers, and time constraints.

UNIT V

EVALUATION

## INTRODUCTION

The material in this unit is designed for groups of participants that have completed all four of the preceding units. It provides the instructor with an example of a formal written evaluation as well as suggestions for summary activities which cover the key ideas and concepts found in the other units.

If the trainer plans to use all four units, the final evaluation which follows could also be used as a pre-test. If the group in training had difficulties with reading and writing, the instructor can do the evaluation orally. The trainer can read each of the questions in the final evaluation, providing any additional instructions that are needed, and note the responses given by the individual participants.

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UNIT V

FINAL EVALUATION

Several of the questions which follow have three or more answers to choose from. Only one answer is correct in each case. When you have chosen the answer you believe is correct, mark your choice by circling the letter for that answer.

1. Foods are classified in different groups. These are:

- a. Energy foods
- b. Body-building foods
- c. Protective foods
- d. Survival foods
- e. Only a, b, and c
- f. Only a, c, and d

2. Malnutrition can be caused by:

- a. A lack of body-building foods in the diet
- b. A lack of seasonings in the diet
- c. Loss of nutrients due to sickness
- d. Only a and c
- e. a, b, and c

3. Give five reasons why breastfeeding is a good practice

- a. \_\_\_\_\_
- b. \_\_\_\_\_
- c. \_\_\_\_\_
- d. \_\_\_\_\_
- e. \_\_\_\_\_

4. Malnutrition in a child can be discovered by:

- a. Palpating the child's abdomen
- b. Taking its temperature
- c. Monitoring changes in weight and height
- d. Only a and b
- e. Only c

5. Prepare a menu plan for a breastfeeding woman that will assure her of a balanced diet.

Breakfast:

Snack:

Lunch:

Snack:

Supper:

6. How long does it take for the body of a woman to recover completely from a pregnancy?

- a. 9 months
- b. 18 months
- c. 36 months

7. Between which ages is it recommended that a woman have her children?

- a. 13 to 18 years
- b. 18 to 35 years
- c. 15 to 40 years

8. Name one effect that low birthweight can have on a child: \_\_\_\_\_  
\_\_\_\_\_

9. Describe two ways in which family planning can help improve the nutritional status of women and their children:

- a. \_\_\_\_\_  
\_\_\_\_\_
- b. \_\_\_\_\_  
\_\_\_\_\_

10. Give two reasons why bottlefeeding can be dangerous:

- a. \_\_\_\_\_
- b. \_\_\_\_\_

11. On the next page, name two teaching methods and give two advantages and two disadvantages for each one.

**Teaching Method**

**Advantages**

**Disadvantages**

a. _____	_____	_____
b. _____	_____	_____

12. Two effects that combined oral contraceptives can have on the nutritional status of women who use them are:

- a. Cause the woman to gain or lose weight and increase her need for protective foods.
- b. Cause weight gain, increasing a woman's need for energy foods.
- c. Combined orals have no effect on nutrition.

13. One effect that non-hormonal IUDs can have on the nutritional status of users is:

- a. Cause a weight gain or a weight loss.
- b. Increase the amount of blood lost during menstruation and the risk of anemia.
- c. IUDs have no nutritional effects.

14. Name two important points that should be considered in counseling a breast feeding mother about the selection of a contraceptive:

- a. \_\_\_\_\_
- b. \_\_\_\_\_

15. Describe three resources which exist in your community for providing nutrition information, counseling or assistance:

- a. \_\_\_\_\_
- b. \_\_\_\_\_
- c. \_\_\_\_\_

16. Explain one thing a woman can do to prepare her nipples for breastfeeding:

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17. Name three common problems that can arise during breastfeeding and briefly describe how each can be solved:

a. \_\_\_\_\_  
\_\_\_\_\_

b. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

c. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

KEY TO ANSWERS - FINAL EVALUATION

1. Item e.
2. Item d.
3. o Breastfed infants are healthier because the mother's milk provides protection against allergies and illnesses.
  - o Breastfed children thrive on the close and frequent contact with the mother.
  - o Breastmilk is quickly and easily digested by the child.
  - o Breastmilk meets all the nutritional needs of the newborn and young infant.
  - o Breastmilk is always available, at the right temperature, and clean.
4. Item e.
5. NOTE: a menu plan for a balanced diet will vary according to the geographic zone, region or country and should reflect foods that are locally available and customarily consumed. What the trainer should look for and evaluate is the presence of foods from the three food groups in the menu plan and the distribution of these among the daily meals and snacks.
6. Item b.
7. Item b.
8. Increase the child's chances of sickness and of death.
9. o It allows a woman to space her pregnancies far enough apart to fully recover her nutritional and body strength between pregnancies.
  - o Adequate birth-spacing improves the child's chances of having a normal birth weight.
  - o It allows women to avoid pregnancies at ages when their risks are higher.
10. o. If the milk or formula is not properly mixed it may not provide the child with sufficient nutrients.

- o. When problems of non-potable water, inadequate hygiene, or poverty exist the possibility of malnutrition and diarrhea increases.
11. NOTE: See Task 6 in Unit II for the complete table.
12. Item a.
13. Item b.
14. o. Breastfeeding produces a contraceptive effect, but this is not sufficiently reliable for women to depend exclusively on breastfeeding for spacing pregnancies.
- o. Postponing pregnancy is important to permit the most recent child to breastfeed for at least a year.
  - o. Combined oral contraceptives are not recommended during the first few months of breastfeeding. If a woman wants to take pills, she should use a progesterone-only pill.
15. This will depend on the country. Possibilities include: Health Centers, Social Security clinics, nutrition rehabilitation centers, food distribution programs, growth monitoring projects, teachers, home economists, health educators, etc.
16. o. During the last two months of pregnancy, the woman should pull on each nipple five or six times a day until it begins to hurt a little.
- o. She should also roll each nipple between her fingers four or five times a day.
17. Different answers will be given. Compare responses with the list under Task 12 in Unit IV.

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## UNIT V

### SUMMARY ACTIVITIES

The following activities are suggested as final, summary activities for the four units. They are designed to have the trainees creatively use their new knowledge, reinforcing key points, and again focusing on its application in their individual community settings. Evaluation activities are especially recommended for groups that have difficulty with written tests.

1. Have the group (or several small groups) devise a "Snakes and Ladders"\* game that emphasizes nutrition and family planning. Snakes and Ladders is a board game. Two, three, or four people may play at one time. Each person uses a seed or other marker to show where they are on the board. Each player throws the die. The player with the highest number starts the game. Placing her seed on Square 1, she rolls the die and moves her marker according to the number on the die. If the die shows a 6, the player can move six, then roll again--an extra turn.

If the marker lands on the head of a snake, the snake "swallows" it, and the player must move his seed down to the snake's tail. He must read the messages to the players. Next turn, he must begin from the tail of the snake.

If the seed lands on the bottom of a ladder, the player moves her seed up to the top, reading the message to the other players. The next turn begins from the top of the ladder.

The first player to reach Square 100 wins, but he must throw the exact number needed to get to the square.

See examples on the following pages.

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\* Adapted from: Helping Health Workers Learn--D. Warner and B. Bower. pp. 11-26 to 11-28.

Examples:

84

Closely-spaced  
preganancies

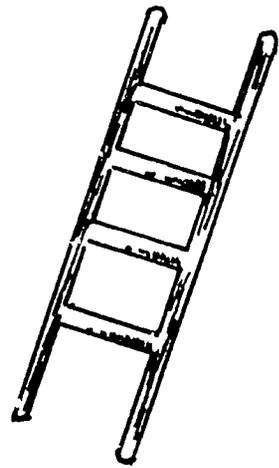


55

Makes mothers  
weak

70

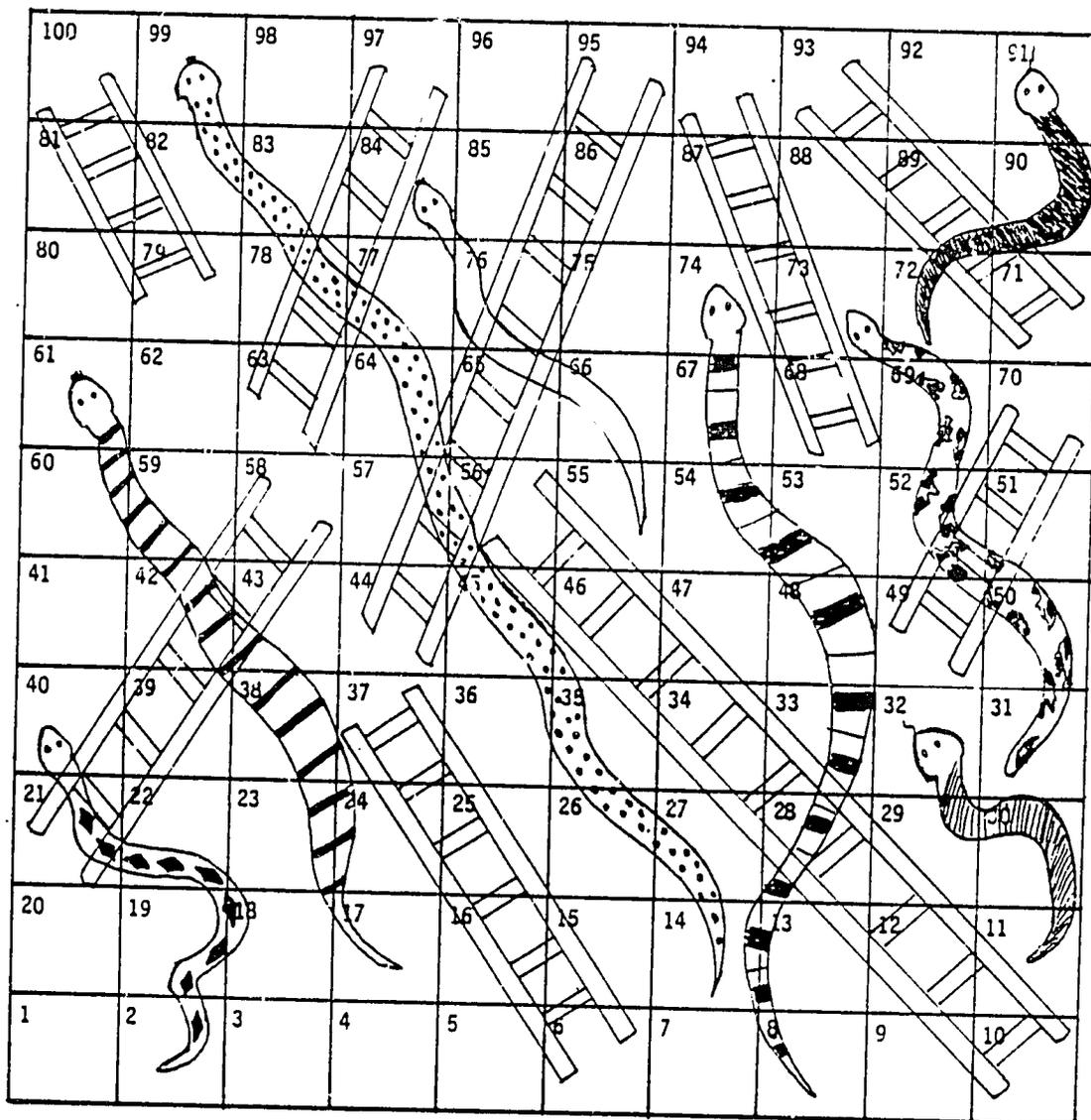
Growing up  
strong and healthy



49

A breastfeeding  
child

Here's an example of a board to fill in. Be creative. Use pictures, drawings, etc.



**Materials needed:**

- Seeds or other markers
- 1 die
- Game board

2. Divide the group into small groups of 3-4 trainees. Have each group develop 5-8 problem cases--a patient presenting herself or her child to the family planning worker.

On a large sheet of paper, or blackboard, etc., label 4 columns:

PROBLEM	POSSIBLE CAUSE	RECOMMENDATIONS	REFERRAL?
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Have the group discuss each problem case, suggesting the causes, their recommendations, and whether or not the patient should be referred. If referral is needed, to whom? (This may also be done individually, on individual sheets of paper, with problems developed by the trainees).

Examples of Problems:

- a. A woman using oral contraceptives feels depressed.
- b. A child has pale eyelid membranes and acts tired and listless.
- c. A mother who delivered by Cesarean requests bottled formula because her baby does not want to breastfeed.
- d. An 8-month-old baby cries all the time. The mother is only feeding it breastmilk.
- e. A woman using an IUD complains she is tired all the time.
- f. A woman who is bottlefeeding says her 4-month-old baby is sick all the time.
- g. A child, 3 years old, is very thin and short, has dry, discolored hair, and cannot stand up unaided.

- h. A pale, thin, tired woman says she does not have enough breastmilk to satisfy her 3-month-old child.
  - i. A woman started taking her old birth control pills after her baby was born and complains that her milk has dried up.
3. Have each individual name an item that he or she will purchase at the market, according to one of the themes listed below (or others you can think of). Each individual must name all previous items named, plus her purchase. If she forgets any item, she must drop out.

Examples:

Body-building foods

Trainee 1: I'm going to the market to buy eggs.

Trainee 2: I'm going to the market to buy eggs and milk.

Protective foods

Iron-rich foods

Weaning foods

Foods for a nursing mother

4. Have the class members design a dramatic presentation they could give in their communities to teach people about nutrition and family planning, the interrelationships between maternal age, child-spacing and parity and the health of mothers and their children. What messages would be effective? How could these be dramatized? What materials would be needed?
5. Assign small groups the task of designing an educational pamphlet of 3-5 pages for distribution in the community. The pamphlet would provide information on the subject of "Nutrition and Family Planning". When groups finish, have them exchange their pamphlet designs for revisions and comments.

**APPENDICES**

**APPENDIX I: DETAILED LIST OF CONTENTS OF THE UNITS**

**APPENDIX II: GLOSSARY**

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APPENDIX I

DETAILED OUTLINE OF THE CONTENTS OF THE UNITS

UNIT I

INTRODUCTION TO NUTRITION

**TASK 1:** Communicate correct information about the basic food groups, what foods belong to each group, and how each group contributes to a healthy body.

**LEARNING**

- OBJECTIVES:**
- 1a. Name the three major food groups by their nutritional function.
  - 1b. State two categories of food that fit into each group. (Ex. grains, meats, etc.).
  - 1c. Describe what function each food group performs in the body.
  - 1d. State the reason why iron is important and name three foods that provide it.
  - 1e. Name five locally available foods that fit into each food group.

**TASK 2:** Describe the special dietary requirement of mothers and children.

**LEARNING**

- OBJECTIVES:**
- 2a. Name the best food for an infant 0-4 months old.
  - 2b. State two essential components of the diet of an infant 6-12 months old.

- 2c. State four essential components of the diet of a 6-12 months old infant and state the order in which they should be added to the diet.
- 2d. Name the food group of greatest importance in the diet of a 1-5 year old child.
- 2e. Name the two food groups of greatest importance in the diet of a pregnant or nursing mother.

**TASK 3:** Describe in basic terms the causes and the results of malnutrition.

**LEARNING**

**OBJECTIVES**

- 3a. Name two causes of malnutrition.
- 3b. State two results of malnutrition,
  - 1) in children
  - 2) in mothers.
- 3c. Given a sample diet, identify the missing components.
- 3d. Describe three important local taboos and customs that influence malnutrition.
- 3e. State three physical signs or symptoms of malnutrition.

**UNIT II**

**NUTRITION AND FAMILY PLANNING**

**TASK 4:** Communicate how nutrition and family planning interact.

**LEARNING**

**OBJECTIVES:**

- 4a. State how long it takes for a woman to fully recover from pregnancy and why.
- 4b. Explain two ways in which birth-spacing affects the health of a woman.

- 4c. Describe two ways in which a woman's age can affect her pregnancy.
- 4d. State two ways in which parity affects a woman's nutritional status.
- 4e. Explain two ways in which birth-spacing affects the health of a child.
- 4f. State two ways in which a mother's age can affect her child.
- 4g. Describe two ways in which birth order can affect a child's nutritional status.
- 4h. State two reasons for low birthweight.
- 4i. Describe two ways in which low birthweight affects a child.
- 4j. Name three ways in which family planning can help improve the nutritional status of a woman.
- 4k. State three ways in which family planning can help improve the nutritional status of a child.

**TASK 5:** Communicate how breastfeeding, nutrition, and family planning interact.

**LEARNING**

- OBJECTIVES:**
- 5a. Give three reasons why breastfeeding is important to the child.
  - 5b. State one way in which poor nutrition can affect breastfeeding.
  - 5c. Explain the "displaced child syndrome."
  - 5d. Describe two ways in which family planning can affect breastfeeding.

- 5e. Name three benefits to the mother of breastfeeding.
- 5f. Explain two reasons for the decline in breastfeeding.
- 5g. Describe three risks of bottlefeeding.

**TASK 6:** Communicate family planning and nutrition information to the Community.

**LEARNING**

- OBJECTIVES:**
- 6a. Describe three teaching methods that one could use in community education.
  - 6b. Give two advantages and two disadvantages of each of the above teaching methods.
  - 6c. Design an educational activity for a community group that does not include a lecture.
  - 6d. Describe two appropriate "teaching aids" to use in community education.
  - 6e. Describe two ways in which you can assess what your audience has learned.

**UNIT III.**

**NUTRITIONAL EFFECTS OF CONTRACEPTION**

**TASK 7:** Communicate the nutritional effects of various contraceptives to prospective and current family planning users.

**LEARNING**

- OBJECTIVES:**
- 7a. State three nutritional effects of combined pills.
  - 7b. Describe the nutritional effects of progesterone--only contraceptives (pills, mini-pills, medicated IUDs, injections, implants).

- 7c. State a possible effect of an IUD on a user's nutritional status.
- 7d. Describe the nutritional effects of barrier and fertility awareness methods.
- 7e. Describe a possible nutritional effect of postpartum sterilization.

**TASK 8:** Communicate the interactions of breastfeeding, contraception and nutrition.

**LEARNING**

- OBJECTIVES:**
- 8a. Explain the contraceptive effect of breastfeeding.
  - 8b. State two factors that help prolong the contraceptive effect of breastfeeding.
  - 8c. Describe the effect of combined pills on breastfeeding.
  - 8d. Name two responsibilities of a family planning worker when counseling a woman who is breastfeeding.
  - 8e. State three important points that should be covered in a counseling session with a breastfeeding woman on contraceptive choices.

**TASK 9:** When appropriate, refer clients to other community resources that may aid them with nutritional problems.

**LEARNING**

- OBJECTIVES:**
- 9a. Identify three types of nutrition services that might be available in a community.

9b. State two reasons why cooperation between resource people is important.

UNIT IV.

BREASTFEEDING: GETTING OFF TO A GOOD START AND SOLVING COMMON PROBLEMS

**TASK 10:** Correct myths and misunderstandings about a woman's ability to breastfeed.

**LEARNING**

**OBJECTIVES:**

- 10a. State five myths about breastfeeding.
- 10b. Give a correct explanation to contradict each of the above myths.

**TASK 11:** Communicate information about preparations for breastfeeding and initiation of breastfeeding to prenatal and postpartum clients.

**LEARNING**

**OBJECTIVES:**

- 11a. Explain two ways of preparing the nipples for breastfeeding.
- 11b. State the benefit of colostrum to the baby.
- 11c. Indicate how soon after delivery a baby should begin breastfeeding.
- 11d. State how long it takes for a woman's milk to "come in."
- 11e. Describe two effects of the baby's sucking on the mother.
- 11f. Describe two advantages of feeding-on-demand.

**TASK 12:** Counsel women on how to overcome problems encountered in breastfeeding.

**LEARNING**

**OBJECTIVES:**

12a. State five common problems encountered in breastfeeding.

12b. State a solution for each of the above mentioned problems.

**UNIT V.**

**EVALUATION**

Final Evaluation

Key to Answers

Summary Activities

APPENDIX II

GLOSSARY

<b>ANEMIA:</b>	A deficiency in essential elements in the blood that can result from a diet with too little iron.
<b>AREOLA:</b>	The circular area of darker skin that surrounds the nipple on the breast.
<b>BIRTH ORDER:</b>	The place of the child in the sequence of children born to the mother (first born, second child, third child, etc.).
<b>CALORIES:</b>	Units of energy present in varying amounts in different foods.
<b>CESAREAN:</b>	Delivery of a baby through an incision made through the abdominal wall and uterus.
<b>COLOSTRUM:</b>	A thin, yellow milky fluid secreted by the breasts shortly before or after the birth of a child.
<b>COMBINED PILLS:</b>	Contraceptive pills which contain two types of female hormones, estrogen and progesterone. Also called combined oral contraceptives.
<b>CONTRACEPTIVE:</b>	A substance, device or practice used to avoid pregnancy.
<b>DEPRESSION:</b>	A state of melancholy that causes a loss of interest in normal activity.
<b>DISPLACED CHILD SYNDROME:</b>	Deterioration in the nutritional status of a baby that is weaned early because his mother has become pregnant again.
<b>ECZEMA:</b>	Name given to inflammations of the skin which are characterized by oozing, crusting vesicles or blisters and by flaking or scaling of the skin.
<b>ENGORGEMENT:</b>	Swelling of the breast due to an increase in milk production, in the volume of blood in breast veins and to inflammation of mammary tissues.
<b>FOOD:</b>	Natural sources of nutrients from the edible portions of plants and animals.
<b>IMMUNITY:</b>	Natural or acquired resistance to disease.

<b>KWASHIORKOR:</b>	A severe form of malnutrition caused by a lack of sufficient protein in the diet.
<b>LIPPES:</b>	A type of intrauterine contraceptive made of plastic. Also known as the Lippes Loop. A non-medicated IUD.
<b>LOW BIRTHWEIGHT: BABY</b>	A child who weighs less than 2,500 grams (5 1/2 pounds) at birth.
<b>MARASMUS:</b>	A severe form of malnutrition caused by an insufficient quantity of both calories and protein in the diet. See PCM.
<b>MEDICATED IUDS:</b>	Intrauterine Devices (IUDs) which slowly release small amounts of the hormone progesterone when placed in the uterus. The copper IUDs such as the Copper 7 or Copper T, can also be considered "medicated" even though they do not have any hormonal effects.
<b>MENOPAUSE:</b>	The natural cessation of menstruation.
<b>MINI-PILLS:</b>	Contraceptive pills which contain only progesterone. They do not contain any estrogen.
<b>NON-MEDICATED IUDS:</b>	Intrauterine devices such as the Lippes Loop or Saf-T-Coil which are made of plastic. They have no chemical or hormonal effects on the uterus or body.
<b>NUTRIENT:</b>	A substance or food which provides nourishment to the body.
<b>NUTRITION:</b>	The sum of the process of eating, digesting and assimilating food. Also the science which studies foods and their relation to health.
<b>OBESE:</b>	A person who has an excessive amount of body fat.
<b>OBESITY:</b>	The excessive accumulation of body fat.
<b>PARITY:</b>	The number of children a woman has borne.
<b>PROTEIN:</b>	Essential elements found in cells of the body. They must be obtained from food for the repair of body tissue and for normal growth and development.
<b>PCM:</b>	Protein-Calorie Malnutrition or PCM is a term for nutritional deficiencies produced by a diet with insufficient protein and generally some variable degree of deficiency in calories as well.
<b>SUBDERMAL IMPLANTS:</b>	A progesterone-only contraceptive. Small capsules or rods containing progesterone are inserted under the skin by a clinician and can be removed at any time by a trained professional. The contraceptive effect of implants lasts from three to five years depending on the type.

- THRUSH:** A fungal infection of the mouth. Also known as moniliasis or candidiasis.
- "THE INJECTION":** An injectable progesterone-only contraceptive with an effectiveness of two to three months, depending on the type used.
- WEANING:** The process of gradually introducing supplemental foods to the diet of an infant, in addition to milk consumed.
- VITAMINS:** Natural substances found in small amounts in different foods, all of which are important to normal body functioning.

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