

SUMMARY OF PROCEEDINGS

USAID/REDSO/WCA

WORKSHOP ON INTEGRATION OF NUTRITION AND ORAL REHYDRATION THERAPY

INTO PRIMARY HEALTH CARE

29 October - 2 November 1984

Abidjan, Ivory Coast

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## I. INTRODUCTION

The REDSO/WCA Workshop on Integration of Nutrition and Oral Rehydration Therapy (ORT) into Primary Health Care was held in Abidjan, Ivory Coast, from 29 October to 2 November 1984. Forty-two representatives working in nutrition and primary health care from 14 West and Central African countries attended the workshop. The workshop was sponsored by the USAID Regional Office for West and Central Africa (REDSO/WCA), with much of the technical support provided by the Office of Nutrition and the Africa Bureau, AID/Washington, the Office of International Health, Department of Health and Human Services, and WHO/AFRO and UNICEF New York.

This workshop was organized as a follow-up to the International Conference on Nutrition in Primary Health Care held in Cairo in January 1984 to take the lessons learned and recommendations made in that meeting to the point of implementation.

The main purpose of the workshop was to strengthen primary health care (PHC) strategies by initiating or enhancing the process of incorporating appropriate nutrition components into existing national PHC programs. To achieve this, the participating PHC and nutrition professionals systematically designed specific proposals of nutrition interventions and activities during the course of the workshop that will hopefully be incorporated in the PHC plans of their respective countries.

Participants were assisted by a group of fifteen international experts and resource persons in nutrition, ORT and PHC. Moreover, available financial and technical resources to support and follow-up these proposals were identified by representatives of nine international agencies and a comprehensive supply of technical documents were made available to the participants.

## II. OPENING CEREMONY

The workshop participants were welcomed by Dr. James Shepperd, Regional Health Officer, REDSO/WCA, USAID, who had initiated this workshop.

Mr. Robert Miller, U.S. Ambassador to the Ivory Coast, offered his greetings and wished the participants success in the week's work. Some health programs that are assisted in the U.S. in this region were mentioned.

Mr. Laurance Bond, Director of REDSO/West and Central Africa, also welcomed the participants. He described REDSO's role and support for health and nutrition programs.

Professor Alphonse Djédjé Mady, Minister of Public Health and Population, Ivory Coast, made the opening statement. He stressed the importance of education of the public in nutrition and the use of ORT in the Ivory Coast.

### III. KEYNOTE ADDRESS

#### Integration of Nutrition and ORT into PHC, An African Opportunity by Dr. Samuel Ofosu-Amaah, UNICEF

The PHC strategy as endorsed by the Alma Ata Declaration of 1978 may be the way to improve health and nutritional status and to help raise the level of economic development of African countries that are beset with severe socio-economic and health problems. The important and revolutionary ideas of this strategy are: self-reliance, community involvement, intersectorial coordination, and technical cooperation among developing countries.

They decrease the dependence of the people on the health professionals and the health care system provided by the government. This may be the only realistic way to bring health to all, especially to the poor.

UNICEF has proposed the concept of GOBI - Growth monitoring, Oral rehydration, Breastfeeding, and Immunization. It uses low cost, scientifically sound methods that can be applied by families or communities to fight health problems to ensure child survival.

We must understand the systems of food production, distribution and consumption so that we can analyze the problems and offer realistic solutions in appropriate programs. Our obligation is to be advocates for the needs of the poor by our contacts with policy-makers.

In applying the nutrition interventions in PHC selected in the Cairo Conference, we should consider sound traditional methods, allocating more responsibility to the community, the right time and place for each intervention, and orientation of school children, fathers and grandmothers. Food supplementation has to be targeted and defined. The African woman is the central figure to whom education and help has to be given.

"It is my hope that the crisis in Africa today will concentrate our minds to find ways of working with communities to meet the changes in health and nutrition as many countries have done before us."

#### Discussion of Primary Health Care

by Dr. J. Shepperd, RHO, REDSO/WCA

In the few years since 153 nation of the world embraced the goal of Health for All by the Year 2000, PHC has been a very popular title for the strategy to provide vital health services to the most remote areas.

To redefine the PHC strategy, primary health care is the systematic provision of health services based upon what is needed by a community and what it can afford. There are 8 groups of services from which to choose:\*

- promotion of proper nutrition,
- adequate supply of safe water,
- basic sanitation,
- maternal and child care including family planning,
- immunization against infectious diseases,
- prevention and control of locally endemic diseases,
- education concerning prevailing health problems and methods of prevention and control, and
- appropriate treatment of diseases.

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\* Primary Health Care, Alma Ata, 1978, WHO/UNICEF.

The strategies to implement PHC are:

- the services must be affordable by the community and the country,
- community participation,
- decentralization of the development and management process,
- inter-sectorial development,
- appropriate health technology, use of paramedical personnel and traditional health practitioners,
- technical cooperation among developing countries (TCLC), and
- mobilizing public opinion and political support so that priority for health is raised and finances and resources become available.

Most of the problems in program planning and implementation relate to these strategies, especially that of affordability.

Too many programs focus on curative services and too few on preventive care. Too few emphasize nutrition along with its other PHC elements even though severe nutritional problems exist among the populations served.\*

We hope that through the participants' work in the workshop, a large demand for resources and services in the nutrition area will be created to which USAID and other international aid organizations can respond.

#### IV. SUMMARY OF CASE STUDIES

Four case studies were presented at the workshop, providing examples of attempts to integrate nutrition into primary health care from Zaire, Gambia, Niger and Senegal. These attempts were described and evaluated, allowing the participants to share and learn from these experiences.

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\* "Sine Saloum Primary Health Care Project Case Study", Front Lines, August 1984.

Case Study I - Zaire by the SANRU (Santé Rurale) Project Team and  
CEPLANUT (Centre National de Planification de Nutrition Humaine) Team

The case study was presented in four parts:

1. The Development of PHC in Zaire

Zaire is undergoing a full reorganization of its health service to adapt it to the principles of PHC.

Five inputs were made which contributed to the success of this effort:

- pilot PHC programs, carried out between 1970 and 1980, tested the feasibility and served as models for later expansion of the PHC program,
- the Health Action Plan for 1982-1986 which provided the framework for the reorganization of health care coverage by area into "health zones",
- the Decentralization Strategy which left the planning and management of the programs to local authorities in the "health zones",
- the important role played by non-governmental organizations, especially that of the churches in providing PHC, and
- international aid organizations/projects, which provided much of the technical and material assistance required in the program.

2. Nutrition and PHC in Zaire: Aspect and Perspective

Zaire inherited a colonial health care system that emphasized costly curative care, which was inaccessible to 80% of the population, especially those in the rural areas. Zaire then opted for the PHC strategy, which created "health zones", each a geographical area where access to health care is provided for 100,000 to 150,000 inhabitants through a network of health centers that are supervised by a referral hospital. Local councils and committees which include the health personnel and representatives from the community direct the programs in their zones. One hundred and forty-six zones were planned for 1982-1986. In 22 of the 50 zones developed under the SANRU (Rural PHC) project assisted by USAID, nutrition interventions are carried out by

multi-disciplinary committees with varying degrees of success. Some practical recommendations were made on the implementation of these interventions.

### 3. Training of Personnel in Nutrition

Nutrition training is given at:

- training institutions for health professionals and workers,
- the health zone to all levels of health workers, adapting to the local needs, and
- the Village Development Committee, emphasizing intersectorial collaboration.

### 4. The Activities of CEPLANUT (National Nutrition Planning Center)

CEPLANUT is an advisory body created in 1978 in the Public Health Department that is specialized in nutrition surveillance, planning and management of nutrition activities, dissemination of nutrition information, and preventive interventions.

The Center is directing a pilot regional project for nutrition improvement in the Bandudu Region, which, if successful, will be expanded to the 8 other regions. The activities include nutrition education and training of school children, nurses' aides and trainers in health and agriculture, and collection and analysis of data on the nutrition situation. A regional Food and Nutrition Council (CRANB) was formed in 1983, which is assisted by CEPLANUT in the planning, assessment and funding of proposed nutrition interventions.

Case Study II - Gambia by Mrs. Haddy Gabbidon, Medical and Health Department

#### Paper 1: The Nutritional Aspects of the Gambia's ORT Program

The Mass Media for Infant Health Project in the Gambia was started in May 1981 with the support of USAID to respond to the problem of diarrhea and subsequent dehydration and malnutrition. Its main goals are to:

- reduce under 5's mortality due to diarrhea/dehydration, and
- establish the educational methodology in the Medical and Health Department.

Through campaigns using radio broadcasts, graphic materials, trained health workers and volunteers to disseminate the messages, villagers were given instructions on the recognition of dehydration, preparation and administration of ORT in the home and appropriate feeding of the child during episodes of diarrhea.

Evaluation of the results after the first year of the campaigns showed that although the messages on mixing and giving the sugar-salt solution have been effective, the feeding messages were far less successful in changing the behavior of the mothers. These feeding messages were revised to respond more to the Gambian mother's perception and needs, and are focused upon in the 1983 rainy season campaign. An important addition to rural health workers being trained in year 3 are primary health care workers. The campaign also addressed rural fathers. More emphasis is placed on the second goal in the training of health education unit personnel.

#### Paper 2: Integration of Nutrition in PHC

The PHC program in the Gambia was started in 1981 to extend health services to all, and is being implemented very rapidly. The emphasis is on community self-reliance so that only initial capital development costs are subsidized externally. Community health workers from villages are selected and supported by their village committees. They are trained to provide basic health care, and to mobilize communal efforts to improve the health and nutritional status of their villages. They are supervised by community health nurse supervisors and backed up by referral health services.

The Nutrition Unit of the Health Department has undertaken to formulate and initiate nutrition surveillance through PHC. Community Health Nurses are trained in surveillance and interventions at the individual and village levels, who will in turn train the community health workers under their supervision.

Case Study III - Niger

The Joint Nutrition Support Program (WHO/UNICEF) in Niger by Dr. D. Buriot, WHO/UNICEF; Mlle. F. Alzouma and M. Koda, Ministry of Health

This program is funded by the Government of Italy and is only in its initial stages of implementation. The goals of the program are to:

- increase the capacity of Niger to deal with the problems in food and nutrition, infant and child health and development, and the status of women,
- achieve self-sufficiency in food in the long-term, and base the field interventions on the developmental framework, and
- improve the nutritional status and lower the mortality and morbidity rates of the infant and young child.

The strategy of the program, in using a multi-sectoral approach, community participation and promoting self-reliance, corresponds perfectly to the principles of the country's development strategy and national PHC policy. The program is conceived and being implemented by an inter-ministerial Nutrition Committee at the national level, while the conception, planning and implementation of the program at the local level is done by the village development committees (VDC) in consultation with the technical services.

Three zones have been chosen in which to start the program - an agricultural, a pastoral, and a mixed zone - with 10 villages in each zone. Participation is voluntary. In each, the VDC chooses one or two actions from among those that are offered and assisted by the technical services for the improvement of the health, food and nutrition, and social and economic status of the village. The village assumes responsibility in the decision-making, and support and maintenance of the chosen activities, which should involve the participation of women and youths. The program will be assessed and revised annually at the local and central levels.

The PHC Program in Niger

The program was begun in 1964 and is now under the direction of the Ministry of Public Health and Social Affairs. It consists of the

training and support of volunteer village health workers (VHW). The community participates by choosing and supporting the health worker morally and financially, and being involved in activities to improve health and nutrition in their village.

Despite its early beginnings, the program did not evolve until 1974, and in 1980 the first Village Health Worker Training Guide was produced in an effort to rationalize the training methods. This guide was revised in 1984. It contains a nutrition component that includes activities in the prevention and treatment of malnutrition.

The major problems encountered in this program are lack of resources and manpower, due to financial, cultural and geographical constraints. The program will be expanded in 1984-1985 to cover 4,000 villages, each with a village health team which will be supported technically by the government health care system.

Case Study IV - Senegal by Col. Sy and Mme. Lo, SANAS (Service de l'Alimentation et de la Nutrition Appliquée)

Since 1980, Senegal has given priority to PHC, and has reorganized the health system to support the program. The implementation strategy includes the creation of one health unit per village, training of local personnel and health committees, development of the 8 PHC elements in collaboration with all sectors concerned, and reinforcing referral services. Awareness was created in the population and their participation in implementing the program was organized. Resources are provided by the Ministry of Public Health, as well as other ministries involved, the community, and multilateral cooperation. Evaluation of the program has shown it to be successful in providing access and knowledge of PHC, and it has a high level of community participation and utilization. Problems encountered are those of coordination, resources and infrastructure, and training and management.

PHC can play an important role in the alleviation of the nutritional problems in Senegal of insufficient caloric intake, reduction of breastfeeding, poor weaning foods, anemia, goiter, and diarrheal diseases. Community health workers (CHW) are being trained and

supervised by nurses from the medical posts to carry out the interventions of nutrition surveillance using the "thinness chart", treatment and rehabilitation of malnutrition, nutrient supplementation, promotion of breastfeeding and appropriate weaning foods, ORT, education in nutrition, hygiene and sanitation. They form part of the national nutrition surveillance system. Data collected by the CHW is processed and analyzed by SANAS (Food and Applied Nutrition Service), the central body which plans, coordinates and evaluates the nutrition programs.

V. DISCUSSION OF INDIVIDUAL COUNTRY SITUATIONS IN SUBREGIONAL GROUPS

Workshop participants were divided into three linguistic and ecological groups to discuss the constraints to the implementation of nutrition interventions in PHC and to relate them to individual country experiences.

Group 1 - Sahel (Mauritania, Senegal, Niger, Mali)

Constraints

- relative importance accorded to curative aspects of health care with little effort in preventive and promotional aspects,
- lack of decentralization in political organization and decisionmaking,
- lack of participation and mutual trust,
- insufficient implementation of structure, and
- dependence on imported foods.

Group 2 - Francophone Central and West Africa (Zaire, Central African Republic, Guinea, Ivory Coast)

1) Constraints

- political constraints in choices, structures, dissemination, awareness and acceptance of information,
- methodological constraints in training and evaluation programs; examples - data collection, community participation,
- lack of resources, means of communication,
- lack of coordinating body for the activities, and
- lack of motivation of personnel.

2) Factors that Influence Successful Integration

- existence of structures that monitor and follow-up on nutrition activities,
- integration of PHC into the health policy, and
- changes in mentality.

Group 3 - Anglophone Central and West Africa (Liberia, Sierra Leone, Nigeria, Ghana)

1) Constraints

- poor acceptance of new ideas, changes and practices,
- finance,
- logistics,
- poor program planning,
- political instability and insufficient commitment,
- cultural factors,
- lack of definition of epidemiological factors that contribute to malnutrition,
- lack of well-defined food and nutrition policies,
- administrative problems: inadequate training of health personnel, and insufficient personnel commitment,
- lack of understanding of communities' priorities,
- laxity in the solution to nutritional problems,
- poor coordination of nutrition programs and activities, and
- the multifactoral nature of malnutrition.

2) Factors Contributing to Successful Integration

- proper orientation and training of health workers,
- mobilization of existing facilities for the solution to the malnutrition problems,
- effective utilization of local resources,
- involvement of multi-purpose field workers in the PHC program
- massive educational campaigns on: increased food production especially protein rich foods, and proper selection and use of local foods,
- sufficient government commitment in agriculture, e.g., provision of inputs, etc.,

- growth monitoring - creating awareness of the use of growth charts in mothers, school children and the general public,
- institution of an effective nutrition surveillance system, and
- effective diarrhea control.

### 3) Lessons Learned from Experiences Thus Far

- growth charts can be used as a tool,
- food aid can be used as an incentive but should be targeted,
- reliance on external food aid should be discouraged,
- clinic-based programs are not needed,
- the understanding of basic nutrition concepts needs to be ensured and transferred to others, especially among non-health staff,
- face-to-face teaching and demonstrations are effective ways of educating mothers, and
- mass media can be used to back up nutrition education.

## VI. NUTRITION INTERVENTIONS IN PHC

Technical papers describing the state of the art of key nutrition interventions were presented. They are summarized as follows:

### 1. Introduction to Nutrition, Food and Socio-Economic Development by Dr. C. Schuftan, Louisiana State University

Many African countries today are facing decreasing per capita incomes, increasing foreign debts, insufficient food production and lagging development, which are the basis of poverty. Malnutrition is only one of the many faces of poverty so that it has to be dealt with not only by conventional health interventions but by non-health interventions that address the socio-economic issues as well. These influence and can impede the flow of the food chain from production to individual utilization. The socio-economic problems that are nutrition related include urban migration, seasonal shortages of food and employment, low food purchasing power.

The many causes of malnutrition can be categorized into socio-economic, political, agricultural, health and environmental,

educational, administrative and infrastructural causes. These are inter-related. The overall policies and interventions to combat malnutrition depend on the commitment of the government. Actions in development that can be taken were given, which should give priority to stimulation and improvement of food production.

Some of the determinants of malnutrition can best be corrected through the PHC approach using low cost design and technology, promoting self-reliance and community participation. Health or health related interventions were listed, which emphasize preventive services and education. The capacity of the existing PHC system and its needs must be carefully assessed when planning a nutrition component to ensure success in its integration.

## 2. Growth Monitoring in Primary Health Care Programs

by Dr. J. Kreysler, WHO

Growth monitoring should be the first nutritional activity to be carried out in PHC as it can provide answers to the 'who, how, how many, where and why' of the malnutrition problem. They can then be used to develop a rational program. "Nutrition mapping" is advocated to illustrate the geographical distribution of the incidence of malnutrition which can be tied in with ecological factors and can be used for determining the priority and target groups. A nutrition surveillance program should not be embarked upon if there are no means to act on the information collected.

Growth monitoring in PHC programs should include the following objectives:

- create awareness of the importance of good nutritional status,
- identify individuals and groups that are nutritionally at risk,
- provide the rationale for the management of those at risk,
- provide the basis for priority listing and rational choice in intervention programs, and
- provide the basis for nutrition program planning and evaluation.

The usual growth monitoring tools are: clinical assessment, mid-upper arm circumferences, weight-for-age and weight-for-height.

Their main uses, advantages and shortcomings were discussed. It was stressed that health workers should depend on clinical assessment first and use the objective measurements only as confirmation, and not pass it over for the quicker methods.

The PHC approach can be used to increase growth monitoring coverage. However, it is often ineffectively carried out as no remedial action is taken after malnutrition is detected in the individual or group on the local, regional or national levels. The results of any nutritional interventions are also difficult and slow to demonstrate.

The development of sub-regional strategies for countries with similar socio-cultural and ecological conditions is encouraged as they can share information and experiences.

3. Perinatal Nutrition, Food Supplementation and the Weaning Process  
by Dr. Gretchen Berggren, Save the Children Fund

The nutritional status of the newborn, indicated by his birthweight, affects his survival and is dependent on the maternal status. As birthweight is related to the pre-pregnancy weight and weight gain of the mother, the maternal nutritional status can be easily monitored using weight and mid-upper arm measurements to detect women who are at risk of producing low birthweight infants. Nutrition interventions can then be applied to them. Examples of monitoring tools such as the "pregnancy weight card" with reference weight gain curves and risk indicators were given. These nutrition activities can be integrated into the maternal and child health services, and village health workers can be trained to carry them out to reach all the women in the community.

Food supplementation during pregnancy has been shown to improve the outcomes. However, such programs must ensure that the supplementary food reaches the pregnant woman and that her food intake is increased and not merely substituted.

The child's survival is also affected by breastfeeding, supplementary feeding and weaning practices. Studies have shown that infant and child mortality rates are reduced in health programs where mothers are given

nutrition education. The mothers should learn by doing how to prepare appropriate weaning foods that are adequate nutritionally and to feed the child frequently and in sufficient quantities.

It is often not practical or affordable for a mother to prepare the right weaning foods. Appropriate weaning foods that can be produced at the village level, that are acceptable and can be easily prepared by other family members as well as the mother, need to be developed.

It was stressed that the health and nutrition programs should reach all the children in a family.

4. Nutrition Information, Education and Communication  
by Mrs. Mathilda Pappoe, Ghana Medical School

Information, education and communication (I.E.C.) as used in a nutrition intervention in a PHC program were defined as providing knowledge, experience and interactions that change and modify attitudes and behavior to those that promote good health and nutrition. It involves a systematic and organized series of activities, the purpose of which is to raise public awareness and understanding of nutritional problems, their relationship to health, and actions to be taken to solve them. The level of community involvement, critical to the success of the PHC program, can also be raised by these activities by motivating and creating a spirit of participation.

I.E.C. interventions must recognize the cultural and other factors that influence food practices. As food habits are mainly culturally determined, they are resistant to change, but can also be modified as they are a learned and dynamic behavior.

The I.E.C. intervention should be included in the PHC program only if the following criteria are met:

- it can help the program to achieve its objectives and expected outcomes,
- the manpower requirements, especially in trained professionals, can be met,
- the material resources are available, and
- the costs can be justified by the benefits gained.

The design, implementation and evaluation of the overall PHC and nutrition program should include that of the I.E.C. intervention and should involve the overall program staff, I.E.C. personnel as well as community members. The specific I.E.C. objectives should relate to those of the overall program, for example, in deciding the target groups and information to be obtained and provided. They should also be based on a prior assessment of the I.E.C. needs of the community.

#### 5. Oral Rehydration - Treatment and Rehabilitation

by Dr. Makhtar N'Diaye, ORANA

The close relationship between diarrhea and malnutrition is now well known. Repeated episodes of diarrhea lead to malnutrition due to poor feeding practices, anorexia, malabsorption and vomiting that occur during these episodes. It has been shown that malnourished children are also more susceptible to acute diarrhea. Breastfeeding, good nutritional status and food hygiene are all important in the prevention of diarrhea.

In all cases of acute diarrhea, the short-term risk of dehydration can be treated by the simple method of oral rehydration. When presented with such a case, all details of history and observations must be well recorded. Two examples of records were given: the "diarrhea character" and the "dehydration score", tools used in determining the treatment and follow-up required, and also for the reporting system.

The child must be weighed to determine the degree of dehydration and the amount of rehydration fluid required. The weight also indicates the child's nutritional status, and the need for nutrition rehabilitation and education. Breastfeeding must not be interrupted, and other appropriate foods should be given to correct and maintain the child's nutritional status. Fasting is unnecessary and is detrimental to the child's condition.

The onset of severe dehydration is often sudden and the patient's condition can deteriorate very rapidly. Oral rehydration should be given from the very first onset of diarrhea even if dehydration is slight. If dehydration has become severe, intravenous rehydration has to be given. Methods to be used in both cases were described.

ORANA (Organization for Research on African Food and Nutrition), a regional institution, is carrying out several projects in this field:

- an epidemiological survey in Senegal,
- development of a rehydration formula using rice flour, and
- oral rehydration therapy for the severely malnourished child with diarrhea.

#### 6. Community Food Actions

by Maura Mack, S&T/N, AID/Washington

Community food actions are local food production activities that can help the individual or community to achieve and maintain good nutritional status. As improved food availability is necessary to prevent or resolve malnutrition among the poor, it constitutes one of the major nutrition interventions that can be integrated into PHC. These actions share some common characteristics with PHC such as community participation, self reliance, low cost technologies, and target groups.

There is a large variety of community food actions that range from home gardens to community irrigation. Some examples were given. They should be implemented simultaneously with nutrition education to establish the link between increased food production and consumption, and improved nutrition and health. By these actions, the most nutritious and appropriate crops according to the community's needs and resources can be produced.

The following factors should be considered in choosing the most appropriate community food actions:

- livelihood and locale of the target population,
- availability and access to resources (e.g., land, labor, water, seeds),
- food production activities, problems and seasonality
- main health problems in the community,
- socio-economic conditions, and
- availability of qualified community development workers.

The community should participate in the selection of actions, based on information on the above factors and their ability to address the food and nutritional needs.

The major constraints to both PHC programs and community food actions are low priorities, high costs, lack of appropriate, low cost technologies and infrastructure, and little technical extension or follow-up. In order to succeed, the actions selected must address the issues of the basic problem and its primary causes, cost effectiveness, assurance that benefits will reach the target groups, providing technical support and follow-up, women's role, social influences on behavior, and evaluation. They also need an appropriate scientific basis and direction.

A community food action program from Mauritania was presented. Community food centers were created to combat malnutrition through education of the masses, motivation and organization of community participation, nutrition surveillance and rehabilitation, immunization, and food supplementation activities. These centers are managed by the mothers and supported by the community with food assistance from aid donors.

7. Treatment and Rehabilitation of Severe Malnutrition  
presented by Claudio Schuftan, LSU

The malnutrition syndromes of marasmus and kwashiorkor and their major causes were described. Three types of treatment are possible:

- a) Outpatient treatment in the village - This is usually unsuccessful due to the inability or unwillingness of the mother to apply the nutritional advice given. Home visits must be made by the health worker to show and help the mother feed the child,
- b) Nutrition rehabilitation centers - this is a unit that is set up especially to treat malnourished children and to train the mothers to feed them correctly, and
- c) Hospitalization - is necessary for very ill children that have to be observed closely or where home or rehabilitation center treatment is not possible. The mother should accompany the child and be responsible for feeding him so that she can learn correct practices. Treatment of complications such as diarrhea, sepsis, and anemia may be needed.

Nutrition education of the mother is essential for the prevention of recurrence of the malnutrition in her child. She has to understand the nature and cause of her child's illness, the treatment or foods needed to

correct it, and the long recuperation period. Next to breastmilk, cow's milk is the best protein rich food that can be given during the initial stage. Energy rich foods such as oil can be added for protein-sparing. If the child is over or at a less critical state, other local protein and energy foods that are available to the mother can be given. The important thing is to feed the child 5 times or more a day.

Severe malnutrition can be prevented also by three other interventions: vaccination against measles, TB and pertussis; early detection through growth monitoring; and child spacing to avoid too early displacement of the child from the breast. All these interventions can be implemented at the PHC level.

8. Supplementary Feeding Programs and Primary Health Care: The Integration Issue

by Dr. Betsy Stephens, International Science and Technology Institute

Supplementary feeding programs in Africa are usually separate from PHC activities. They should be integrated as the food aid provides a substantial resource that is available for nutrition intervention in a PHC program, which can, in turn, be reinforced by the complementary health services in effectiveness. Together, they will benefit the target groups more and increase coverage in both activities.

In some supplementary feeding programs, Maternal and Child Health services are provided, including growth monitoring and nutrition and health education. These programs have been found to be more successful in the improvement of the health status. The food ration given increases the family's income; it can be used as an educational tool and for nutrition rehabilitation. It provides a strong incentives for the mother to participate in the program, and thus increases the coverage of PHC, especially in preventive measures. A strong, well-supported and extensive network of food distribution centers has already been established, which can be used to support the PHC infrastructure. Additional health components can just be added on to the existing feeding and MCH programs in these centers.

Issues that need to be resolved in the integration of PHC and supplementary feeding programs are those of organizational framework, personnel, targeting, methods of growth monitoring and nutrition surveillance, composition and size of the rations, and sustainability.

The objectives of the programs may vary in detail but are based on the common goal of improving the health and nutritional status. The selection of centers will depend on the objectives. The roles and responsibilities of the personnel have to be redefined for the integrated program. The planning of activities must be coordinated. The training, logistical and supervisory support systems have to be organized. The program should include the minimal services of food distribution, growth monitoring, health education, ORT, vaccinations, and referrals for curative case. Other services that may be incorporated according to resources are: family planning, pre-natal care, malarial prophylaxis, de-worming, and nutrition rehabilitation.

The integration of programs will necessitate national commitments at the policy and programming levels, and reorientation and reorganization of existing food distribution programs.

The discussion among participants that followed centered on the issues of dependency created by food aid, costs to the national governments, and need to target the food distribution. It was felt that assistance should be channelled instead to increasing food production and self-sufficiency.

Guidelines to Incorporation of Nutrition in PHC

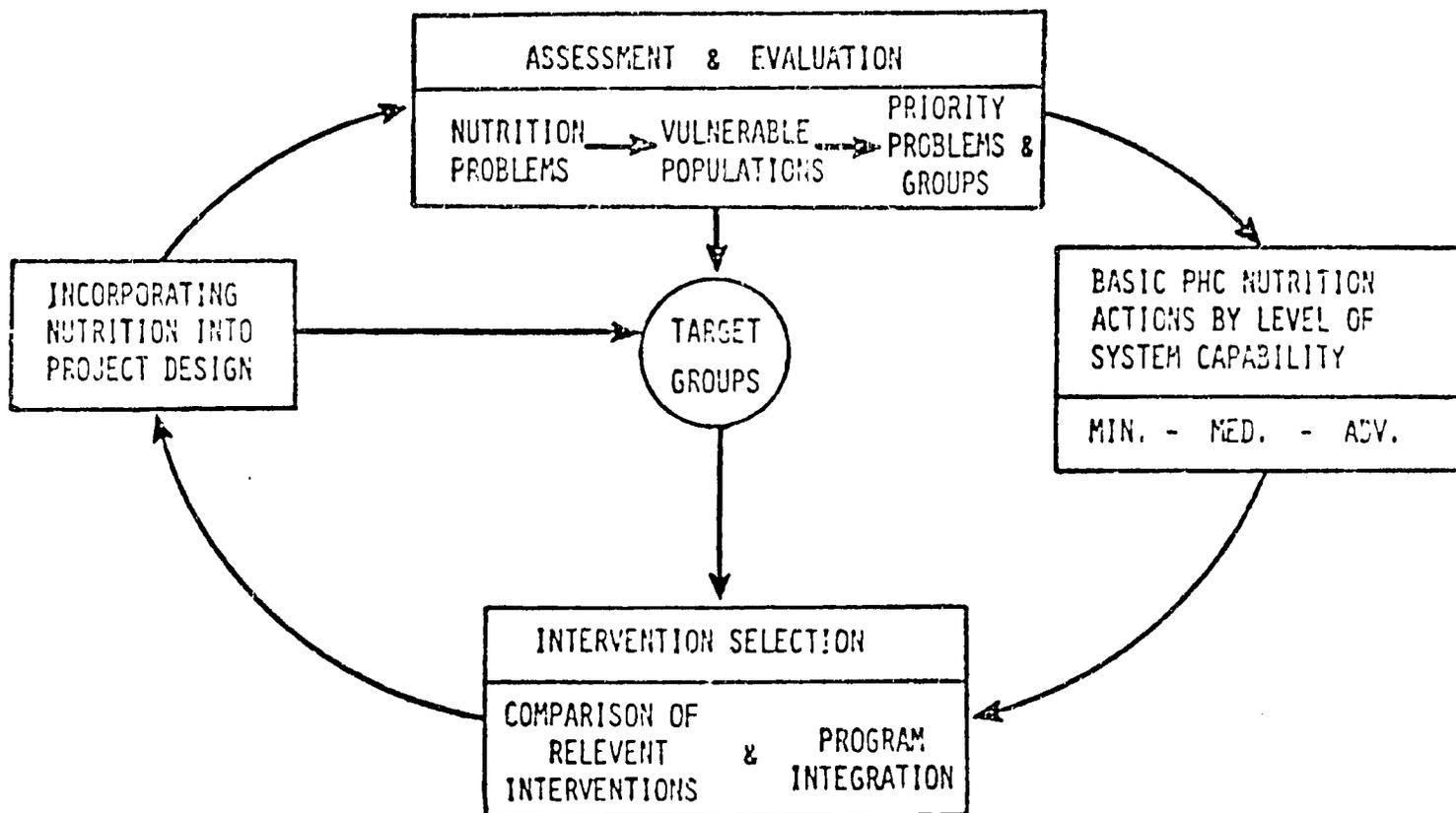
by Dr. C. Teller, Office of International Health, U.S. Department of Health and Human Services

These guidelines were developed in response to an expressed need by AID Health Officers for assistance in designing health and nutrition projects. Project designs were reviewed and it was found that the nutritional problems and target groups were not well defined. Thus they had little demonstrable relevance to local needs and conditions.

The guidelines are meant to augment the technical capability and not substitute local expertise in designing PHC projects with a nutrition component. The sequential process in planning is shown as follows:

FIGURE 1.1

INCORPORATING NUTRITION INTO PHC PROJECT DESIGN



The process was briefly reviewed. Details and examples of how to apply this process are to be found in the guidelines document.\* This approach has been tried and found to be successful in various countries.

\* #6 on List of Documents for individual participants

## VII. FIELD TRIPS

Participants made field trips to two rural sites 100 kms outside of Abidjan, the Protestant Hospital at D'Abou and the rural mobile health unit at the village of Guebo. They observed a comprehensive set of nutrition activities in a PHC setting.

## VIII. FUNDING OPPORTUNITIES AND PROGRAMS

### 1. A.I.D./Science and Technology/Nutrition Bureau, Ms. M. Mack

The S&T Bureau provides the technical back-up for the regional and bilateral offices. The Office of Nutrition has 9 projects in all the regions to which they provide technical assistance and programming support. These are:

- nutrition technical and planning support in the broad sense, includes agriculture, household food production activities,
- Vitamin A,
- iron deficiency,
- food and nutrition technology,
- surveys and surveillance,
- nutrition education,
- nutrition and primary health care,
- maternal and infant nutrition, and
- nutrition economics.

Requests for assistance should be made through the Health Officer in the local AID Mission, and should specify the type of assistance needed, when, for how long and the qualifications required (in the case of resource persons).

### 2. Strengthening Health Delivery Systems Project (SHDS) - Dr. David French

SHDS is a regional project covering 20 West and Central African countries. It functions under the auspices of WHO/AFRO and is funded by USAID. SHDS does not carry out programs that tackle health problems, but

helps to develop the capability to plan, implement and manage such programs. It is involved in developing courses, methodology and providing assistance in the following areas in health:

- health management and planning training,
- training and instructional materials for training PHC workers, post-basic nursing,
- training in epidemiology, disease surveillance and information systems,
- applied research.

The local AID Missions or WHO Country Program Coordinators can be contacted to request resources offered by S.IDS.

### 3. African Development Bank (ADB) - Mr. T. B. Llunga

The ADB is an international institution that provides loans for development projects. It comprises 3 institutions:

- African Development Bank (ADB) - finances mainly economic projects such as agricultural, industrial and infrastructural projects,
- African Development Fund (ADF) - finances social projects, including health at no interest costs, and
- Special Nigerian Fund - provides loans at 4% interest.

Technical assistance is also provided in the form of scholarships, long and short-term consultants, and funding for research institutions. The funds are not available to countries with high income levels, i.e., Nigeria, Ivory Coast and Gabon. Requests for loans have to be prepared and submitted to the Bank by the government who guarantees repayment.

Although it has not funded any nutrition projects, many of its agricultural and rural development projects have nutrition components.

### 4. World Health Organization (WHO) - Dr. Raba and Dr. Kreysler

WHO provides assistance in:

- expertise - short and long-term consultants for a country or region,
- training - funding of training institutions, scholarships,

- some materials, and
- publications.

In the African region, WHO is working in the Inter-Country Project in Nutrition in collaboration with FAO and the World Bank, providing expertise to assist project design, training, research design for regional and national institutions, multilateral program coordination, monitoring and evaluation and transfer of experiences. Two other projects are the JNSP, in collaboration with UNICEF, and the Belgian Survival Fund in a project in East Africa.

Requests for assistance must be submitted through the Ministry of Health to the WHO country coordinator, which will then be transmitted to the Regional Office.

5. World Bank - M. Jean David Roulet

The World Bank finances large projects that contribute to economic development. Its organization and operations are similar to those of the ADB. It is not involved to a great extent in health and nutrition projects, but support projects that have health and nutrition components or impact. It has recently approved or is processing loans for a number of population and health projects in West and Central Africa.

Requests for assistance have to be made through the government. The World Bank also finances projects in collaboration with or through other international or non-governmental organizations.

6. Food for Peace, USAID/REDSO/WCA - Mr Buddy Dodson

Food for Peace is the food relief program of USAID. Its priorities are to provide relief for famine or disaster-stricken areas; improve the nutritional and health status of the most vulnerable groups of children under 5 and women; and to promote family planning and development of food self-sufficiency. The food aid is provided through voluntary agencies such as Catholic Relief Services, CARE, international relief organizations such as World Food Program and UNICEF, and national institutions. The aid can be provided in the form of donations or concessional sales. Operational programs and program improvements can

also be funded. To request food aid, except in emergency situations, a "program plan" has to be prepared and submitted by the country representative of the voluntary agency, international or national organization. They have to meet the criteria with regard to purpose, need and strategy.

7. UNICEF - Mr. Nailton Santos

Priority is given to the young child and mother, and the primary goal is to reduce infant mortality rates. Thus the African region is given priority. UNICEF is involved mainly in country programs that are adjusted to the situation and meet the needs of individual countries. It cooperates with other agencies to increase the resources. It can provide technical expertise and material assistance, commodities, technical information and publications.

Requests are made by the government, which should represent long-term and not ad hoc planning, through the country offices. They have to meet UNICEF's priorities.

8. Primary Health Care Technology Support (PRITECH), AID/S&T/Health -  
Dr. Susan Prysor-Jones

This new project is centrally funded by the Office of Health in AID. Its priority is the reduction of infant mortality. At present it is concentrating its activities in oral rehydration therapy (ORT) and diarrheal disease control. It provides technical assistance, operational support of programs, research assistance in training and training materials, logistical support, program follow-up and evaluation and local costs. Its aim is to accelerate introduction of proven technologies such as ORT.

There is a documentation center in Washington.

Requests for assistance are to be made through the USAID officers responsible for health at USAID Missions.

## XI. COUNTRY PROPOSALS

The participants from each country as a team developed specific proposals for the nutrition components of primary health care using the guidelines provided. These proposals should form the "back-bone", which can be elaborated on after they return home, to develop feasible proposals that are acceptable to donor agencies. The suggested format is as follows:

- background information,
- program and population,
- outline of nutrition components,
- program design: interventions proposed and program of action,
- coordination and linkages,
- management and administration, monitoring and evaluation,
- tentative budget, and
- immediate future tasks and preparatory actions needed to facilitate program set-up.

Each country team presented a preliminary form of the proposal that defined their ideas and approach, and assessed the problems, constraints and capacity of their country's health and other service delivery systems. There were many similarities in the country proposals. The general objectives are to improve the health and nutritional status and thus lower the morbidity and mortality rates of the most vulnerable groups. The main nutritional problems found are: protein-energy malnutrition of under 5's, and pregnant and lactating women, micro-nutrient deficiencies, diarrheal diseases, and insufficient food production. The constraints are as listed in the subregional group discussion.

For interventions, most countries selected nutrition surveillance and growth monitoring, mass media, and local food production. Some opted for additional interventions of ORT, weaning food production, nutrition rehabilitation units, nutritional education at village level, food supplementation and operational research. Strategies include central planning, community participation, training and continuing education, improved information systems, supervision and management, and intersectorial cooperation.

Two countries, Ghana and Guinea were selected to present their full detailed proposals to serve as an example and exercise for critique. Summaries of program designs of proposals from each country are as follows:

1. Central African Republic

Region: Basse-Koto (forest zone) and Ouham (Savanna Zone)

Interventions (in order of priority) to be carried out are:

- nutrition surveillance by observation and interrogation,
- oral rehydration therapy,
- nutrition education in appropriate infant and child feeding and diets for pregnant and breastfeeding women,
- increase of subsistence food production and consumption,
- operational research, and
- in-service training of village development workers.

Strategy includes creation of a National Food and Nutrition and Health Committee, and a National Nutrition Center.

2. Chad

Region: Zones most affected by malnutrition

Interventions to be carried out are:

- creation of Community Food Centers for food distribution for children,
- growth monitoring for evaluation of feeding programs,
- nutrition and health education,
- training of village health workers,
- iron/folate supplementation of pregnant women,
- malaria treatment,
- ORT, and
- immunization

3. Gambia

Interventions to be carried out are:

- nutrition surveillance - consolidate and expand present program through more training and development of training materials, supportive supervision, inclusion of new villages, using village-level responses, and treatment of "at risk" children,
- ORT - continue with on-going program, and
- communal feeding program for children.

4. Ghana

Region: Two communities in two districts per region.

Interventions to be carried out are:

- community farms that include agricultural training of CHW's,
- promotion of breastfeeding,
- commercial production of local weaning foods,
- nutrition surveillance system - growth monitoring, data collection and analysis, and
- ORT.

5. Guinea

Interventions to be carried out are:

- growth monitoring to be integrated into the PHC program,
- nutrition education that also includes gardening and small livestock,
- nutrition rehabilitation, and
- training of CHW's.

6. Ivory Coast

Interventions to be carried out are:

- national nutrition survey,
- nutrition rehabilitation activities in existing health centers and creation of 2 centers in high-risk communities in Abidjan,
- in-service training of social and medical personnel in nutrition activities in the PHC context,

- training of CHW's and Health Development Workers, and
- education at MCH clinics using audio-visual aids.

## 7. Liberia

Interventions to be carried out are:

- growth monitoring,
- nutrition education in infant and young child feeding on individual and group levels and through mass media,
- micro nutrient supplementation,
- other health related interventions such as ORT, family planning, immunization, treatment of malaria and hookworm, and
- training and development of training materials.

Strategies include strengthening of nutritional support capabilities at local and national levels, and testing of interventions.

## 8. Mali

Region: Koulikoro

Interventions to be carried out are:

- growth surveillance,
- community actions in improving water supply and food production,
- treatment and rehabilitation of malnourished children, and
- ORT.

## 9. Mauritania

Interventions to be carried out are:

- improvement and increase in capacity of the Community Food Centers,
- community food actions,
- national nutrition survey,
- strengthening of existing health structures by training, and
- improvement of system for data collection and analysis.

## 10. Niger

Interventions to be carried out are:

- nutrition education in infant feeding,
- prevention and treatment of micro nutrient deficiencies (Vitamin A and iron),
- nutrition rehabilitation with ORT,
- food aid program, and
- community food action.

This program is to be integrated into the Niger/WHO/UNICEF JSNP in the 3 zones covered.

#### 11. Nigeria

Region: Niger and Ondo States

Interventions to be carried out are:

- growth monitoring and nutritional surveillance which involves training and identification of target groups, and
- nutrition rehabilitation units in each local government area.

These nutrition components can be added to on-going projects in family planning and ORT.

#### 12. Senegal

Interventions to be carried out are:

- nutrition surveillance - expansion of existing programs and nutrition survey in the drought-affected Northern Region,
- nutrition rehabilitation,
- diarrheal disease control including promotion of ORT and local production of oral rehydration sachets,
- promotion of appropriate traditional weaning foods,
- training, material and logistical support of CHW's, and
- operational research in traditional foods, ORT, communication methods, anemia and goitre.

#### 13. Sierra Leone

Interventions to be carried out are:

- production of local weaning foods at community level,
- strengthening growth monitoring activities, and
- strengthening nutrition education activities through training, supportive supervision, structures, and materials.

#### 14. Zaire

Interventions to be carried out are:

- develop nutrition surveillance that is community based, with a uniform growth chart for use in the whole country,
- develop nutrition surveillance in prenatal care,
- nutrition education - appropriate methods and materials,
- community food actions to promote self-sufficiency,
- information network for exchange of experiences, information and materials, and
- community based rehabilitation centers.

These interventions are to be integrated into the existing PHC projects, SANRU and CEPLANUT.

#### X. CLOSING CEREMONY

Dr. Assi Adou, spokesman for the Minister of Public Health, Ivory Coast, brought his message of support and thanks for USAID and the organizers of the workshop for bringing this much needed opportunity to the participants.

Mr. Coumanzi, from the Central African Republic, thanked USAID and the organizers on behalf of the participants for a most useful and pertinent workshop.

Dr. James Shepperd thanked all those who organized and worked in the workshop, and the participants, who made it a success. He hoped that it would be the start of a long working relationship between AID and the countries in nutrition and primary health care.

USAID CONFERENCE ON INTEGRATION OF NUTRITION  
AND ORAL REHYDRATION THERAPY INTO  
PRIMARY HEALTH CARE

HOTEL IVOIRE TOWER,  
BALAFON ROOM

SUNDAY - 28, October 1984

- 2:00: Resource Persons Meeting in Main Lobby, Hotel Ivoire
- 4:30: Registration in Main Lobby
- 6:30: Orientation Cocktail in Salle Rotary
- Remarks - REDSO/WCA, Dr. James Shepperd, USAID, Abidjan  
Administration - REFOS, Ms. Suzanne Cloffi

MONDAY - 29, October 1984

- 8:00: Registration - Balafon Lobby
- 9:00: Opening Ceremony - Balafon Room
- Welcome - Master of Ceremony - Dr. J. Shepperd, Regional  
Health Officer (RHO), REDSO/WCA, USAID  
Greetings - Mr. Robert Miller, U.S. Ambassador  
to Ivory Coast  
Greetings - Mr. Laurance W. Bond, Director, REDSO/WCA  
Opening Statement - Prof. Alphonse Djédjé Mady, Minister of  
Public Health, Ivory Coast
- 9:50: Coffee break
- 10:00: Administrative Details - Mr. Kouassi Agnissan, REFOS
- Groups, tour, meals, per diem, air tickets,  
clerical assistance, transport, entertainment, etc.
- 10:05: Introduction to Agenda Objectives - Dr. Charles Teller,  
Office of International Health, Department of Health &  
Human Services (OIH)
- 10:15: Keynote Address - Integration of Nutrition and  
ORI into PHC, Dr. Samuel Ofosu-Amaah, UNICEF
- 11:00-11:15: Discussion of PHC, Dr. J. Shepperd, RHO, REDSO/WCA
- 11:15: Presentation of Case Studies - Moderator, Mr. David  
Eckerson, AID/W
- Case Study I - Zaire, SANRU Project Team and CEPLANUT Team
- 12:30: Lunch

- 2:00: Presentation of Case Studies (continued)
- Case Study II - Gambia, Mrs. Haddy Gabbidon, MOH  
Discussion  
Case Study III - Niger, Dr. Diego Buriot, Project JNSP,  
(WHO/UNICEF)  
Case Study IV - Senegal - Col. Sy and Mme. N'Deye Lo,  
SANAS
- 3:00: Discussion
- 4:00: Discussion of Individual Country Situations in Subregional  
Group Sessions - concurrent
- a. Sahel - facilitator, Dr. Claudio Schuftan, Louisiana  
State University (LSU)  
b. Central and West Africa - facilitator,  
Mr. D. Eckerson, AID/W  
c. Anglophone - facilitator, Dr. C. Teller, OIH
- 7:00: Dinner at restaurant - local food - transport  
to restaurant provided
- TUESDAY 30, October 1984
- 8:00: Nutrition Interventions in PHC,  
Moderator, Dr. S. Ofosu-Amaah, UNICEF
- a. Introduction to Nutrition, Food and  
Socio-economic Development, Dr. C. Schuftan,  
LSU  
b. Growth Monitoring and Nutritional  
Surveillance, Dr. Joachim Kreysler, WHO  
c. Infant Feeding and Weaning, Dr. Gretchen Berggren,  
Save the Children Foundation  
d. Nutrition Information, Education and  
Communication, Mrs. Mathilda Pappoe, Ghana  
Medical School
- 9:40: Discussion
- 10:15: Break
- 10:30: a. Oral Rehydration - Treatment and Rehabili-  
tation, Dr. Suzanne Prysor-Jones, PRITECH/MSH  
b. Community Food Actions, Ms. Maura Mack, S&T/N,  
AID/W  
c. Treatment and Rehabilitation of Severe  
Malnutrition, Dr. C. Schuftan, LSU  
d. Food Supplementation, Dr. Betsy Stephens, International  
Science and Technology Institute
- 12:00: Discussion
- 12:30: Lunch

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- 2:00: Subregional Group Discussion on Inter-relatedness of Nutrition Interventions and Constraints to Implementation.
- 3:00: ~~Plenary~~ Guidelines to Incorporation of Nutrition in PHC  
Moderators, Dr. C. Schuftan, LSU; Dr. C. Teller, OIH
- 3:30: Country Team Work - Assessment of Nutrition Problems and Discussion of Appropriate Interventions in PHC Approaches (with assigned facilitators)

WEDNESDAY - 31, October 1984

- 8:00: Leave for field trip from Hotel Ivoire, Tower lobby
- 9:00: Arrive D'Abou hospital - Group A - 25 persons  
Arrive Guebo village - Group B - 15 persons
- 11:30: Leave Hospital and village for Abidjan
- Afternoon: Free
- 6:30: Cocktail - Residence of Mr. L. W. Bond  
Director, REDSO/WCA, USAID

THURSDAY - 1, November 1984

- 8:00: Plenary: Brief (3-5 minutes) Presentations by Country Teams of Preliminary Ideas and Approaches.  
Moderator, Dr. C. Schuftan, LSU
- 9:30: Coffee Break
- 9:45: Plenary: Funding Opportunities and Programs.  
Moderator, Dr. J. Shepperd, RHO, REDSO/WCA, USAID
- AID/Science & Technology Bureau, Ms. M. Mack  
Strengthening Health Delivery Systems Project (AID),  
Dr. David French  
African Development Bank, Mr. T.B. Llunga  
WHO/FAO, Dr. J. Kreysler  
World Bank, Mr. Jean-David Roulet  
Food for Peace, Mr. Buddy Dodson  
UNICEF, Mr. Nailton Santos  
ORANA and Nutrition Research, Dr. A. Mokhtar N'Diaye
- 12:30: Lunch
- 2:00: Plenary: Funding Opportunities and Programs (contd.)  
PRITECH, Dr. S. Prysor-Jones and Mr. Robert Simpson, MSH
- 2:20: Plenary: Discussion of the Process of Preparing Country Proposals, Dr. C. Schuftan, LSU; Dr. C. Teller, OIH

2:30-5:30: Country Team Work: Development of Proposals  
(with Facilitators and rotating Resource Persons)

FRIDAY - 2, November 1984

8:00: Continue Country Team Work  
(with Facilitators and Resource Persons)

10:00: Break

10:15: Country Team Work: Finalize Proposals

12:30: Lunch

1:30: Presentation of Programs Developed. Moderator,  
Dr. C. Schuftan, LSU

4:00: Closing Ceremony  
Dr. C. TeVler, OIM  
Dr. J. Shepperd, Moderator  
Mr. L. W. Bond, REDSO/WCA  
George Guessennd, MOH, Ivory Coast

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LIST OF PARTICIPANTS AND RESOURCE PERSONS

<u>Name</u>	<u>Organization</u>	<u>Country</u>
ADDO, Florence	Ministry of Health	Ghana
ADETUNJI, Ademola	School of Health Technology	Nigeria
AINSWORTH, Richard	MEDEX	Liberia
ALZOUMA, Francoise Z.	DEESN-MSP/AS	Niger
ANOUMA, Jacqueline	National Institute of Public Health (INSP)	Ivory Coast
ASSI ADOU, Jerome	Ministry of Public Health	Ivory Coast
BAER, Franklin	USAID	Zaire
BALDE, Hadja F.S.	Ministry of Social Affairs	Guinea
BERGGREN, Gretchen	Save the Children Foundation	U.S.A.
BURIOT, Diego	WHO	Mali
CONDE, Mamadi	Ministry of Social Affairs	Guinea
CONTEH, Momodou	PHC Training Unit, Medical and Health Department	Gambia
COULIBALY, Juliette	Ministry of Public Health	CAR
COUMANZI, Malo Dieudonne	Ministry of Public Health and Social Affairs	Zaire
De WOLFE, Robert	USAID	Zaire
DIARRA, Paul	Ministry of Health	Mali
DIRABOU, Seraphin Alexis	INSP	Ivory Coast
DJA, Esther		Ivory Coast
DUODU, Thomas A.	Nutrition Division, Ministry of Health	Ghana
ECKERSON, David	AID/Washington	U.S.A.
GABBIDON, Haddy	Nutrition Unit, Medical and Health Department	Gambia
GALAKPAI, Moses	Ministry of Health and Social Welfare	Liberia
GODO SOLO, Vincent		Ivory Coast
GUESSENND, Georges	Ministry of Public Health	Ivory Coast
HABIS, Charles	USAID	Mauritania
HUDACEK, Ann	Catholic Relief Services	Togo
HUNG, Manming	USAID/REDSO/WCA	Ivory Coast

<u>Name</u>	<u>Organization</u>	<u>Country</u>
KABBA, Lansana	Ministry of Health	Sierra Leone
KADRI, Koda	Ministry of Health	Niger
KALAMBAY, Kalula	SANRU	Zaire
KALE, Kouamé	INSP	Ivory Coast
KOUO, Epa		France
KREYSLER, Joachim	WHO	Mali
LIBERI, Dawn	USAID	Niger
LO, N'Deye	Ministry of Health	Senegal
MACK, Maura	AID/Washington	U.S.A.
MESSOU, Ebrin	Ministry of Public Health and Population	Ivory Coast
MONTGOMERY, Katherine	American Embassy	CAR
M'PAPA, Muabiwa	SANRU	Zaire
N'DIAYE, Makhtar	ORANA	Senegal
OFOSU-AMAAH, Samuel	UNICEF	U.S.A.
ORMEL, Dolores	National School of Midwives	Ivory Coast
OUATTARA, Aboubacary	INSP	Ivory Coast
PAPPOE, Matilda Ethel	University of Ghana, Medical School	Ghana
PIELMEIER, Nancy	USAID	Liberia
PRYSOR-JONES, Susan	PRITECH	U.S.A.
RABA, André	WHO	Gabon
RODRIGUEZ, Rose-Marie	Ministry of Public Health	Ivory Coast
ROY, Claudie	INSP	Ivory Coast
SABA, Susan	Ministry of Health	Nigeria
SALL ALIOU, Mamadou	Ministry of Health	Mauritania
SAIDI, Misangu	SANRU	Zaire
SANIOS, Nauton	UNICEF	Ivory Coast
SCOTT, Sylvetta	Ministry of Health	Sierra Leone
SCHUPTAN, Claudio	Louisiana State University, Medical School	U.S.A.
SEMEGA, Djibril	Ministry of Health	Mali
SHAW, Estelle	Ministry of Public Health and Population	Ivory Coast
SHEPPERD, James	USAID/REDSO/WCA	Ivory Coast

<u>Name</u>	<u>Organization</u>	<u>Country</u>
SIMPSON, Robert	Management Sciences for Health	U.S.A.
STEPHENS, Betsy	International Science Technology Institute	U.S.A.
SY, Mame	SANAS/DHPS, Ministry of Health	Senegal
TEBI, Ambricse	INSP	Ivory Coast
TELLER, Charles	Department of Health and Human Services, U.S. Government	U.S.A.
TRAORE, Moussa	INSP	Ivory Coast
WABO, Namuké	CEPLANUT	Zaire
WALDMAN, Ronald	Centers for Disease Control	Ivory Coast
YEE, Virginia S.	AID/Washington	U.S.A.
ZAMORA, Francisco	USAID	Mali
Moudjalbaye, Tormol	Ministry of Health	Tchad

LIST OF DOCUMENTS

Each participant received the following documents in Nutrition and Primary Health Care:

1. Nutrition and Primary Health Care, October 29-November 2, 1984. Prepared by the Clearinghouse on Infant Feeding and Maternal Nutrition. (A collection of information on documents and institutions available on nutrition and Primary Health Care.)
2. Guidelines for Training Community Health Workers in Primary Health Care, prepared by World Health Organization.
3. Office of Nutrition Projects (mimeo).
4. Cable on the Sine Saloum Project.
5. Africa Bureau Health Sector Strategy.
6. Guidelines for Incorporating Nutrition into the Design of Primary Health Care and Related Projects by J. Wilcox, C. Teller and J. Aguilar.
7. Nutrition in Primary Health Care: Summary of a Conference Sponsored by the Arab Republic of Egypt and the International Nutrition Planners' Forum.
8. Analysis of the Eight Elements of Primary Health Care Activities (nutrition component only), World Health Organization.
9. Nutrition and Primary Health Care (mimeo), World Health Organization.

All documents were available in French and English.

Each Francophone country group received the following documents in Primary Health Care, Oral Rehydration Therapy and Child Health (in French):

1. Managing Drug Supply, Management Sciences for Health.
2. Child Survival (information package) from the PRITECH Project.
3. A cable on the PRITECH project.
4. Program Activities for Improving Weaning Practices, World Federation of Public Health Associations (provided through Gayle Gibbons).
5. Oral Rehydration Information Guide, World Federation of Public Health Associations (provided through Gayle Gibbons).
6. Organization of Primary Health Care in Communities, World Health Organization.
7. Treatment of Diarrhoea and Use of Oral Rehydration Therapy, World Health Organization.
8. Une revolution au profit de la Survie et du developpement des enfants, UNICEF Carnets de l'enfance.

The Anglophone country groups received documents 1-6 above, plus:

7. Maternal Nutrition, Information for Action Resource Guide, World Federation of Public Health Associations (provided by Gayle Gibbons).

Also available were:

World Development Report 1984, World Bank.

World Bank Annual Report, 1984, World Bank.