FEEDING STANDARDS FOR REFUGEE CAMPS

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UNHCR KAMPUCHEAN OPERATIONS MANUAL No. 10

BULK RATIONS

January 1980

A. INTRODUCTION

These standards are necessary to ensure proper method of handling the large scale distribution of food in the holding centres.

To prevent malnutrition among the refugee population, daily bulk rations must include foodstuffs familiar and acceptable to the Khmer diet in addition to providing high nutritional content. Bulk ration distribution requires competent supervision and surveillance by qualified personnel.

B. GUIDELINES

1. Objectives

The objectives of UNHCR in the distribution of the bulk rations are:

a) To provide an adequate daily diet for all refugees through distribution of uncooked foods which provide the daily allowances of energy, proteins, fats and vitamins.

b) To provide foods of sufficiently high protein, caloric and vitamin levels to prevent nutritional disorder (e.g. Beri-beri, Vitamin A deficiency, etc.)

c) To provide a ration of sufficiently high protein and caloric content so that unintentional shortages occuring in the ration for short periods of time will not seriously affect the nutritional status of the refugees. "Skimming", taxing or other intentional withholding of the ration will be detected through the Nutrition Surveillance Programme and will be handled through legal channels.

2. Co-ordination of Bulk Ration Distribution:

Bulk ration distribution in each camp is the co-ordinated responsibility of the Central Purchasing Office, the UNHCR Nutrition Officer and WFP.

3. General Characteristics:

Foods used, should, as far as possible, be:

- from local (national) food supplies
- limited in number of items
- acceptable (in relation to food habits and religion)
- easy to transport and store
- nutritionally compact (e.g. high caloric and nutritive value per unit weight)
- simple to distribute (if possible, in pre-packed ration units, or in dry form)

4. Facilities for Bulk Ration Distribution

The area designated as a receiving point in each section where rations are delivered should be covered and well drained during the rainy season. In addition, plastic sheeting should be placed on the ground to prevent spoilage of goods delivered in bags or sacks.

5. Ration Composition Standards

Rations that are adequate for a daily diet for the majority of the population will be provided to the whole caseload. Daily ration composition must provide:

Protein 50gm/person/daily

Energy 2100KCals/person/day

Fat 12-15% of energy/person/day

WFP under advice from the UNHCR Nutrition Officer will be responsible for ration plans (e.g. specific commodities and amounts needed to meet the required compositions). The ration elements and amounts are tentative and may be changed if it is shown that the additional caseload overloads the market for an item or if adjustments could raise the nutritional value of the diet, (e.g. commodities such as brown rice or mung beans). Any changes made in ration content must meet nutrient requirements and be approved by the UNHCR Nutrition Officer.

6. Bulk Ration Distribution Schedule

WFP and UNHCR will jointly develop a plan for distribution of rations based on type of commodity (e.f. vegetables may be distributed twice weekly, rice and dried fish weekly, cooking oil monthly, etc.). Distribution schedules will be co-ordinated with the camp FPC and the camp Logistics Officer. The Logistics Officer will notify section leaders of distribution schedules. (Rations in scheduled amounts will then be delivered to the designated area in each section.)

7. Common Problems in Distribution

Common problems in distribution are:

- rations unequally distributed by section leaders
- portions withheld as a means of control by certain groups
- portions withheld for resale via black markets

- women and children deprived of their portions by working males
- portions hoarded as insurance against possible shortages
- portions smuggled out to enter the "land bridge" back to Kampuchea
- unforeseen temporary shortages due to delivery failure or transport problems
- accidental losses
- portions may be spoiled (rotten)

Therefore, if there is interruption of bulk ration distribution, the population may decrease below minimum levels thus leading to malnutrition.

8. Surveillance

The surveillance of the bulk feeding programme will rely on the normal surveillance by SFCs as the nutritional status of vulnerable groups will indicate problems of distribution at the family level. Spot checks will be carried out by members of the UNHCR Planning and Evaluation Team to ascertain amounts of food distributed to the family. Any problems noted will be reported to the Camp Administrator.

C. ORGANISATION

1. Logistics Officer

Each camp will have a Logistics Officer. He will be responsible for providing information and distribution schedules regarding amounts to be distributed to the warehouse dispatching crew. He will be responsible for storage of the food, for the scheduling of deliveries from the warehouse and for ensuring that the distribution is done in proper sequence to prevent spoilage. The Logistics Officer is also responsible for co-ordination with SFP regarding procedures for delivery of goods to the camp warehouse.

2. Camp Feeding Programme Co-ordinator

The Camp FPC will be responsible for ensuring that bulk ration standards are met. The FPC will report any proposed changes in bulk ration content to the UNHCR Nutrition Officer for approvals and any problems in quality of content of rations.

D. ROUTINES

1. Ration Delivery

WFP trucks arrive to each camp warehouse (refer to UNHCR storage manual). The camp Logistics Officer and the warehouse supply team co-ordinate delivery of bulk rations to specified section areas, for distribution of rations by section and block leaders according to planned schedules.

2. Distribution Method

Food is delivered in bulk to each section where it is divided by the section and block leaders and then distributed to the individual families by the block leaders. Section and block leaders are to be held accountable for proper distribution.

3. Records

The recording of deliveries to the camp and the recording of the consignments to each section is the responsibility of the camp Logistics Officer. Records will be on the standard forms shown in Annex I.

4. Rat Control

On a periodic basis the camp Logistics Officer will ensure that adequate rat control measures are taken in co-ordination with the camp vector control team. It is the responsibility of the camp Logistics Officer to ensure that rat poisons do not contaminate food supplies.

5. Surveillance

The camp Logistics Officer will conduct random checks of the distribution system to ensure that minimum pilferage occurs.

E. JOB SPECIFICATIONS

1. Title or Position: Camp Feeding Programme Co-ordinator (Involvement with bulk ration distribution)

A. Supervisor: UNHCR Nutrition Officer

B. Subordinates: Camp Logistics Officer

C. Duties:

- To ensure that rations distributed meet the required standards
- To ensure that families receive proper amounts of rations

D. Responsibilities:

- To periodically check quality, amounts and contents of bulk rations delivered and distributed
- To assist in surveillance programmes of the nutritional status of the families in the camp.
- To report any improper ration distributions as indicated by decreases in nutritional status of the refugees to the Nutrition Officer.

E. Co-ordinates Work With:

ICRC Nutrition Advisor, WFP, Logistics Officer

F. Maintains Communications With:

Camp Administrator, UNHCR Nutrition Officer, SFP Co-ordinating Committee

G. Maintains Communications By:

- Attending SFP Co-ordinating Committee meetings
- Periodic reports to Nutrition Officer
- Personal contact with WFP

2. Title or Position: Logistics Officer

A. Supervisor: Camp Administrator

B. Subordinates: Warehouse clerks, truck drivers involved in ration deliveries, section and block leaders receiving rations

C. Duties:

- To ensure that goods delivered are the required amounts
- To ensure that goods received are recorded adequately
- To ensure that the goods are adequately stored to prevent spoilage and kept free from rats
- To ensure that goods from the warehouse are withdrawn in adequate sequence to prevent expiration and spoilage

D. Responsibilities:

- To record amounts of goods received, withdrawn and delivered
- To notify Camp Administrator of amounts needed and problems regarding supplies
- To routinely check storage facilities for proper hygiene levels

E. Co-ordinates Work With:

WFP, ICRC Nutritional Advisor, UNHCR Nutrition Officer, FPC, Central processing office

F. Maintains Communications With:

Nutrition Advisory Committee, UNHCR Nutrition Officer

G. Maintains Communications By:

Personal contact with: WFP staff involved with bulk ration distribution, warehouse clerks

UNHCR

UNHCR KAMPUCHEAN OPERATIONS MANUAL NO. 11

SUPPLEMENTAL FEEDING

January 1980

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A. INTRODUCTION

These standards are intended to assist those involved in the planning, implementation and supervision of Supplementary Feeding Programmes (SFP) in the Kampuchean camps.

A SFP should be seen as a community service and a part of a preventive medical programme. To be effective, it requires competent management and good cooperation between organisers, agencies, medical personnel and leaders of the Khmer population.

In order to facilitate the transition back to their normal way of life, a SFP must utilize foods which are familiar to the Khmer population in addition to improving nutritional status.

A Feeding Programme Co-ordinator will be designated by UNHCR in each camp to liaise between the different groups and to ensure that the guidelines are followed and there is consistency in standards and procedure in all Supplementary Feeding Centers. UNHCR will allow a short grace period to provide those groups now operating at a level not sufficient to meet the standards time to reorganise their operations under the new rules. A grace period will also be extended to agencies using foods not approved under these standards to expend supplies received or ordered prior to 15 February 1980.

Regular meetings shall be held to exchange information and to ensure good co-operation between all those involved.

B. STANDARDS

1. The objectives of a SFP are:

   a) To prevent deterioration of vulnerable groups by providing the extra nutrients needed for growth and lactating mothers milk production.

   b) To rehabilitate malnourished individuals.

   c) To aid recovery from disease.

   d) To educate the Khmer population as to better nutrition practices.

2. The beneficiaries of SFPs in the camps should be:

   a) Small children under 5 yrs and a given weight or under 105 cm.

   b) Pregnant and lactating women.

   c) Malnourished individuals (any age).

   d) Selected medical cases.

   Note: School Feeding Programmes

   It is recognised that school age children (5-15 yrs) in these populations may be nutritionally deficient. Therefore, where resources and local circumstances permit, a feeding programme shall be created to become an integral part of any school programme set up for refugee populations. This will be based on the nutritional and management principles included in this paper. Coordination of school feeding with supplementary feeding programmes within each camp will be arranged by the UNHCR feeding programme coordinator.

3. The recommended method of feeding in SFPs involves:

   "On the spot" consumption of cooked food in the SFP center under the supervision of trained personnel. Alternative strategies for on the spot consumption may be explored on the advice of the UNHCR feeding programme coordinator.

4. Meal Composition:

   a) The meals must be rice based and adapted to the food habits of the Khmer population. Only foods, recipes and locally

d) A translator should be assigned to each center to allow communication with expatriate personnel.

e) One "model" Center in each camp should be used for staff training.

f) A designated representative of each agency involved in the SFP must be present during all activities related to supplementary feeding.

10. The facilities required for SFP are:

a) An enclosed area designated as the feeding site. Where large numbers of beneficiaries are to be fed, facilities should include separate entrance and exit.

b) A sheltered area where people can sit to eat.

c) A kitchen with stoves, fuel and necessary utensils.

d) A reliable water supply with drainage system.

e) A garbage disposal system approved by UNHCR.

f) A secure food store with hard surface floor.

g) A reliable food supply system.

h) A designated area for an advisory room.

11. The location and size of the SFP site

This must be chosen according to the lay-out of the camp with the precise "catchment area" clearly defined. Ideally it should be:

a) Close to an outpatient department (OPD) to facilitate co-operation between the 2 services.

b) Cater for not more than 3,000 beneficiaries.

12. Registration of beneficiaries

New admissions should be advised to attend at a certain time for registration and individual advice.

A registration book should be kept in each center. This book is used to record the following information for each beneficiary:

a) A registration number

b) Name, age, sex

c) Date of admission to the programme.

d) Category (e.g. under 5 yrs, pregenant, etc.).

e) Referred or not? (e.g. from OPD, IFW, etc.)

f) Group leader or household number (if available to facilitate home visits).

13. Card System

(Specimen cards as shown in Annex III)

a) A numbered registration card must be given to each beneficiary.

b) The card is to be presented as the beneficiary arrives for feeding.

c) The card number corresponds to that in the register and facilitates the recording of daily attendance.

d) Cards should be protected in plastic covers wherever possible.

14. Preventive Medical Programme

The preventive medical programme will develop gradually with emphasis on particular aspects according to the needs in each camp. These guidelines indicate the scope of such a programme.

The SFP is intended to be the focal point of the preventive medical programme run in close collaboration with the OPD and public health personnel. Any agency involved in a SFP should provide the necessary medical personnel or collaborate closely with another agency in the provision of this service.

Khmer staff should play a major role in every aspect of this programme, and training schemes for Khmer extension workers should be initiated as soon as possible.

a) Home visiting: every household in the SFP catchment area should be visited to refer beneficiaries to the feeding center (or OPD if necessary). Follow-up visits should be made at regular intervals particularly where domestic problems have been found. Where a beneficiary has been absent from feeding for 2 consecutive days (NB use of daily attendance register) a follow-up home visit should be made.

b) "Under 5s clinic": "Road to health cards" will be used to record the progress of each child. Explanations must be given to all mothers on the purpose and value of the cards.

i. Nutritional surveillance will be carried out through the regular weighing of all small children and the recording of this information on the Road to health card.

ii. Immunization programmes* (details of which will be recorded on the Road to health card) under the direction of the medical coordinator.

*Note:

Immunization programmes have already begun in most existing camps. ICRC will soon be issuing a set of recommendations in the management of such programmes, which should be carried out in complete cooperation with the local medical coordinator.

c) Advisory room: this facility should be arranged for those with particular problems, e.g. malnourished children or women with failure of lactation. This allows time for special attention and advice and extra meals if necessary.

d) Assessment of progress of the malnourished: this entails the regular weighing of those classified as malnourished on admission to the programme. This information must be recorded in the SFP register at 2 week intervals, and will be reviewed regularly by the nutrition coordinator.

e) Education: regular, informal education sessions for small groups of women should be organised. Discussions and practical demonstrations can cover a variety of topics including child care, nutrition, hygiene, etc.

f) Mass distribution of medicines such as vitamins*, iron preparations and de-worming agents should be distributed under the direction of the medical coordinator.

*Note:

Medical/nutrition authorities agree that any vitamin or mineral deficiency should be treated selectively. Multivitamin preparations do not contain enough of any vitamins to be useful in treatment of a vitamin deficiency syndrome. For this reason, the mass distribution of multivitamin is not recommended. Any decision concerning the large scale distribution of specific vitamins (esp. Vit. A) will be made under the guidance of the medical or feeding programme coordinator in each camp.

15. The long-term need for SFP

This will be determined through a system of nutritional surveillance. A surveillance programme of a regular systematic basis should include sample surveys of housing inspection and other methods to be determined by the UNHCR nutrition officer. (The weighing and measuring of children in under 5s clinics will be an integral part of the surveillance programme).

As conditions allow the SFP facilities may be made available for other purposes as coordinated by UNHCR.

C. ORGANISATION

The organisation for the management of the supplemental feeding programme is as follows:

1. UNHCR Nutrition Officer

The nutrition officer shall be a nutritionist, dietitian or medical person trained or experienced in the operation of relief feeding programmes. This person will be a member of the UNHCR Kampuchean operations staff, not a representative of one of the voluntary organisations.

The nutrition officer shall be the final authority for all questions regarding suitability of foods, diets, recipes, organisation of feeding programmes, facilities and personnel in the SFPs.

The nutrition officer shall be responsible for overall assessment of the nutritional status and needs of the camps. He shall set up and implement the regular surveillance systems and shall conduct periodic briefings on his findings to the volags conducting the individual feeding programmes.

2. Nutrition Advisory Committee (NAC)

A NAC shall be established to advise the UNHCR nutrition officer on matters relating to the conduct of the feeding programmes. The committee shall be made up of representatives of the agencies involved in feeding within the camps. The convenor shall be a representative of UNICEF.

3. Camp Feeding Programme Co-ordinators (FPC)

In each camp, a feeding coordinator will be designated by the UNHCR nutrition officer. In the smaller camps, the coordinator may be a representative of one of the voluntary or UN organisations working in the camp. However, in the larger camps the FPC will be a UNHCR staff member and will be a part of the camp administration. The FPC in each camp will be responsible for seeing that all organisations in the camp SFPs meet the UNHCR standards. To do this, he will carry out periodic inspections of the SFCs, their records, and their surveillance statistics.

The FPC will advise the nutrition officer of any problems in logistics, personnel or non-compliance by agencies with the standards.

4. Camp SFP Co-Ordinating Committee

In the larger camps where over 3 organisations are involved in the SFP, a coordinating committee will be established to advise the FPC on problems relating to the SFP, especially logistics, facilities, personnel and qualities of foods.

5. Lead Agencies

The UNHCR shall designate a lead agency in each of the camps to serve as the "model" agency for the delivery of services in that camp. All agencies in the camp offering supplementary feeding shall duplicate the services, schedules and routines of the lead agency.

6. Nutrition Advisory Committee - Supplementary Feeding Subcommittee

A representative from each agency conducting supplementary feeding services in the camps will be delegated by the agency involved to serve on the NAC Supplementary Feeding Subcommittee. The subcommittee members will report to the NAC regarding compliance with the standards.

D. ROUTINES

1. Feeding Schedules

The daily schedule for SFPs in each camp shall be developed by the camp FPC with the advice of the camp SFP coordinating committee. All operations within the same camp should be carried out on approximately the same schedule.

2. Surveillance

Each SFP shall conduct the surveillance activities listed in the standards on a monthly basis. A monthly report shall be compiled and forwarded to the FPC who will verify the reports, if necessary. The FPC will prepare a summary for the entire camp on the SFP Periodic Report Form and present it to the nutrition officer. This shall be recorded in the Policy and Standards Implementation Book.

E. JOB SPECIFICATIONS

1. Title or Position: UNHCR Nutrition Officer

   A. Supervisor: Chief ROKU

   B. Subordinates: Feeding programme co-ordinators in each refugee camp

   C. Duties:

   - To ensure that the UNHCR standards in the Supplemental Feeding Programmes are met.

   - To ensure that the supplies necessary to maintain the standards are procured on a timely basis by preparing estimates of food needs for the procurement officer.

   - To provide the training necessary to ensure that all agencies operating nutrition programmes are able to meet the standards.

   D. Responsibilities:

   - To monitor the nutrition status in each of the camps and to prepare a monthly summary of the nutritional status on the UNHCR Periodic Report Form.

   - To periodically report on the quality of the foods being delivered in the Supplementary Feeding Programmes.

   E. Co-ordinate Work With:

   WFP, ICRC nutrition advisor, UNICEF, the epidemiological unit of ICRC and the volags in each camp.

   F. Maintains Communications With: The Nutrition Advisory Committee

   G. Maintains Communications By: Attendance at all meetings of NAC

2. Title or Position: Feeding Programme Co-ordinator (FPC)

A. Supervisor: UNHCR Nutrition Officer

B. Subordinates: Participating agencies in the UNHCR feeding programme

C. Duties:

- To ensure that all agencies in the camp meet the UNHCR feeding and nutrition standards for Supplemental Feeding.
- To advise on problems relating to feeding and nutrition in the camp.
- To advise on any supply problems that occur.

D. Responsibilities:

- To monitor the nutrition status in the camp.
- To check the surveillance and record keeping of the participating agencies.
- To check the hygiene at each SFP in all phases of feeding.
- To ensure that adequate training is given to all Khmer staff.
- To ensure that feeding operations are carried out in a regular, daily routine.

E. Co-ordinates Work With: Volags, WFP, camp SFP co-ordinating committee

F. Maintains Communications With:

UNHCR Nutrition Officer, Nutrition Advisory Committee, FPCs in other camps, each SFP

G. Maintains Communications By:

Periodic reports, 1 monthly visit to Bangkok or Aranyaprathet for FPC meeting

Meal 1

RECIPIES

Per 50 Litre saucepan/100 portions:

Meal Composition	Cals.	Protein	Fat	Carbohydrates
5 kgs. Rice	18,100	350 gms	50 gm	4,050 gms
1 Litre Oil	9,000	-	1,000 gm	-
6 kgs. tinned Curry	9,000	1,074 gms	240 gms	576 gms
5 kgs. Green Vegetables	850	85 gms	-	155 gms
27 Litres water				
Salt to taste				
	36,950	1,509 gms	1,290 gm	4,781 gms
Per portion	369.5	15.09gm	12.9 gms	47.81 gms

Meal 2

Per 50 litre Saucepan/100 portions:

5 kgs. Rice	18,100	350 gm	50 gm	4,050 gms.
500 gms Oil	4,500	-	500 gm	-
4.8 kg tinned sardines in oil	13,152	1,041.6 g	960 gm	14.4 gm
5 kgs green vegetables	850	85 g	-	155 gm
27 Litres Water				
Salt to taste				
	36,602	1,476.6	1,510 gm	4,219.4 gm
Per portion	366	14.76 gm	15.1 gm	42.19 gm

Meal 3

50 litre saucepan/100 portion:

5 kgs. Rice	18,100	350 gm	50 gm	4,050 gm
1 litre Oil	9,000	-	1,000 gm	-
4.8 Kgs. tinned sardines in tomato	7,152	1,065.6 g	259 gm	72 gm
5 kgs. green Vegetables	850	85 gm	-	155 gm
Salt to taste				
	35,102	1,500.6 g	1,309 gm	4,277 gm
				42.77 gm

ANNEX II

ISSUES IN THE PROVISION OF MILK AS A NUTRIENT FOR INFANTS AND CHILDREN

Although milk has long been considered an ideal food in human nutrition, recent research has seriously challenged the use of milk in the third world. Usage of milk or milk-based formulas in developing countries leads to a special set of problems. Although powdered cows milk or milk-based formulas are acknowledged to be an easily transportable food with good protein and calorie density it has, in the current situation, numerous disadvantages. A summary of the issues are as follows:

1. Inappropriate food

   It is not part of the traditional local diet. The Khmers have not used cows milk as a dietary component, nor is it thought they are likely to do so if they return to Kampuchea. Introduction of milk-based food thus encourages dependency on outside food sources.

2. Distribution of milk powder

   The distribution of DSM has been cited as one of the major contributors to the contemporary high incidence of infant mortality. The use of DSM depends on a safe supply of water for mixing the powder, for washing the containers, and for serving the milk. It also demands a high standard of hygiene on the part of the feeder. If any one of these is not clean, disease will result. For this reason several developing countries have banned the sale of DSM.

3. The distribution of tinned milk (infant formula, condensed or evaporated).

   All these milks create the same problems as DSM, especially if they are to be diluted.

   Even if a can of milk is given to the mother with clear instructions that it is for her own use, there is absolutely no guarantee that the milk will not be provided to a small child. This is a dangerous practice and must not be allowed.

4. Lactose content

   Lactose is a sugar present in large amounts in cows milk. A high proportion of Southeast Asians have been identified as being unable to digest this sugar (lactose deficiency). The major significance of this condition, present in an yet unknown proportion of the Khmers, is that persons who react adversely to milk may not continue to return for subsequent supplementary feedings.

5. Infant mortality

A number of studies over the past 70 years have clearly documented the advantages of breast feeding. Safe preparation and use of milk or milk-based formula requires a clean water supply and refrigeration, two items in short supply. Lacking either or both, formula or milk-fed infants are at very high risk of infection with subsequent high risk of dealth from diarrhoea or sepsis.

In summary, in a developing country, the use of a baby bottle is doing a singular disservice to the recipient infant and its family.

6. Malnutrition

Families which have become dependent on milk or milk-based formulas may, when economically or logistically disabled, over dilute the formula to make a larger but lower calorie dense supply. In this situation, malnutrition may quickly result.

ANNEX III

DATE : NAME : REG. NO. :	CHILDREN NAME : REG. NO.
REMARKS :	

Side 1

SUPPLEMENTARY FEEDING

BLOCK :

Side 2

UNHCR

UNHCR KAMPUCHEAN OPERATIONS MANUAL NO. 12

SCHOOL FEEDING

January 1980

TABLE OF CONTENTS

A. INTRODUCTION

These guidelines are intended to assist those involved in the planning, implementation and supervision of School Feeding Programmes in the Kampuchean camps.

A School Feeding Programme is seen as an integral part of the School Programme and Supplementary Feeding Programme. To be effective, it requires competent management and good co-operation between organisations, agencies, education personnel and leaders of the Khmer population.

To enhance the physical and mental status necessary to a child's participation in the learning process, a School Feeding Programme must provide therapeutic feedings of a high nutritional value in a controlled setting, education about proper nutritional and health practices, and monitoring of the nutritional status of the children.

B. GUIDELINES

1. Objectives

a) To prevent severe nutritional deficiency in school age children (5-15 yrs) by providing the extra nutrients needed for growth and concentration.

b) To educate school age children as to proper nutritional and health practices.

c) To aid recovery from nutritional deficiencies by providing the nutritional assessment and necessary treatment under supervision of qualified SFC personnel.

2. Co-ordination of the School Feeding Programmes

School feeding in the Kampuchean Refugee Camps is the responsibility of the Feeding Programme Co-ordinator designated by UNHCR in each camp. He will liaise between the School Programme and Supplementary Feeding Programmes.

3. The Need for School Feeding

Priority is now given to vulnerable groups (children less than 5 years old, pregnant and lactating mothers) by the Supplementary Feeding Centres. Nonetheless it is necessary to recognise the nutritional needs of school age children (5-15 yrs). School feeding is necessary to ensure proper participation in the learning process and to prevent nutritional deterioration of the children to a state which necessitates in-patient treatment.

4. The Numbers Requiring School Feeding

Initially, it is helpful to carry out a simple survey in the school for several days to assess and determine the numbers of children attending school.

For ease of management, it is preferable to limit the feeding area to no more than 300 recipients at one time. If requirements are greater, then additional feeding times (shifts) should be set up.

5. Facilities for School Feeding

The setting for school feeding should be in a separate room or building near or adjacent to the school building. Facilities should include an area large enough for on the spot feeding of no more than

9. Hygiene

- Soap and water will be provided near the entrance of the feeding area for handwashing

- Containers for waste will be provided near the exit of the feeding centre

- Containers with antiseptic (chlorine) or detergent solutions will be available for washing of utensils and equipment after feeding

- The children will be responsible for picking up trash and depositing it in the appropriate receptacles and for delivering utensils to the cleaning area before leaving the feeding room, etc.

10. Staffing and supervision of School Feeding Personnel

a) The agency providing SFC school feeding services will be responsible for providing a plan for the staffing necessary for the preparation, delivery and distribution of the school meals. This must be approved by the camp FPC. (Most of the tasks can be carried out by trained Khmer staff to include parents of school children.)

b) The FPC in each camp may designate a School Feeding Programme Officer responsible for all school feeding areas in each camp.

c) A translator should be assigned to each school feeding area as necessary to allow communication with expatriate personnel.

11. Education

Programmes, classes or demonstrations must be provided to assist in the health and nutrition education of children. The SFC staff may conduct classes in conjunction with the School Programme staff. The children should play active roles in any health or nutrition classes.

12. Medical Care

No drugs (including vitamins, etc.) will be given at the school feeding area. Trained SFC and school staff will be responsible for referrals of children to the OPD's for necessary treatment.

C. ORGANISATION

1. UNHCR Nutrition Officer (Involvement in School Feeding Programme)

The UNHCR Nutrition Officer will advise the SFC conducting School Feeding Programmes regarding meal composition and delivery. The Nutrition Officer will be responsible for ensuring that SFC and School Programme staff involved in school feeding are adequately trained.

2. Feeding Programme Co-ordinator (FPC)

The FPC will be responsible that all School Feeding Programmes follow the guidelines. The FPC will be responsible for seeing that orders for SFC supplies and equipment for school feeding are met and will report any problems to the Nutrition Officer. The FPC will plan school feeding schedules through co-ordination with the SFC and School Programme Co-ordinator. He will liaise between school and SFC staff.

3. Camp School Feeding Programme Officer

In the larger camps, the FPC may designate an assistant to act as co-ordinator for School Feeding Programmes. He will be responsible for proper functioning of School Feeding Programmes. The assistant will report any agencies involved with school feeding that do not follow guidelines and standards to the FPC.

4. Nutrition Advisory Committee - Supplementary Feeding Sub-committee

A representative from each agency conducting school feeding via supplementary feeding services in the camp will be delegated by the agency involved to serve on the NAC Supplementary Feeding Sub-committee. The Sub-committee members will report to the NAC regarding status of SFC school feeding services and to exchange information between the individual supplementary feeding centres.

5. Lead Agencies

The UNHCR shall designate a lead agency from among the SFCs in each camp to serve as the "model" agency for the delivery of school feeding services. All agencies in the camp offering school feeding shall duplicate the services and routines of the lead agency.

D. ROUTINES

1. Food Delivery

Deliveries of school meal food will be the responsibility of the SFC providing school feeding services. Deliveries must be within 15 minutes of scheduled feeding times. Food must be protected from flies, insects and dust. The FPC in each camp will be responsible for ensuring that proper deliveries are made on time.

2. Food Distribution

SFC workers will be responsible for actual distribution of the food at the school feeding areas in addition to conducting clean-up services.

3. Feeding Schedules

Feeding schedules will be set according to the number of children per school and school shifts. Feeding times, however, should not be set before classes, and feeding after classes is acceptable only if class time does not exceed 4 hours. Schedules will allow 30 minutes total feeding time.

300 children at one time. A school feeding area or room should include:

a) A separate entrance with facilities for handwashing before receiving food located close to the entrance

b) An area designated for the distribution of eating utensils (bowls, cups etc.) and food

c) An exit with facilities for collection of used utensils and rubbish.

The older children should all play an active role in the day to day operation of the feeding area. They should be involved in the care and monitoring of handwashing areas, distribution of utensils, and clean-up under the direction of the teacher assigned to supervise each feeding shift. The school feeding area or room may then be utilised for other activities.

6. Food Preparation

The SFC servicing the same zone in which a school is located is responsible for the preparation of the food in the SFC in addition to the delivery of the food to the school. (Khmer workers and/or mothers of school children will serve in these roles.) The SFC will obtain any needed equipment for the preparation and delivery of School Programme food.

7. Nutrient Content of School Feeding Meals

The Supplementary Feeding Centres involved in school feeding will be responsible for providing food with the required nutrient contents. Meal plans will be developed with the advice of the UNHCR Nutrition Officer. A liquid will be provided to slate thirst(e.g. safe water, tea, fruit juices). Liquid milk will not be distributed. The quantity of food prepared will be determined through co-ordination of SFC personnel and the FPC following assessment of the number of children.

8. Feeding Supervision

To ensure proper food consumption by the children, close supervision of feeding during the entire feeding time is necessary. Because the teachers will be familiar with the children, one or two teachers as needed per feeding shift will be responsible for supervising that shift which includes children from his/her classroom. Rotation schedules for supervision will be developed by the teachers (e.g. one teacher from the first meal shift may supervise 2 days a week, etc.). Only those teachers who classes are released for the meal will be responsible for that meal time. SFC personnel will train teachers in surveillance of children for signs of possible vitamin deficiencies, lack of appetite, etc. The teacher supervising will then report any findings to the SFC for possible referrals to OPD. Qualified SFC personnel will also conduct periodic spot checks of the children for signs of complications or deficiencies.

E. JOB DESCRIPTIONS

1. Title or Position: UNHCR Nutrition Officer

A. Supervisor: Chief ROKU

B. Subordinates: Feeding Programme Co-ordinators in each camp

C. Duties:

- To ensure that the UNHCR Guidelines for School Feeding Programmes are met
- To ensure that the supplies and equipment necessary to meet the guidelines by the SFCs are procured
- To provide the training necessary to ensure that all agencies and school programme staff involved in school feeding are able to meet the guidelines

D. Responsibilities:

- To monitor the surveillance programme of the School Feeding Programme to ensure that the nutritional status of the children is adequate
- To provide information regarding supplies and equipment for school feeding to the Procurement Officer

E. Co-ordinates Work With:

WFP, UNICEF, ICRC Nutrition Adviser

F. Maintains Communications With:

School Programme Co-ordinator, Nutrition Advisory Committee, the Procurement Officer, FPCs

G. Maintains Communications By:

Personal contact with the School Programme Co-ordinator
Attendance at all NAC meetings

2. Title or Position: Camp Feeding Programme Co-ordinator

A. Supervisor: UNHCR Nutrition Officer

B. Subordinates: Agencies providing School Feeding Programme services, School Feeding Programme Officer

C. Duties:

- To liaise between SFC's providing school feeding and the School Programme Co-ordinator
- To ensure that school feeding services provided follow the guidelines

D. Responsibilities:

- To advise the SFCs on school meal composition and feeding schedule
- To periodically check all SFC's during all phases of school meals preparation, delivery and distribution
- To periodically check the hygiene in all schools feeding areas
- To ensure that adequate training is given to all Khmer staff involved in School Feeding Programmes
- To ensure that all supervision and surveillance procedures are carried out properly

E. Coordinates Work With:

Volags, School Programme Co-ordinators, SFP Co-ordinating Committee

F. Maintains Communications With:

UNHCR Nutrition Officer, Nutrition Advisory Committee, each SFC, School Programme Co-ordinators

G. Maintains Communications By:

Personal contact with School Programme Co-ordinators, attendance to FPC meetings, periodic reports to the UNHCR Nutrition Officer

UNHCR

UNHCR KAMPUCHEAN OPERATIONS MANUAL NO. 13

INTENSIVE FEEDING

January 1980

ACKNOWLEDGEMENT

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Dr. S.N. Chaudhuri, Catholic Relief Services;
Ms. Susan Peel, RN, League of Red Cross Societies;
Ms. Eva Wallstrom, Swedish International Development Authority.

TABLE OF CONTENTS

A. INTRODUCTION

Due to the size and scope of the Kampuchean operation, the UNHCR must coordinate the efforts of the numerous non-governmental organisations providing services in the camps. Setting basic minimum standards on each service supplied, providing guidelines on delivery of these services, and a basis for standardized reporting and monitoring, is necessary to ensure uniformity of services delivered.

The objectives of the UNHCR manual of Guidelines for Intensive Feeding Programmes (IFP) in Kampuchean camps are:

- to ensure that all services involved meet a basic minimal level of quality
- to ensure that all services are provided in a uniform manner
- to provide the basic information necessary to successfully implement the UNHCR standards
- to standardize routines and to facilitate reporting and monitoring
- to provide a guide for those who have had no prior experience in this field

UNHCR Guidelines for Intensive Feeding Programmes in Kampuchean camps

These guidelines are intended to assist those involved in the planning, implementation, and supervision of Intensive Feeding Programmes (IFP) in the Kampuchean camps.

Much of the following information has been provided from the Recommended book: The Management of Nutritional Emergencies in Large Populations by Cde Villed de Goyet, I. Seaman, and V. Geijer, WHO publication (pages 50-58)

An IFP will be seen as a part of the medical complex. To be effective, it requires competent management, and good co-operation between organizations, agencies, medical personnel and leaders of the Khmer population.

To reduce deaths among infants and young children with severe protein energy malnutrition (PEM), an IFP must provide therapeutic feedings of suitable preparations, education of mothers and staff, and monitoring status of patients with emphasis on prevention.

These guidelines are specifically concerned with the care of children with severe protein energy malnutrition and prevention of PEM. The techniques outlined here are not suitable or necessary for the management of malnourished adults. Malnourished adults are better cared for in a 'Rehabilitation Ward' where diets are based on local foods and normal meal times but where extra food supplements are given between meals. A rehabilitation ward is a useful and often essential part of the hospital complex where large numbers of malnourished or debilitated adults would otherwise be occupying needed hospital beds.

1. The objectives of an IFP are:

   a) to reduce deaths among infants and children with severe protein energy malnutrition by providing therapeutic feedings of high nutritional value

   b) to rehabilitate severely malnourished infants of children

   c) to aid recovery from disease

   d) to educate the Khmer mothers and staff as to nutritional practices necessary for the prevention of malnutrition and the rehabilitation of severely malnourished infants and children

2. Co-ordination of Intensive Feeding Programmes

Intensive Feeding in the Khmer Refugee Camps is the responsibility of the Medical Co-ordinators and the feeding centres are considered as part of the hospital complex.

3. The need for Intensive Feeding

Careful consideration should be given to the establishment of separate Intensive Feeding facilities since they are expensive in terms of material and personnel. It should be realised that all but the very worst cases of malnutrition (PEM) can be adequately rehabilitated in an effective Supplementary Feeding Programme (SFP). Priority should always be given to the provision of a good SFP to prevent others deteriorating to the state which necessitates intensive feeding.

Where such life-saving measures are necessary it should be appreciated that for a static camp population with good general food distribution and a good SFP, Intensive feeding should only be necessary for about 3 months i.e. the period taken to gather together and treat all those children arriving at the camp with severe PEM.

4. The Numbers Requiring Intensive Feeding

It is helpful to carry out a simple survey in the camp (or at screening procedure as the refugees arrive at the camp) to determine the likely numbers of severely malnourished in the population.

For ease of management it is preferable to limit the Intensive Feeding Centre (IFC) to no more than 100 beds. If the requirement is greater than this then a separate facility should be set up.

5 Facilities for Intensive Feeding

The IFC should be a separate building, near but independent of the Paediatric Ward. It is difficult to manage severe PEM in the setting of a Paediatric Ward since feeding schedules must be rigid and feeding procedures are very time consuming.

Ideally the IFC should consist of 2 or 3 separate buildings made of local material. One of the buildings would be used for newly admitted severe cases and have medical facilities. The children (and mothers) are accommodated in one single building. Close supervision by qualified personnel, nurses, for instance, is required on a full time basis. As the children improve they will progress from the acute ward into the other houses which also have accommodations for the children and accompanying relatives. Feeding is provided by the mothers under the supervision of auxiliaries. Qualified supervision is required on a periodic basis (detection and prevention of complications). Meal schedules will be adjusted until the children are ready to return to their own homes. The kitchen should be a focal point of the IFC and should be used for educational purposes with mothers and staff working side by side in the provision of rehabilitative foods for the children.

.../4

Notes: A plan for the lay-out of an IFC can be found in Annex I. This plan is flexible but includes all the necessary facilities for the food storage, preparation and distribution, the supervision of feeding, sanitation and water supply, medical services, a recreational area for the recovering children, and a dining area for attendants. (It is felt that parents and attendants should not dine in the presence of children on less desirable diets in the acute ward; however, children in the rehab building will be allowed in the dining area.)

Intensive feeding should be carried out in a residential centre since night feeds are an essential part of the treatment. Where for security or other reasons patients and/or staff cannot stay overnight in an IFC, this cannot be considered Intensive Feeding. These day-time centres should be called Treatment Feeding Centre to prevent confusion. These notes will discuss procedures for IFC but they also apply to treatment feeding unless mentioned otherwise. A suitable treatment feeding schedule is outlined in Annex III.

6. Admission to Intensive Feeding Centres

Admissions are generally selected on clinical rather than anthropometric grounds. In practice, admissions are usually less than 70% of standard weight for height or have oedema. Others may be less malnourished but have some serious underlying illness which puts them at particular risk.

It is important that the medical personnel responsible for hospital admissions appreciate the role of the IFC, i.e. they should not send a severely malnourished child into the paediatric ward for the treatment of an infection. Most infections can be cured in a few days but PEM may take several weeks.

Almost all admissions to an IFC have some underlying illness. For this reason close medical supervision is essential, preferably from a competent Paediatrician.

Every child admitted to the IFC should be accompanied by an attendant, preferably the mother. Where there is no suitable relative available, a Khmer volunteer should be designated to attend the child. Generally only one family member should be admitted but obviously where the mother has other small children, especially if breast fed, these may also need to be accommodated in the IFC.

7. Feeding Schedules

In order to achieve maximum weight gain in as short a period as possible a strict feeding schedule is essential. Ideally, this is a 3 hourly schedule giving at least 6 feeds during the 24 hours period. The feeding of sick children demands great patience.

.../5

High Energy Foods are given which have the necessary amount of protein for rapid growth. The basis of the feeding is a High Energy Milk Formula (HEM) or K MIX II. Both these foods provide approximately 1 Kcal/ml after dilution. (Recipes and preparation instructions are provided in Annex IIa Individual food requirements are calculated according to the formula 150 Kcal Kg body weight/day. (See table Annex VI). After appetite is stimulated (usually after 3-5 days) semi-solid then solid meals can be introduced into the meals schedule. Emphasis is placed on the individuality of each case, and diets will vary, (e.g. semi-solid or solid foods may be initiated on day one according to appetite and tolerance); however, schedules are to remain strict. (Annex IIb provides additional recipes and preparation instructions.

Intensive Feeding (residential)

a) HEM (or K MIX) 3 hourly for 3-5 days, 6 a.m., 9 a.m., 12.00 3 p.m., 6 p.m., 9 p.m. (12 midnight only in the most severe cases) 1/2 strength feeds should be given for the initiation of treatment. Poor appetite will normally restrict the volume of food taken for at least 48 hours. DO NOT FORCE FULL FEEDS for at least 48 hours i.e. if giving food via a Naso-gastric tube give diluted feeds.

b) After 3-5 days: introduce a porridge meal e.g. rice, oil, milk mixture instead of the 6 p.m. HEM feed.

c) After 1 week: introduce rice and soup meal at 6 p.m. and a porridge meal at midday. Give additional snacks e.g. biscuits and bananas with HEM feeds.

d) Before discharge: Children should be taking three full meals/day with extra HEM twice/day. The 9 p.m. feed should be discontinued at least 5 days before discharge.

NOTE: Using the plan suggested in Annex I, it would be expected that children on diets described in a. and b. would be in the 'acute' ward as they progressed to diet c. they would move to the second house and to the third house by diet d. prior to discharge.

Mother and/or attendants should be involved not only in the feeding of the children but also in the preparation of the food, the washing-up and the cleaning of the centre etc. They should all play an active role in the day to day running of the centre not the passive role of the patient and attendant in a hospital ward.

6. Supervision of feeds

Supervision of feeds is the most important function of ALL the staff of an ITC. All other activities should stop during feed times and all staff should turn their attention to the feeding of their patients. Khmer attendants should also be trained for this task and 2 or 3 particular children allocated to them for supervision.

10. Staffing of the IFC

Medical supervision is necessary in the IFC where PEM is complicated by underlying disease as is the case in the Khmer Refugee camps. Good nursing care is needed especially during the initiation of treatment. Most of the day to day tasks of the centre can be carried out by trained Khmer staff under the supervision of Khmer or expatriate medical personnel. The mothers and other attendants should also be included in the work of the IFC.

Suggested staff allocation:

			Day	Night
1.	Medical	- Doctor	1	-
		- Nurses	3	2
2.	General Kitchen	- Cook	2	-
		- Assistants	6	-
3.	Milk Kitchen	- Cook	1	1
		- Assistants	2	-
4.	Wards	- Attendants	10	3

One staff member should be designated as IFC administrator. This person should then be responsible for maintaining records, ordering of supplies and equipment, allocation of staff etc. (List of equipment for IFC can be found in Annex VII)

11. Education

This is one of the most important functions of the IFC. Staff and mothers should constantly be reminded that FOOD IS THE BEST MEDICINE for the malnourished child. For this reason mealtimes should be the most important activities of the day and medical activities should be 'discrete'.

Staff and mothers should be encouraged to take part in all activities especially in the preparation of the meals. Cooking times should be used as classes with discussions going on about the value of the various ingredients, the methods of cooking, etc.

Mothers and attendants can be encouraged to take an interest in the weighing of the children and the significance of weight gain and loss.

Informal classes can be held at quieter times of day when child care, hygiene and nutrition can be discussed preferably using Khmer health workers.

12. Medical Care

No drugs should be given unless they are absolutely essential. Observation has shown that staff may waste considerable time in giving inessential and expensive medicines instead of supervising intensive feding.

On admission each child should receive:

a) Fulldose (200,000 iu) vitamin A

b) Curative dose of anti-malarial medication *

c) Measles vaccine* (a measles outbreak in a feeding centre can be disastrous. The immunization of patients with severe PEM against measles is a priority as soon as their condition has started to improve.)

*Note: These should be administered under the guidance of the medical co-ordinator/epidemiologist.

Routinely:

a) Iron preparation daily

After 1 week:

a) Anti-helmintic (esp. Hookworm)

Broad spectrum antibiotics should be avoided if at all possible. They are particularly dangerous if a child has a monilial infection common in PEM. Treatment by antibiotics must be limited to treatment of identified infections. Infection is often masked in malnourished children, and hypothermia rather than fever may be present. Penicillin is the antibiotic of choice in PEM.

Potassium rich foods should be given (especially bananas) particularly in the case of diarrhoea (which is frequent during the first days), or Potassium chloride should be added to the REM or K MIX II. A bulk solution can be prepared with 7.5g in 100ml of water; 5ml/kg of body weight are given daily in divided doses.

Complications

Death occurs in 10-20% of cases and usually takes place within the first 4 days. Infection and dehydration are the major causes.

Other possible complications are:

a) Failure to gain weight

Sometimes children fail to respond to treatment and do not gain weight satisfactorily. Here there are two possibilities

(i) There is some problem with the actual feeds (generally they are not prepared properly or else they are inadequate in quantity or frequency)

(ii) There is a medical problem (e.g. an infection, worm infestation, tuberculosis, etc.) Medical examination and/or naso-gastric feeding are indicated if there is no oedema loss or weight gain after one week. In areas where tuberculosis is common, any malnourished child who does not gain weight satisfactorily despite a good dietary intake should be suspected of and treated for tuberculosis.

b) Hypothermia

Malnourished children, particularly marasmic ones, tend to have a low body temperature, especially at night. Care should be taken to ensure that the children are warm at night, even though the air temperature may seem uncomfortably high to the staff. Mothers should be encouraged to hold their children close to their bodies at night.

c) Severe anaemia

Anaemia is often severe and can deteriorate even after treatment for PEM has been given for 1 or 2 weeks. In severe cases, blood transfusion is recommended. Routine administration of iron with folic acid is recommended for the duration of the stay in the centre to prevent acute deterioration.

d) Lactose intolerance

Profuse diarrhoea can in some regions, be attributed to a lower tolerance to cow's milk sugar (lactose). Most diarrhoeas, however, are caused not by lactose intolerance but by infection.

If lactose intolerance is suspected, confirmation should be obtained by withholding milk from the feeds. Should the condition be present, diarrhoea will stop within 12 hours and start again after milk is reintroduced.

If lactose intolerance is confirmed, a low-lactose diet can be given (K MIX II, nonmilk diets). If lactose intolerance is not confirmed, there is no contraindication to giving the milk based diet as recommended, or two-hourly feedings of 20ml/kg of half-strength milk based diet for a few days.

e) Hypoglycaemia (low blood glucose)

This is less common when feedings are given at regular intervals during the night. Oral (or, if necessary, intravenous) administration of a strong sugar (glucose, dextrose, or sucrose) solution will be effective almost immediately. This must be followed by frequent oral feeds of sugar, or relapse may occur.

f) Relapses

Relapses after discharge from the feeding centre are very frequent (up to 75% of cases) unless the mother is admitted with the child and has taken over the feeding of the child herself. Failure to educate the mother can make intensive feeding meaningless.

13. Hygiene

Children suffering from PEM are very vulnerable to all infections.

- Safe boiled water should be available in large quantities (at least 20 litres per person). Clean cooking utensils, measures, and containers with warm antiseptic (chlorine) or detergent solution should also be available.
- Do not reconstitute feeds in advance. Protect them from flies, insects, and dust
- Mothers should clean the child's feeding plate and utensils every day
- Hand-washing with soap is essential before feeding the child.
- Latrine facilities should be provided for patients and staff. But no latrine should be installed without consultation with the UNHCR camp construction officer.

14. Criteria for discharge

Oedema loss (Kwashiorkor) as a sign of recovery is usually after 5-10 days. Oedema loss is accompanied by a loss of weight due to elimination of water.

Children with PEM (Kwashiorkor patients after the oedema loss) should show a weight gain of 8-10g per kg per day. (The standard weight gain for a normal 1-year-old child is 1g per kg per day)

Progress must be assessed daily if possible or at least every 2-3 days. Mothers should be given a careful explanation of the meaning of the chart which includes weight measurements.

It is essential to stimulate the malnourished child as quickly as possible since they are always lethargic and inactive. As soon as the child is sufficiently recovered he should be encouraged to move around and should be given every opportunity to participate in play or other activities at the centre.

Once the children become noisy and energetic then the IFC can be seen to have done its job successfully.

A child should not be discharged from the IFC unless:

a) free from obvious illness

b) alert and active

c) has a good appetite

d) gaining weight

e) at least 80% of standard weight for height (with no oedema)

15. Follow-up of children discharged from IFC

All children discharged form an IFC are vulnerable to deterioration. Every attempt should be made to safeguard the children from a sudden reduction in calorie intake. For this reason ALL children released from the IFC MUST be referred to their nearest SFP with a referral card. It is important that the staff of the SFP are aware of the need for follow-up for these children. Regular weighing must be carried out and any deterioration reported at once to the IFC. The mothers should be advised to report any illness or change in the child's condition.

Note: Advice on the management of the IFC or individual patients will be available from the ICRC nutritionists, or UNHCR nutrition officer.

16. Staffing and supervision of IFP personnel

a) A plan for the staffing of the IFP must be developed by the agency. This must be approved by the UNHCR nutrition officer.

b) Each agency operating an IFC shall designate an administrator for the IFC.

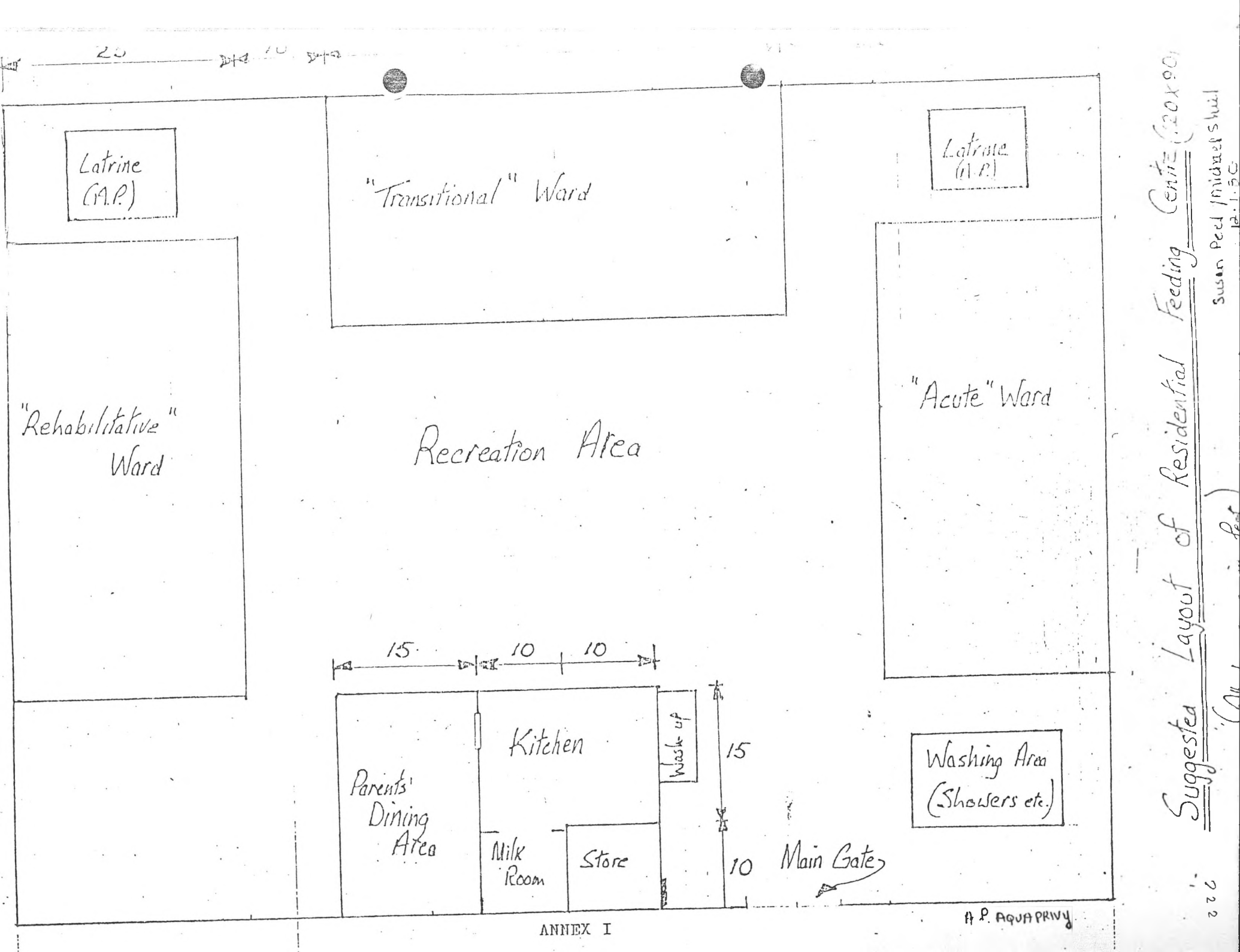
c) A schedule for increasing the involvement of responsibility of Khmer and/or Thai staff in the IFP will be developed by the agency and approved by UNHCR/ICRC.

d) The training and supervision of volunteers and Khmer and/or Thai staff is the responsibility of the agency working in the IFP.

e) A translator should be assigned to each centre to allow communication with expatriate personnel.

f) A designated representative of the agency involved in the IFP must be present during all activities related to intensive feeding.

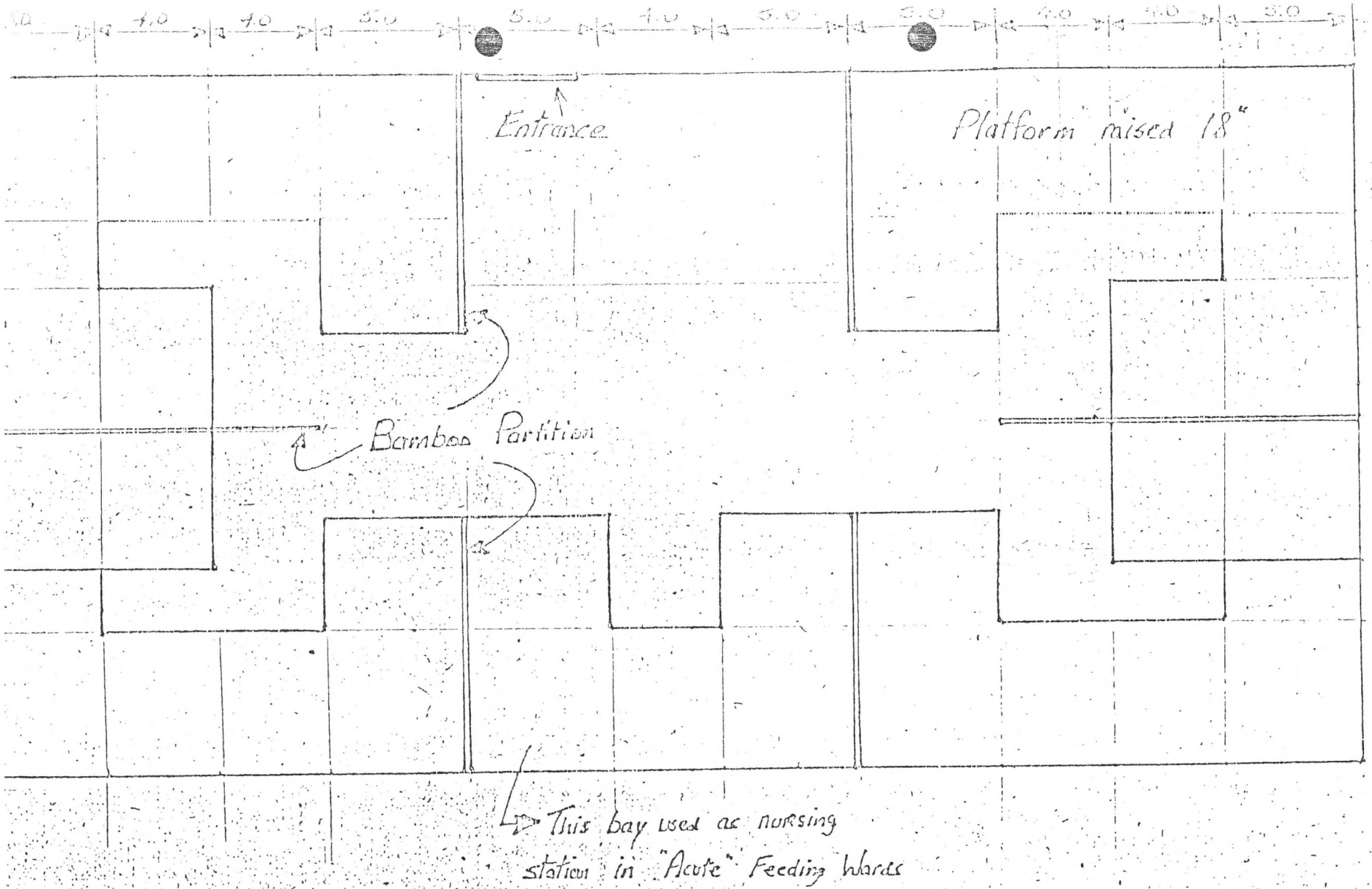
ANNEX	I	Plan for IFC
	IIA	Recipes and food preparation instructions
	IIB	Additional recipes, food preparation and instructions as submitted by Dr. S.N. Chaudhuri, C.R.S.
	III	Treatment feeding centres
	IV	Specimen Card
	V	Weight for Height tables
	VI	Energy/Volume requirements by Weight
	VII	Equipment list for IFC



ANNEX I

Suggested Layout of Residential Feeding Centre (120' x 90')

Susan Reed (Middlesex Hall) 12.1.50



FEEDING WARD (50ft x 25ft)

Dimensions in feet

ANNEX I

by: S. Peel & M. Shiel
12.1.80

ANNEX II

1. High Energy Milk Formula

a) High Energy Milk

Premix:	Dried skim milk	6 parts by volume
	Vegetable oil	2 " " "
	Sugar	1 S " "

The ingredients for the premis are mixed together thoroughly. If kept in a sealed container, the premix can safely be stored for several days.

The premix is reconstituted using:

Premix 1 part : water 4 parts

The liquid milk should be served hot as the oil separates out.

NOTE: Where possible:

Potassium Chloride 52 g
Magnesium Hydroxide 26 g
} Should be added to each kg of premix

b) KMIX II

This is a low lactose formula. The bulk of the protein content coming from casein.

KMIX II is reconstituted as follows:

KMIX	100 g
Oil	60 g
Water	1 litre

Because food scales are not always available the following conversions to Volume may be helpful:

Preparing KMIX II

(using a cup with a 250 ml. capacity)

Allowing for an average intake of 250 ml/child:

ANNEX II B

Recipes, preparations and instructions currently in operation in the Intensive Feeding Ward, Khao I Dang, submitted by Dr. S. N. Chaudhuri, C.R.S.

Feeding Schedule

FOR CHILDREN LESS THAN 6 MO. OR EQUIVALENT

6:00 am (or when awake)
Breast
Supplement with Lactogen 60 to 120 cc
Kaset (sweetened with brown sugar if desired) (if over 4 mo)
1 - 2 spoons full

9:00 am Breast
Supplement with Lactogen 60 to 120 cc
Orange juice (teach mother to squeeze juice into baby's mouth from orange section. Remove pits)

11:00 am Breast
Supplement with Lactogen 60 to 120 cc
Kaset (sweeten with brown sugar if desired) (if over 4 mo)
1 - 2 spoons full

2:00 pm Breast
Supplement with Lactogen 60 to 120 cc

3:30 pm electrolyte 100 cc

5:00 pm Breast
Supplement with Lactogen 60 to 120 cc
Kaset (sweeten with brown sugar if desired) (if over 4 mo)
1 - 2 spoons full

8:00 pm Breast

8:00 pm Breast
Supplement with Lactogen 60 - 120 cc

12:00 pm Breast
Supplement with Lactogen - severe malnutritioned (or if awake)

ADDITIONAL TIPS FOR FEEDING BABIES

1. If baby can't suck: A. Teacher her to do it
   B. Express mother's milk and give to baby

2. If baby doesn't tolerate Lactogen try:
   A. Dumilk
   B. Dilute Lactogen

3. If baby has continued diarrhea try:
   A. egg yolk
   B. banana

4. Bottles with nipples are TABOO except in exceptional cases because of sterilization (lack of) and other unsanitary conditions in camp.

5. For weaning, use eye dropper or syringe or small end of spoon.

6. Kaset is a transition food to fill infant and prepare it for rice and other foods. Give when child is not satisfied with milk, but not ready to eat rice. Little food value. Given to infants over 4 mo and under 6 mo.

ANNEX II B

FEEDING SCHEDULE
CHILDREN LESS THAN 6 MO

2400 If awake
Lactogen 120 cc

0600 Lactogen 120 cc
Kaset for those over 4 mo

0900 Lactogen 120 cc
fruit juice

1100 Lactogen 120 cc
Kaset for those over 4 mo

1315 Lactogen 120 cc

1500 Electrolyte 120 cc

1700 Lactogen 120 cc
Kaset for those over 4 mo

2000 Lactogen 120 cc
biscuits for all

DIET SHEET FOR CHILDREN

INTENSIVE FEEDING WARD

	FOOD	AMOUNT	DESCRIPTION	APPROX. CAL.	APPROX. PROTEIN GRAMS	
6-7 am	Milk	150 mls	KMIX II + OIL	170	(nett) 8	6 (utilisible)
	Rice	50 gms	Weighed raw	180	3	2
	Egg/Fish	30 gms	1 Boiled	150	20	15
	Fruit	1 piece	orange/banana/etc.	-		
9 am	Milk	150 mls	KMIX II + OIL	170	8	6
11 am	Rice	100 gms	weighed raw	360	5	3
	Soup - veg. fish/meat	200 mls		100	10	7
3 pm	Milk	150 mls	K MIX II + OIL	170	8	7
	Fruit	1 piece	orange/banana/etc	-	-	
	Biscuits	50 gms	Gateau milk protein	130	10	7
5 pm	Rice	100 gms	weighed raw	360	5	3
	Soup - veg. fish/meat	200 mls		100	10	7
8 pm	Milk	150 mls	KMIX II + OIL	170	8	6
	Biscuits	50 gms	Gateau milk protein	130	10	7
				2,190	105	75

Snacks in the form of fried food, biscuits, cakes are given once a day in addition to the above foods.

Average daily Calorie Requirement for children below 5 yrs is approximately 1,500 cals. Above 5 yrs approximately 2,000 cals.

ANNEX II B

S22

ANNEX II B

MIXING INSTRUCTIONS

Regular Milk

1. Red Cow

1 can of red cow milk powder
cold water to make a paste
2 cans sweetened condensed milk
Add enough warm water to make
1 full bucket of milk

2. K-MIX

2 cups vegetable oil
6 cups K-MIX
Make a paste, then add
4 large dippers of water

3. Lactogen for babies under 6 mo or equivalent

2 cups Lactogen
5 cups water (warm)

4. Dumilk for intolerance of Lactose

1 cup Dumilk
4 cups water (warm

5. Soy Bean Milk for intolerance of other milks

Is kept in a locked cupboard
Bottles to be saved (₱2 per bottle)

6. Haset

1 cup Haset
3 cups water (warm)

7. Electrolyte Mixture

2 large (or 8 small) packets
1 large dipper of water

N.B. All water must be boiled!
a cup means a full cup!

ANNEX II B

WARD POLICY &

TIPS FOR VOLUNTEERS

1. Feeding

a) We try to teach the mother to feed and to care for her child. To bathe her child and keep her bed and bed space clean.

Help and teach the parent all you can -- But do things for her ONLY WHEN SHE CANNOT DO THEM FOR HERSELF!

b) Getting the milk into the child is of Greatest Importance! Help them, bribe them, force them. You could ask the nurse to put it in a tube. Be patient, but do get the milk into them.

c) For children who vomit or can't tolerate milk, we suggest:

- Change to Dumilk
- Decrease the amount - may begin with 30 cc every 1/2 hour or even less and gradually build up tolerance. (Stomach may not be able to absorb milk because of long absence of enzymes etc.)
- Dilute the milk
- For vomiting give Plasil - 1 tsp 15 min. before feeding
- Mix milk with melted biscuit - make a pudding
- Insert N.J. tube (by nurse only) if child is too weak or resists too much

d) Do not give food or goodies to patients without checking with the nurse in charge of feeding.

ANNEX III

TREATMENT FEEDING CENTRES IN KHMER REFUGEE CAMPS

Good results can be achieved from these centres if children attend regularly from early morning to late afternoon. It is necessary to have well trained, reliable Khmer staff for the times when medical personnel cannot be present to supervise feeds.

It is usually necessary in these centres to introduce mixed foods earlier than in the residential centres since mothers and children will not return daily unless they are tempted by "good meals". This should be considered a compromise but a necessary one.

Suggested schedule:

7 am	9 am	11 am	1 pm	3 pm	5pm
HEM	HEM	Rice	HEM	HEM	Rice
+	+	+	+	+	+
Porridge	Banana	Soup	Biscuit	Hard boiled egg	Soup

A dry ration allocation of porridge mixture should be given to take home.

(See recipes in Annex II)

A weather proof building with kitchen is required for such a centre. These may usefully be attached to a SFP.

The full co-operation of the mother or attendant is essential if rapid weight gain is to be achieved among these malnourished children.

Home visits and good follow-up are needed to ensure attendance.

ANNEX VI

Volume of HEM at each meal depends on weight of the child. Before other meals are introduced this can be based on the following table:

Food volumes required (if food provides IKCAL/ml)

(3 hourly feeds) e.g. KMIX II on HEM

Weight of child	Vol/Energy requirement	Vol required at each feed 4 feeds/day	Vol required at each feed 5 feeds/day	Vol required at each feed 6 feeds/day
up to 5 kg	750 Kcal/ml	200 ml	150 ml	150 ml
5.0-7.5 kg	1125 Kcal/ml	300 ml	250 ml	200 ml
7.5-10 kg	1500 Kcal/ml	400 ml	300 ml	250 ml
10.0-12.5 kg	1870 Kcal/ml	500 ml	400 ml	300 ml
12.5 kg+	2000 Kcal+	500 ml+	500 ml+	500 ml+

ANNEX VII

Equipment and Materials required for an intensive feeding centre (100 in-patients)

Bed/platform/mats	100	
Blankets	200	
Tables	4	
Chairs	10	
Weighing Scales (Salter)	3	(one per house)
Height Stick	3	(one per house)
Tape measures	3	
Registers	3	
Cards (IF cards)	500	
(Treatment cards)	500	
Card clips	200	
String	1	Roll
Cups (250ml)	200	
Plates	200	
Spoons	200	
Food scales	1	
Measuring jugs	2	
Buckets - large	10	
- small	10	
Water containers	3	(one per house)
Whisks	5	
Stoves (charcoal)	10	
Scrubbing brushes	10	

C. ORGANISATION

The organisation for the management of the intensive feeding programme is as follows:

1. UNHCR NUTRITION OFFICER

The nutrition officer shall be a nutritionist, dietitian or medical person trained or experienced in the operation of relief feeding programmes. This person will be a member of the UNHCR Kampuchean operations staff, not a representative of one of the voluntary organisations.

The nutrition officer shall be the final authority for all questions regarding suitability of foods, diets, recipes, organisation of feeding programmes, facilities and personnel in the IFPS.

The nutrition officer shall be responsible for overall assessment of the nutritional status and needs of the camps. He shall set up and implement the regular surveillance systems and shall conduct periodic briefings on his findings to the volags conducting the individual feeding programmes.

2. CAMP MEDICAL COORDINATOR: (IFP involvement)

In each camp, a medical coordinator will be designated by UNHCR or ICRC and will be a part of the camp administrative structure. The medical coordinator in each camp will be responsible for seeing that all IFP's meet the UNHCR standards. To do this, he will carry out periodic inspections of the IFC's, their records, and their surveillance statistics. The medical coordinator will advise the nutrition officer of any problems in logistics, personnel or non-compliance by agencies with the standards in the IFP.

3. NUTRITION ADVISORY COMMITTEE (NAC)

A NAC shall be established to advise the UNHCR nutrition officer on matters relating to the conduct of the feeding programmes. The committee shall be made up of representatives of the agencies involved in feeding within the camps the convenor shall be a representative of UNICEF.

The NAC shall establish a subcommittee made up of representatives of the agencies involved in intensive feeding within the camps.=

4. NUTRITION ADVISORY COMMITTEE - INTENSIVE FEEDING SUBCOMMITTEE

A representative from each agency conducting intensive feeding services in the camps will be delegated by the agency involved to serve on the NAC Intensive Feeding subcommittee. The subcommittee members will report to the NAC regarding status of IFCS and to exchange information between the individual intensive feeding centres.

5. ADMINISTRATOR OF CAMP IFC

One staff member of each IFC will be delegated as IFC administrator by the agency involved. He will be responsible for maintaining records, ordering of supplies and equipment, allocation of staff, preparation and distribution of food within the IFC, hygiene in the IFC and overall function of the IFC to meet the standards. He will report periodically to the medical co-ordinator any problems in logistics or personnel.

6. LEAD AGENCIES

The UNHCR shall designate a lead agency from among the camps to serve as the "model" agency for the delivery of intensive feeding services. All agencies in the camps offering intensive feeding shall duplicate the services, schedules and routines of the lead agency.

D. ROUTINE

1. Feeding Schedules

Each IFP shall conduct feeding schedules as set in the guidelines with the advice of the UNHCR Nutrition Officer and the Camp Medical Coordinator. Strict adherence to feeding times and routine cooking, cleaning and teaching schedules is emphasized.

2. Surveillance

Each IFP shall conduct the surveillance activities listed in the guideline on a monthly basis. A monthly report shall be compiled and forwarded to the camp medical coordinator who will verify the reports if necessary. The medical coordinator will prepare a summary for the entire camp on the IFP Periodic Form and present it to the nutrition officer. This shall be recorded in the Policy and Standards Implementation Book.

E. JOB SPECIFICATIONS

1. Title of Position: UNHCR Nutrition Officer

a) Supervisor: Chief ROKU

b) Subordinates: ICRC Medical Co-ordinator in each camp

c) Duties:

To ensure that all agencies in the camp meet the UNHCR feeding and nutrition standards in the basic rations, supplemental feeding and school feeding. To ensure that the supplies necessary to maintain the standards are procured on a timely basis by preparing estimates of food needs present and potential for the procurement officer. To provide the training necessary to ensure that the medical co-ordinator and all agencies operating nutrition programmes are able to meet the standards.

d) Responsibilities:

To monitor the nutrition status in each camp and to prepare a monthly summary of the nutritional status on the UNHCR Periodic Report Form. To periodically report on the quality of the foods being delivered in each of the feeding programmes. To co-ordinate between IFPs and SFPs as required.

e) Co-ordinate with:

ICRC medical co-ordinator in each camp, UNHCR medical co-ordinator, voluntary agencies in each camp involved with IFPs

f) Maintain communications with:

Nutrition Advisory Committee and intensive feeding sub-committee of the NAC.

g) Maintain communications by:

Attendance at all NAC meetings