

Agencia 10 of Technical Reports

INCREASING THE EFFECTIVENESS OF THE BARANGAY HEALTH WORKER IN THE PROMOTION OF NUTRITION SERVICES WITHIN THE PRIMARY HEALTH CARE FRAMEWORK



Carmencita Salvosa – Loyola, Trinidad S. Osera, Adalisa C. Ramos, Lourdes M. Sumabat

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MODULES
for
TRAINING BARANGAY HEALTH WORKERS
IN NUTRITION

Appendix 10 of Technical Report: Increasing the Effectiveness of the Barangay
Health Worker in the Provision of Nutrition Services within the
Primary Health Care Framework

Carmencita Salvosa-Loyola, Trinidad S. Osteria, Adelisa C. Ramos, Lourds M. Sumabat
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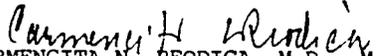
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FOREWORD

Nutrition is still one of the major problems affecting the vulnerable sector of the Philippine population and during the past two decades, nutrition intervention programs have been undertaken to address this problem. This gained worldwide support with the Alma-Ata Conference of 1978, when member countries of the World Health Assembly agreed that nutrition should be an integral part of Primary Health Care (PHC). In trying to achieve health development of communities through PHC, the Ministry of Health considers nutrition as an integral component of the comprehensive maternal and child health care services.

An indicator of community participation in PHC is the presence of volunteers known as barangay health workers (BHWs) who are given the responsibility of reaching out to their catchment areas of 20 households each with basic health services. These include Maternal and Child Health, Family Planning, Nutrition, Tuberculosis, Malaria, Schistosomiasis and Control of Diarrheal Disease. The BHWs are trained by the midwives (for this purpose) with the use of the Household Teaching Manuals. However, because of variability in the nutrition problems prevailing in communities and the need of BHWs for more detailed and specific guidelines to implement nutrition in PHC, training modules were systematically developed. This was made possible through a PRICOR - assisted operational research conducted jointly by the Ministry of Health and the Institute of Public Health of the University of the Philippines, Manila, involving planners, implementors of nutrition in PHC as well as the mothers who are recipients of health services.

This publication on Modules for Training Barangay Health Workers in Nutrition is a documentation of this joint endeavor which is a part of the Technical Report. It is highly recommended as a useful guide for training of BHWs in the implementation of nutrition in PHC.


CARMENCITA N. REODICA, M.D., M.P.H.
Acting Director
Nutrition Service, Ministry of Health

CONTENTS

FOREWORD	1
MODULE I	- Importance of proper nutrition	3
MODULE II	- Food handling	10
MODULE III	- 'Operation Timbang' (Weighing of preschool children)	15
MODULE IV	- Nutrition in pregnancy, lactation, infancy, preschool age, adolescence, and old age	24
MODULE V	- Common nutritional disorders and illnesses	48
MODULE VI	- How to organize and conduct household teaching for nutrition. .	65
MODULE VII	- Family productivity	69
EXHIBIT 1	- List of Tagalog words with English translations	78
EXHIBIT 2	- Table of age in months.	80
EXHIBIT 3	- Computation of age in months if there is no table	83
EXHIBIT 4	- Weight table for preschoolers	84
EXHIBIT 5	- Sample menus for pregnant and lactating mothers	86
EXHIBIT 6	- Supplementary feeding for breastfed infants	87
EXHIBIT 7	- Daily recommended amounts of food for your preschool child . .	89

MODULE I - IMPORTANCE OF PROPER NUTRITION

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
At the end of the session the BHW must be able to:				
1. Define nutrition	<p><i>What is nutrition?</i></p> <p>Nutrition is the study of the food you eat and how the body uses it to keep you healthy.</p>	<p>Ask class members their idea of what nutrition is. Ask them to cite personal experiences with foods - how these have affected their health and general well-being.</p>	<p>Flip chart on basic nutrition</p>	
2. Give reasons why the body needs food	<p><i>Why does the body need food?</i></p> <p>Our body needs food for:</p> <ol style="list-style-type: none"> 1. Life and growth. 2. Energy to work and play. 3. Protection against diseases. 	<p>Participants are asked to note signs of good nutrition in pictures of healthy individuals and undernourished individuals.</p>	<p>Pictures of well-nourished persons and undernourished persons</p>	
3. Describe the effects of good nutrition	<p><i>What are the effects of good nutrition?</i></p> <p>Good nutrition influences ones ability to stay healthy, to work effectively, to live longer, and be happy.</p> <p>Its effects are as follows:</p> <p>A. Physical well-being</p> <ol style="list-style-type: none"> 1. His height and weight are normal for his age. 2. His muscles are firm, strong and well-formed. 3. His bones and teeth are strong. 			

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
	4. His skin is smooth and clear.			
	5. His hair is thick and shiny.			
	6. His eyes are clear and bright.			
	7. His teeth are well-formed and well-developed.			
	8. He is protected from getting sick.			
	B. Psychological well-being			
	1. He is mentally alert and knows how to get along well with others.			
	2. He is active and cheerful.			
4. Enumerate the nutrients present in foods	<p><i>What are the nutrients present in foods?</i></p> <p>The nutrients present in foods are:</p> <ol style="list-style-type: none"> 1. Carbohydrates found in rice, tubers, root crops. 2. Proteins found in meat, fish, eggs, milk, dried beans, and legumes. 3. Fats present in cooking oil, lard and nuts. 4. Vitamins and minerals commonly found in vegetables and fruits. 	<p>Ask group their idea of what nutrients are. Supplement discussion with pictures of food sources of the different nutrients.</p>	<p>Pictures of sources of food nutrients</p>	
5. Identify the tool in selecting and eating the right kind of food	<p><i>How do you know you are eating the right kind of food?</i></p> <p>The Three BFGs help you select the right kinds of foods everyday. They serve as a guide in planning</p>	<p>Demonstration of foods eaten in one day</p>	<p>Poster: Three Basic Food Groups (BFGs)</p>	<p>Nutrition game: The object of the game is to get the highest points by being the first to</p>

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
	least-cost meals for your family.			
6. Explain the Three BFGs: their functions, and sources	<p><i>What are the Three BFGs?</i></p> <p>They are the groupings of foods according to their principal nutrients and functions in the body.</p> <p><i>What do the Three BFGs consist of?</i></p> <p>They consist of the following:</p> <ol style="list-style-type: none"> 1. Energy-giving foods or foods rich in carbohydrates and fats (GO FOODS). 2. Body-building foods or foods rich in protein (GROW FOODS). 3. Body-regulating foods or foods rich in vitamins and minerals (GLOW FOODS). <p><i>How do you describe each group?</i></p> <ol style="list-style-type: none"> 1. Energy-rich foods <p>These foods are rich in calories which provide heat to the body. They contain carbohydrates and fats which are the body's main sources of energy.</p>	<p>Classify each food in the demcnstration according to the Three BFGs.</p> <p>Ask class to give examples of different foods in each Food Group.</p>	<p>Pamphlet: Food and Nutrition Research Institute (FNRI). 1984. Your guide to good nutrition.</p>	<p>run to the designated area that symbolizes the BFGs to which a particular food belongs. The participants may be divided into two groups with one person from each group assigned to run as the name of each food is called out.</p>

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
	<p>Examples of these foods are:</p> <p>Carbohydrate-rich foods: Rice, rootcrops like 'kamote' (Exhibit 1 is a list of the Tagalog words with their English translations).</p> <p>Fat-rich foods: Lard, cooking oil:</p> <p>These foods are needed to:</p> <ol style="list-style-type: none"> a. Supply energy to the body for active work and play. b. Spare protein from being utilized as energy by the body. <p>2. Protein-rich foods</p> <p>These foods are called body-building because they make the body grow.</p> <p>Examples of these foods are:</p> <p>Fish, chicken, pork, beef, legumes, eggs, milk, dried beans</p> <p>These foods are needed:</p> <ol style="list-style-type: none"> a. By children so that they will grow taller and faster. b. By pregnant women and mothers who breastfeed their babies. c. To repair body tissues that have been damaged or wounded. d. To help teeth and bones become strong. 			

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
7. Define meal planning and balanced diet	<p>3. Foods rich in vitamins and minerals</p> <p>These foods are called body-regulating because they contain intermediary substances such as enzymes which are needed in the utilization of food by the body. They are mostly found in fruits and vegetables, particularly the yellow fruits and leafy green vegetables.</p> <p>These foods are needed:</p> <ol style="list-style-type: none"> a. To keep eyes, skin, hair, gums, bones, and teeth healthy. b. To provide resistance to the body against diseases. c. So that the body can properly utilize carbohydrates and protein. <p><i>What is meal planning?</i></p> <p>Meal planning is deciding ahead of time the foods to be included in any one meal and how these foods are going to be prepared and served.</p>	Throw question to participants.	Flip chart on meal planning	

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
	<p><i>What is a balanced diet?</i></p> <p>It is a diet having the correct amounts of all kinds of food necessary for health.</p>			
8. List the steps in meal planning	<p><i>What are the steps in planning a meal?</i></p> <ol style="list-style-type: none"> 1. Decide on the viand or 'ulam'. Will it be a meat, fish, poultry dish or a vegetable dish? 2. Choose accompanying vegetables and fruits to complement the protein-dish or viand. 			
9. Give pointers in planning meals at the least cost	<p><i>What are some tips in planning meals at the least cost?</i></p> <ol style="list-style-type: none"> 1. Select cheap but nutritious foods. 2. Buy fruits in season for cheaper sources of vitamin C. 3. Include one-dish meals as often as possible. 4. Include viands that do not require too many ingredients. 5. Include small fish and shrimps for good quality protein and calcium. 6. Include dark green, leafy vegetables like 'malunggay' leaves, 'kamote' tops and 'kangkong' for minerals and vitamins. 	<p>Ask class members their ideas of planning meals at least cost. Divide the class into groups. Ask each group to plan and prepare one-day menus at least cost.</p>	<p>Pamphlet: Nutrition Foundation of the Philippines (NFP). 1976. Meal Planning.</p>	<p>Identification of most nutritious and at the same time least costly meals prepared by participants (group reports).</p>

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
	7. Use undermilled rice, brown sugar, and root crops for calories.			
	8. Plan meals at least one day ahead of time.			

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MODULE II - FOOD HANDLING

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
At the end of the session the BHW must be able to:				
1. Explain the importance of proper food handling:	<p><i>What is food handling?</i></p> <p>It is the proper selection, storage, preparation, cooking and serving of foods. It includes keeping food safe and clean for consumption.</p> <p><i>Why is proper food handling important?</i></p> <ol style="list-style-type: none"> 1. To increase food capacity and reduce expenses. 2. To provide a safe and adequate diet. 3. To prevent wastage and insure maximum use of food nutrients. 	<p>Throw the questions to the group.</p>	<p>Flip chart on food handling</p> <p>Pamphlets: NFP. 1976. Nutrient conservation.</p> <p>FNRI. 1984. Keeping food safe to eat.</p>	<p>Oral exam</p>
2. Describe proper methods of:	<p><i>What are some helpful ways of food selection, storage, preparation, cooking and serving?</i></p>	<p>Discussion of pamphlets. Field trip to a local market to show correct selection and buying of foods.</p>		
a. Selection and buying	1. Selection and buying			
b. Storage				
c. Preparation, cooking and serving	<ol style="list-style-type: none"> a. Select fish with clear eyes, firm flesh and belly, shiny scales and no odor. 			

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
	b. Choose beef which is bright red, finely grained.			
	c. Select dried beans and nuts if fresh ones are not available.			
	d. Use brown and undermilled rice because it contains iron and B-complex vitamins other than carbohydrates.			
	e. Choose root crops and tubers which are firm and smooth to avoid wastage in peeling. If possible eat the skin for additional nutrients.			
	f. Select margarine that does not easily become rancid.			
	g. Choose vegetables that are fresh and crisp. Dark green and yellow vegetables are more nutritious.			
	h. Buy fruits that are firm, free from blemish and that are in season since they are cheaper.			
	i. Serve duck and quail eggs since they are just as nutritious as chicken eggs.			
	j. Select mature coconut for extracting coconut milk because young coconut has less milk.			
	k. Buy more 'dilis' and other less expensive fish and shell-fish. They are rich sources of protein and calcium for the bones.			

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
	<ul style="list-style-type: none"> 1. Packaging and processing increase the prices of food stuff. Therefore, always buy fresh foods whenever available: m. Buy food in quantity if storage space is available. Buying foods in quantity is cheaper than buying in small amounts. n. Be familiar with the different brands of foods to easily recognize substitutes. o. Read labels on packaged foods carefully. 			
	<ul style="list-style-type: none"> 2. Storage <ul style="list-style-type: none"> a. Fish. After cleaning (if refrigerator is not available), salt and dry the fish under the sun or cook as 'paksiw', 'pangat', or fry before storing in a clean container. b. Meat. In the absence of a refrigerator, prepare meat as dried 'tapa', salted, or boiled as 'adobo' and other recipes to prevent deterioration. If a refrigerator is available, wipe with clean rag before storing. c. Canned milk. Store in a cool dry place. Fresh milk. Refrigerate. 	<ul style="list-style-type: none"> Field trip. Visit a participant's house and note storage methods. Discuss the reasons why foods are stored the way they are. 	<ul style="list-style-type: none"> Same pamphlets mentioned earlier. 	<ul style="list-style-type: none"> Divide class into groups to criticize observed methods of storage.

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
	d. Dried beans. Store in plastic bag and keep in cool dry place away from sunlight. Occasionally, expose them to direct sunlight to prevent molds.			
	e. Rice. Store in dry place. Keep container tightly closed.			
	f. Margarine and cooking fat or oil. Store in cool, dark compartment.			
	g. Fresh vegetables. Soak ends of stems in water to prevent early wilting.			
	h. Fruits. Store in a cool dry place.			
	i. Eggs. Store in cool dry place. Refrigerate if possible.			
	3. Preparation/Cooking <i>Why and how do we cook food?</i> To make it palatable, so that it can be easily digested and utilized by the body, and to make it safe to eat.	Ask participants to relate to the class their methods and styles of preparing, cooking and serving of foods.	Same pamphlets mentioned earlier	Written exam
	a. Always wash hands with soap and clean water before preparing food.			
	b. Wash raw fruits and vegetables thoroughly with soap and clean water before eating.			
	c. Keep cooked and uncooked food			

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
	in a covered container.			
	d. Cook fish quickly at low heat to retain flavor and juices.			
	e. Save and use pork and beef drippings that contain B-complex vitamins.			
	f. Cook eggs in boiling water for 3-5 minutes to keep them from being tough and discolored. If fried, cook in low heat to keep them from burning or hardening.			
	g. Cook dried beans in covered pots with water.			
	h. Without rubbing, wash rice once or twice to remove dust.			
	i. Wash vegetables before peeling, cutting or slicing.			
	j. Avoid soaking pared or cut vegetables in water because the nutrients are left in the water.			
	k. Shred or cut vegetables just before cooking to avoid loss of nutrients.			

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Nutrition Center of the Philippines. 1976. Conservation of food. Nutrition fact sheet. 19. Loose leaf. n.p.

MODULE III - OPERATION TIMBANG

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
At the end of the session the BHW must be able to:				
1. State the importance of 'Operation Timbang' (OPT)	<p><i>What is OPT and why is it important?</i></p> <p>It is a regular activity of the Ministry of Health which aims to weigh 0-83 month-old preschool children in order to classify them into levels of undernutrition (first, second, third). The main objective of the OPT is to generate basic data for local nutrition program planning, implementation, and evaluation.</p> <p>OPT is being conducted nationwide at the barangay level. The results will help the municipality determine, locate, and identify families with malnourished children so that they can be given appropriate medical and dietary treatment as well as intervention for control and prevention purposes.</p>	Ask participants if they are aware of OPT, its importance, and mechanics of conduct. Audience reaction initiates the discussion.	Poster on OPT	Oral exam
2. Explain when and where OPT is carried out in the barangay	<p><i>When and where is OPT conducted?</i></p> <p>OPT should be done in the barangay at least once a year during the second quarter (April to June)</p>			

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
3. Discuss the conduct of OPT	<p>as an evaluation of the previous years' program implementation and in preparation for the local program planning for the following year.</p> <p>It is conducted in any place convenient to the families in the barangay. For the preschoolers who are unable to report to the designated site for weighing, effort should be exerted to weigh them in their homes.</p> <p><i>How is OPT conducted?</i></p> <p>The rural health unit team conducts OPT in coordination with the Municipal PHC committee. (A municipality is a unit of the province). At the barangay level (a barangay is a unit of the municipality), OPT is conducted under the leadership of the barangay health station midwife with the help of the barangay PHC committee. The BHW, being in charge of 20 families, also actively participates in the activity.</p> <p><i>How is a family included in the OPT?</i></p> <p>The OPT team makes a survey in the barangay. Families with children between 0 and 6 years of age are qualified to join the OPT.</p>	<p>Throw questions to members and build discussion on this using OPT organizational chart.</p>	<p>OPT organizational chart</p>	

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
	<p><i>Who conducts the OPT?</i></p> <p>At the barangay level, the OPT team (as organized by the OPT Technical Resource Group) is headed by the Rural Health Unit midwife. The team members include the following: the BHW, the 'purok' or 'pook' leader, the Day Care Center Worker, the parish church worker, the Barangay Nutrition Scholar, the barangay teacher, a member of the Ilaw ng Buhay, Anak Bukid member, or any barangay-based worker who may be duly designated.</p>			
4. Weigh a child properly using an appropriate weighing scale	<p><i>What scale is used in weighing?</i></p> <p>The 'espada', a locally manufactured bar scale with a capacity of 20 kg and with 0.1 kilogram markings, is used in weighing.</p> <p>A crib is made where an infant can be made to lie down or an older child can sit with reasonable ease. The crib, about 14" x 16" in size, is made of abaca sack cloth, an iron bar, and brass rings.</p> <p>Instructions in weighing a child:</p> <ol style="list-style-type: none"> 1. Record the name, date of birth and other pertinent data of the child before the actual weighing. 	<p>Lecture, discussion, and demonstration of proper weighing using a bar scale and a baby</p>	<p>Weighing scale Baby</p>	<p>Return demonstration by participants on the use of the bar scale</p>

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
	2. Note down the weight of the crib. This must be subtracted from the scale reading after weighing the child.			
	3. The bar should be hung such that it is low enough for the operator to balance the arm but high enough so that the feet of a bigger child will not touch the ground.			
	4. Read the weight on the scale at eye level. If the child is struggling, try to calm him with the help of his mother and when he stops moving, read the weight quickly.			
	5. Write down the weight in figures. For instance, 3.5 kg.			
	6. Make sure that the balancing weight is at the zero position before weighing the next child.			
5. Determine the nutritional status of preschoolers	How do you determine the nutritional status of preschoolers? The nutritional status of preschoolers can be determined through computation of the weight for age and by looking at the nutritional level in appropriate tables.	Lecture and discussion supplemented with handouts. Ask a member to do teachback.	Handouts: - Table of age in months (Exhibit 2) - Computation of age in months if there is no table (Exhibit 3) - Weight table for preschoolers (Exhibit 4)	Exercises on computation of age in months. Ask class members to make a table of age in months on the blackboard.

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
	<p>To calculate age in months:</p> <ol style="list-style-type: none"> 1. Determine the preschooler's date of birth. 2. Note down the date of weighing. 3. Refer to the table corresponding to the month of weighing. (Exhibit 2). 4. Run your fingers down the column 'month of birth' until you reach the preschooler's month of birth. 5. From this point, run your fingers to the right until you reach the column of the preschooler's year of birth. 6. The number in the square where the preschooler's month and year of birth intersect is his age in months provided the day of birth is equal to or less than the day of weighing. (See Examples 1 and 2 of no. 8). 7. If the day of birth is greater than the day of weighing, subtract one month from the age in months indicated in the square where the preschooler's month and year of birth intersect. The resulting answer is his age in months. (See Example 3 of no. 8). 8. To illustrate: 			

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
	Example 1:			
	Date of weighing - Jan. 30, 1985			
	Date of birth - Jan. 15, 1985			
	Age in month - 0			
	Example 2;			
	Date of weighing - Jan. 20, 1985			
	Date of birth - April 2, 1980			
	Age in months - 57			
	Example 3:			
	Date of weighing - April 10, 1985			
	Date of birth - Sept. 15, 1983			
	Age in months - 18			
	Actual weight in kg - 8.10			
	See Exhibit 3 for computation of age in months in the absence of a table.			
	To determine nutritional level:			
	In the 'weight table for pre-schoolers' (Exhibit 4) under the column 'Age as of Last Birthdate' run your fingers down the page until you reach the 'Age in Months'. Then run your fingers across the page and look for the actual weight. Again run your fingers up the page until			

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
	<p>you reach the nutritional level. For example, a 41 month-old child weighing 12.2 kg is mildly underweight or is first degree undernourished.</p>			
6. Explain to parents of weighed children the results of the CPT	<p><i>How are the parents of weighed children informed of the OPT results?</i></p> <p>Parents of weighed children are advised about the significance of the latter's weights gathered through OPT. They are told that their children are classified according to certain levels of nutritional status: (Normal, First degree, Second degree, or Third degree).</p> <p>Parents should also be informed that emergency medical treatment will be given to severely undernourished preschoolers for attendant illness caused by malnutrition. These preschoolers and those suffering from second degree undernutrition will receive 'nutripak', an emergency supplement. Additional instructions in the practice of sound nutrition is also given to parents.</p> <p>Immediately after weighing, undernourished preschoolers receive various forms of assistance to re-</p>	Ask a group to report on dissemination of OPT results.		

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
7. Fill in a growth chart	<p>habilitate them to normal. Pre-schoolers suffering from second or third degree undernutrition should be weighed preferably every month until they reach normal weights.</p> <p><i>What is a growth chart?</i></p> <p>It is basically a graph on which a child's weight is shown at different ages.</p> <p>To fill up and record the weight on the growth chart:</p> <ol style="list-style-type: none"> Write the name, address and other information about the child and the family on the back of the chart. Enter the month and year of birth in the rectangle. Then enter the succeeding months in chronological order. Weigh the child. Place a large dot in the middle of the appropriate column for weight (to nearest 0.1 kg) each time child is weighed. Connect this dot to previous dot. Enter also illnesses on chart. 	Discussion and demonstration on the use of growth charts	Growth charts of the Ministry of Health	Exercises in filling up and plotting weights in growth charts

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MODULE IV - NUTRITION IN PREGNANCY, LACTATION, INFANCY, PRESCHOOL AGE, ADOLESCENCE, AND OLD AGE

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
At the end of the session the EHW must be able to:				
1. Explain the importance of good nutrition during pregnancy and lactation	<p><i>Why is proper nutrition important during pregnancy and lactation?</i></p> <p>During pregnancy, proper nutrition is important:</p> <ol style="list-style-type: none"> To meet the nutritional needs of the baby. To build nutrient reserves in preparation for delivery and lactation. To avoid any complications or dangers during pregnancy. <p>During lactation, the mother should be properly nourished to meet her own nutrient requirements and to provide sufficient milk for the baby. A breastfeeding mother needs to eat more because she needs more nutrients to produce sufficient amounts of milk. The quality of her milk will depend largely on the adequacy of her diet.</p>	<p>Divide class into groups to discuss importance of nutrition during pregnancy and lactation.</p>	<p>Pamphlet: FNRI. 1982. Meal planning during pregnancy and lactation.</p>	<p>Oral exam</p>

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity																							
2. Explain how good nutrition contributes to normal pregnancy and lactation	<p><i>How does nutrition contribute to normal pregnancy and lactation?</i></p> <p>Among well-nourished mothers:</p> <ol style="list-style-type: none"> The incidence of miscarriages, still births, and premature births is less. Infants are in better physical condition at birth and have fewer and less severe illnesses up to the age of six months. Breastfeeding is more successful in that she has sufficient milk and can provide for her baby's nutritional requirements. 																										
3. Give an example of a one-day menu for a pregnant or lactating mother	<p>Sample menu for pregnant or lactating mother:</p> <table border="1"> <thead> <tr> <th></th> <th>Pregnant</th> <th>Lactating</th> </tr> <tr> <th></th> <th colspan="2">Amount</th> </tr> </thead> <tbody> <tr> <td colspan="3">BREAKFAST</td> </tr> <tr> <td>Fried fish, piece (pc), small</td> <td>1</td> <td>1 1/2</td> </tr> <tr> <td>Rice, cup, (c)</td> <td>1 1/2</td> <td>1 2/3</td> </tr> <tr> <td>Coffee (c)</td> <td>1</td> <td>1</td> </tr> <tr> <td colspan="3">MERIENDA</td> </tr> <tr> <td>Boiled yellow 'kamote' (pc)</td> <td>1 (small)</td> <td>1 (med)</td> </tr> </tbody> </table>		Pregnant	Lactating		Amount		BREAKFAST			Fried fish, piece (pc), small	1	1 1/2	Rice, cup, (c)	1 1/2	1 2/3	Coffee (c)	1	1	MERIENDA			Boiled yellow 'kamote' (pc)	1 (small)	1 (med)	Food demonstration	<p>--Actual food samples of serving portions for a pregnant or lactating mother</p> <p>--Handout: Sample menus for pregnant and lactating mothers (Exhibit 5)</p>
	Pregnant	Lactating																									
	Amount																										
BREAKFAST																											
Fried fish, piece (pc), small	1	1 1/2																									
Rice, cup, (c)	1 1/2	1 2/3																									
Coffee (c)	1	1																									
MERIENDA																											
Boiled yellow 'kamote' (pc)	1 (small)	1 (med)																									

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
	Pregnant Lactating			
	Amount			
	LUNCH			
	Fish 'sinigang' with vegetables			
	Fish (med-size) 1 1			
	Vegetables (c) 1 1			
	Rice (c) 2 2			
	Mango, slice (sl) 1 1/2 1 1/2			
	SNACK			
	Boiled peanuts (c) 1/2 1/2			
	SUPPER			
	Sauted vegetables (c) 1 1			
	Pork 'adobo' (med-size) 1 1			
	Rice (c) 1 3/4 2			
	Banana (pc, med) 1 1			
4. Enumerate some food fallacies during pregnancy	<p>What are some food fallacies during pregnancy?</p> <p>1. 'Duhat' or other dark-colored foods affect the skin color of the baby.</p>	<p>Role playing.</p> <p>Two pregnant women chat about their diets during pregnancy and lactation.</p> <p>One avoids many:</p>		<p>Contest:</p> <p>Divide mothers into two groups. One group states a misconception. The other group gives the corresponding</p>

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
	<p>There is no scientific basis for the belief that a particular food eaten during pregnancy has an effect on a specific part of the body.</p>	<p>foods because of certain beliefs while the other one eats almost everything.</p>		<p>advice. Give one score for every correct advice.</p>
	<p>2. Squash when eaten in the stage of conception can cause dillness.</p> <p>This is not true because squash is one of the vegetables rich in vitamin A that the pregnant woman needs for good eyesight and smooth, clear skin.</p>			
	<p>3. Conceiving mothers should not eat crabs because they can cause deformities among babies like six fingers, etc.</p> <p>Crabs are needed by pregnant women because this food is rich in protein and iodine for building body tissues as long as there are no allergies to crabs.</p>			
	<p>4. Eggplant can cause beri-beri.</p> <p>Eggplant contains vitamin B1 or thiamin which helps in preventing beri-beri.</p>			
	<p>5. Eating vegetables with 'bagoong' during early lactation causes stomach trouble.</p> <p>As long as the mother is used to eating this food, it</p>			

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
	should not be a cause of distress when she is pregnant or lactating.			
	6. Lactating mothers must not eat eggs and eggplant because they make the body itchy.			
	There is no evidence to show that these foods cause itches unless the mother is allergic to them.			
5. Explain the importance of good nutrition in infancy	<p><i>What is the importance of good nutrition in infancy?</i></p> <p>A child grows and develops more rapidly during the first year of life than any other time. On the average, a baby should double his weight by 5 to 6 months and triple it by the end of his first year. This rapid growth of bones, muscles and tissues can take place only if the baby is getting enough of the right kinds of foods.</p>	<p>Throw question to class and reinforce discussion with flip chart and poster.</p>	<p>Flipchart on breastfeeding</p> <p>Poster: Stages of standard development of infants</p>	
6. Promote breast-feeding by:	<p><i>What are the advantages of breast-feeding?</i></p> <p>1. Breastfeeding offers an excellent opportunity for the mother to develop a stable, affectionate relationship with her child.</p> <p>2. Breastfeeding saves you time and money because breastmilk is</p>	<p>Ask participants who among them practice breast-feeding and why. Start the discussion on this.</p>	<p>Pamphlet: FNRI. 1983. Breastfeed-it's the best for your baby.</p> <p>Chart comparing composition of human milk with that of cow's milk</p>	Written exam

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
	available 24 hours and needs no special preparation.			
	3. Breastfeeding aids the infant in developing a sense of trust.			
	4. Colostrum, the first yellowish milk secretion has immune bodies that give the baby immunity to some infections and common illnesses.			
	5. The concentrations and types of protein in breastmilk are ideal for the infant's growth and are less likely to cause allergic reactions.			
	6. Breastmilk contains vitamins and minerals which are needed for the infant's growth.			
b. Teaching some breastfeeding techniques	<i>What are some breastfeeding techniques?</i>	Demonstration on proper breastfeeding	Baby doll to simulate an infant	
	1. The mother's position during a feeding may vary. She may lie on her side or sit upright, making sure that the infant has access to the breast.			
	2. The mother may initiate breastfeeding either by touching the infant's cheek with the nipple (to induce the baby's rooting reflex) or by placing the nipple and areola in the infant's mouth.			
	3. The newborn baby may be breast-fed as early as 30 minutes after			

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
	<p>delivery. The interval for feeding is usually every 3 hours; but the baby is allowed to develop a feeding schedule of his own. This is known as 'self-demand feeding'. Babies should be breastfed up to 1 year old or as long as there is milk.</p> <p>4. Put the baby to the other breast after 8 to 10 minutes of nursing. Subsequent feedings should start at the second breast to ensure complete emptying (Maximum emptying of breasts enhances milk production).</p>			
<p>c. Reassuring and helping mothers to overcome the problems of breastfeeding</p>	<p><i>What are some problems of breastfeeding and how do you overcome them?</i></p> <p>1. Flat or inverted nipples. These are common in women who have their first babies. If a nipple is not protractile, the baby will have difficulty in feeding.</p> <p><i>What to do:</i> Teach her to press her nipple and pull it gently. She should do this for several minutes everyday. Her nipple will grow longer.</p> <p>2. Swollen or engorged breasts. Sometimes a mother's breast</p>	<p>Participants who had problems in breastfeeding share their experiences.</p>		<p>Role playing. A mother wants to give up breastfeeding because of sore nipples. A friend tells her what to do about her problem.</p>

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
	<p>makes more milk than her baby needs during the first week after delivery. This becomes painful and swollen with milk if not emptied normally.</p> <p><i>What to do:</i> Teach a mother to express her milk when her breasts feel painfully full. She should wash her hands and get a clean cup or bowl. Using both hands squeeze gently from the base of the breast and areola between fingers and thumb and let the milk squirt into the cup. If an engorged breast is not emptied, the amount of milk will decrease quickly.</p> <p>3. Swollen nipples. Nipples are very sensitive. If the skin is very soft and the baby sucks very hard, (because of flat nipples and engorged breasts) soreness develops. Sometimes the soreness develops into a crack which is very painful and may be a source of infection.</p> <p><i>What to do:</i> Keep the skin soft by rubbing the areola and nipples with some oil. Do not let the baby suck for too long at first. Change your position so that when the baby sucks, the line of pressure will not always be at the same place. Put some an-</p>			

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
	<p>: tiseptic ointment or antibiotic if : the soreness has developed into a : crack. Let the child feed from the : other breast.</p> <p>: 4. Painful tender breasts and fever. : May be due to germs that have : entered the breast through cracks : in the nipple. The woman may have : fever and a part of the breast : becomes painful, swollen, red, : and warm.</p> <p>: <i>What to do:</i> The mother should be : referred to the health center or : hospital. It is important to keep : the breast empty of milk by feeding : or expressing. Breastfeeding should : be stopped only if there is pus : coming out from the nipple.</p> <p>: 5. Fears that there is too little : milk or that it is of poor : quality.</p> <p>: It is common for mothers to : worry that they do not have enough : milk for their babies. Empty breasts : on the first two or three days after : birth are normal. Encourage mothers : by telling them that:</p> <p>: a. Milk usually starts to flow on : the third or fifth day. Even : if a mother has only a little</p>			

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
d. Explaining to mothers the risk and cost of bottle-feeding	<p>breastmilk, she must continue breastfeeding her child. What ever breastmilk she has is good and she may have more later.</p> <p>b. A baby is born with plenty of water in his body and does not need to drink much in the first few days.</p> <p>c. She may feed any time and anywhere she likes, particularly at night and in any position she and the baby find comfortable. Too much emphasis on proper positions for breastfeeding makes the mother anxious and this may lessen the flow of milk.</p> <p><i>Why can bottlefeeding be dangerous?</i></p> <ol style="list-style-type: none"> 1. Milk is easily contaminated with germs from dirty bottles, rubber teats, spoons, water, or hands. This danger is greatest in homes where there is little fuel, no running water, or no time for sterilizing the feeding bottles and teats. 2. Except for breastmilk, no other milk has any agents that can protect the child from infections. 3. Milk gets spoiled if it is not used quickly or if not stored properly. This happens much more quickly in hot climates. 	Mothers who resorted to bottle-feeding talk on the difficulties that they encountered.		

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
7. Give advice on supplementary feeding for infants	<p>4. Cow's milk and powdered milk are often diluted too much. This is because they cost much. If they are diluted, the children do not get adequate nourishment and will not grow.</p> <p>5. The rubber teat of the bottle may have too small or too large a hole. If the hole is too small, the child may struggle to get the milk and swallow a lot of air but not enough milk. Too large a hole may cause rapid feeding and sometimes vomiting.</p> <p><i>When is supplementary feeding started?</i></p> <p>Supplementary feeding is started not earlier than the fourth month but not later than the sixth month of age. This is necessary to provide added nutrients for the rapidly growing baby as well as to familiarize him to new tastes and textures of food.</p> <p><i>How do you give supplementary feeding to infants?</i></p> <p>1. Food for infants up to 6 months</p> <p>A baby has no teeth and since he is used only to breast-milk, the first food given to him:</p>	<p>Mothers are asked about their common practices of infant feeding.</p> <p>Demonstration on the preparation of supplementary foods for infants using the usual family meals</p>	<p>Handout: Supplementary feeding for breastfed infants (Exhibit 6):</p>	

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
	<p>should be soft and with no strong spicy flavor. Food is introduced gradually by type and amount. If a certain cereal is the staple diet of the family, it should be used to make the first food for an infant. The cereal should be well cooked and mashed so that it is soft. It can be made into porridge or made very soft by adding water. In the beginning, this porridge may be very thin, but as the child grows older, the porridge should be made thicker. If much water is added, there is little strength or energy in the food. A thick porridge is more nourishing than a thin, watery gruel.</p> <p>If the cereal is cooked in oil, or if oil is added, it will increase the strength or energy in the food. Sugar, either white or brown, will also increase the energy in the food, but it is not as good as oil.</p> <p>Sweet foods are bad for the teeth.</p>			

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
2. Food for children 6 months to 1 year old.	<p>In the second half of the first year of life, a child can take a more varied diet. Once a child is eating the cereal porridge well, cooked legumes and other vegetables can be mixed with the cereal or given separately. New items should be given in small amounts at first. Gradually increase the quantity but do not force the child to eat more than he accepts. The vegetables should be very soft, without fiber, and mashed.</p>			
	<p>If a family eats animal foods and can afford to buy them, these can also be given. Meat or fish should be minced or finely chopped. A soft-cooked egg can be mixed with the porridge or given by itself. Milk from animals should be boiled before it is given to children. After introducing a new food, it is good to wait for a few days before introducing another food.</p>			

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
8. Explain the importance of good nutrition during preschool age	<p><i>Why is good nutrition important during a child's preschool years?</i></p> <p>Because this is a period of:</p> <ol style="list-style-type: none"> 1. Rapid growth necessitating increased intake of body-building foods. 2. Increased activity requiring additional energy-giving foods. 3. Mental development needing more body-building materials for the rapidly growing brain. 			
9. Give pointers in feeding pre-schoolers	<p><i>What are some points one should bear in mind in feeding a preschool child?</i></p> <ol style="list-style-type: none"> 1. Give their meals at the right time. Eating junk foods in-between meals destroys their appetite for main meals. 2. Serve nutritious snacks like glazed yellow 'kamote', boiled peanuts, milk or fruit juices instead of candies and soft-drinks. 3. Offer nutritious foods first before sweets, cakes and pastries. They may not even touch your nourishing dishes if they see candies on your table. 4. Re-introduce nutritious foods they dislike. Don't give up but don't force-feed either. In 1 to 2 	<p>Lecture and discussion</p> <p>Mothers share their experiences in feeding their pre-schoolers.</p>	<p>Handout: Daily recommended amounts of food for your preschool child (Exhibit 7):</p>	

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
	weeks you will see that they will slowly begin to like new food.			
	5. Never use food as punishment or reward.			
10. Give instructions to add variety to a child's diet:	<i>How do you add variety to a child's diet?</i>	Divide class into groups to discuss mothers' practices in food preparation for pre-schoolers.	Flip chart and posters	Class reacts on strengths and weaknesses of methods of food preparation.
	1. Use milk instead of water in cooking cereals. Or add powdered or evaporated milk to porridge.			
	2. Add raw egg to porridge as soon as cooked. The heat of the porridge will cook the egg.			
	3. Serve legumes like 'monggo' as meat extenders at meal time or as snack food items.			
	4. Form chopped meat or fish into patties or balls and serve as omelette or in soups.			
	5. Stuff mashed potatoes or yellow 'kamote' with mixed vegetables, roll in beaten egg and fry.			
	6. Cook vegetables like cubed squash or yellow kamote and 'abitsuelas'. Cut into strips and serve in broth.			
	7. Serve fruits in different ways as juices or shaped into cubes, balls and rings.			

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
11. Explain the importance of good nutrition during adolescence	<p><i>Why is good nutrition important during adolescence?</i></p> <p>Good nutrition is important because of the double demands of activity and growth during this period.</p> <ol style="list-style-type: none"> 1. Adolescent boys need more energy foods than adolescent girls because of an increase in physical activity. 2. The need for body-building foods is also high among teenagers because of the accelerated growth and development. 3. Adolescent girls need more iron than adolescent boys because of menstruation. 4. Calcium requirements for teenage boys and girls are similar. It is necessary for bone growth; the skeleton reaching its full size at 17 years in girls and 20 years in boys. 5. Several other nutrients are important to ensure good health. These include vitamins A, C and the B-complex vitamins. 	Group discussion on foods for the adolescents	Pamphlet: FNRI. 1983. Meal planning for teenagers:	Oral exam

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
12. Enumerate some dietary problems contributing to the incidence of nutrient deficiencies	<p><i>What are some dietary problems contributing to the incidence of nutrient deficiencies among teenagers?</i></p> <ol style="list-style-type: none"> 1. Skipped breakfasts due to lack of time, lack of appetite, preference for sleep, and the acceptance of the no-breakfast habit within the peer group. <p>Suggestions:</p> <ol style="list-style-type: none"> a. Make it a habit to eat breakfast. b. Get up early so as to have plenty of time to get dressed and eat. <ol style="list-style-type: none"> 2. Poor lunches due to poor selection of foods eaten away from home, eating hurried lunches at school, over-riding fear of overweight or fear of eating certain foods that are thought to aggravate pimples or acne. <p>Suggestions:</p> <ol style="list-style-type: none"> a. Prepare nutritious foods that can be easily eaten, specially for packed lunches. Prepare foods in such a way that the person's appetite can be stimulated. 	Throw question to members.		

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity																				
13. Give an example of a one-day menu for teenagers	b. Eat plenty of fruits and vegetables in order to have a clear and smooth skin.																							
	Sample menu for adolescent boys and girls:	Food demonstration	Actual food samples of serving portions for an adolescent boy or girl																					
		<table border="1"> <thead> <tr> <th></th> <th colspan="2">B o y</th> <th colspan="2">G i r l</th> </tr> <tr> <th></th> <th colspan="4">A g e (y r)</th> </tr> <tr> <th></th> <th>13-15</th> <th>16-19</th> <th>13-15</th> <th>16-19</th> </tr> <tr> <th></th> <th colspan="4">A m o u n t</th> </tr> </thead> </table>		B o y		G i r l			A g e (y r)					13-15	16-19	13-15	16-19		A m o u n t					
		B o y		G i r l																				
		A g e (y r)																						
		13-15	16-19	13-15	16-19																			
		A m o u n t																						
		BREAKFAST																						
		Fried egg with potato																						
		Fried egg (pc) 1/2	1/2	1/2	1/2																			
		Potato (pc, small) 1	1	1	1																			
		Coffee with sugar																						
		Coffee (c) 1/2	1/2	1/2	1/2																			
		Sugar, teaspoon (t) 3	3	3	3																			
		Rice (c) 2	2	1	1 1/4																			
	SNACK																							
	Boiled 'kamote' (pc, small) 1	1	1	1																				
	LUNCH																							
	'Monggo guisado' with 'malunggay'																							
	'Monggo' (c) 2/3	2/3	1/2	1/2																				
	'Malunggay' (c) 1/4	1/4	1/4	1/4																				
	Rice (c) 2 2/3	2 1/2	2	2																				
	Pineapple (sl) 1	1	1	1																				

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity								
	<table border="1"> <thead> <tr> <th>Boy</th> <th>Girl</th> </tr> <tr> <th colspan="2">Age (yr)</th> </tr> <tr> <th>13-15</th> <th>16-19</th> </tr> <tr> <th colspan="2">Amount</th> </tr> </thead> </table>	Boy	Girl	Age (yr)		13-15	16-19	Amount				
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	Pork (pc)* 1/2 1/2 1/2 1/2											
	Vegetables (c) 1/2 1/2 1/2 1/2											
	Rice (c) 2 2 1/2 2 2											
	Papaya (sl) 1 1 1 1											
	*One piece is equivalent to 3.0 cm cube of lean meat											
14. Explain the importance of maintaining nutritional allowances during old age	<p><i>Why is it important to maintain nutritional allowances during old age?</i></p> <ol style="list-style-type: none"> To maintain the health of the elderly. To prevent the occurrence of chronic degenerative diseases to which the elderly are prone such as: arthritis, rheumatism, gout, coronary heart disease, and diabetes. 											

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
15. State some problems encountered during old age and suggest possible solutions:	<p><i>What are some problems encountered during old age? Give some tips on overcoming them.</i></p> <ol style="list-style-type: none"> 1. Difficulty in chewing due to loss of teeth and not getting used to dentures. <ol style="list-style-type: none"> a. Chop meat or flake fish. b. Slice or chop vegetables into small bite-sized pieces for easy chewing. 2. Lack of appetite. <ol style="list-style-type: none"> a. Do light exercises like walking and gardening to improve appetite and keep the body fit. b. Eat in pleasant surroundings to make your meal enjoyable. c. Make the food attractive by varying color, shape and size. 3. Poor digestion leading to constipation, gas pains, or diarrhea. <ol style="list-style-type: none"> a. Include fruits and vegetables in your daily meals to prevent constipation. b. Have 4 to 5 light meals. Eat the heaviest meal at noon. c. Drink from 6 to 8 glasses of water and fruit juices every day to help digestion and keep normal flow of body fluids. 	<p>The class is divided into groups to discuss nutritional problems that come with old age. Solutions to problems are included in discussions.</p>	<p>Pamphlet: FNRI, 1983. Foods for the elderly.</p>	<p>Each group presents to the class results of discussion on nutritional problems met by the elderly.</p>

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
	d. In diarrhea, take in simple foods like tea, crackers, banana broth, 'lugaw' or toast. Avoid fibrous fruits and vegetables.			
	4. Poor absorption leading to anemia and other vitamin deficiencies.			
	a. Iron-rich foods like liver, lean meat, egg yolk, 'petsay', 'saluyot' will protect you from anemia.			
	b. Vitamin C-rich foods like papaya, 'dalanghita', and mango will help absorb iron and speed up healing.			
	c. Have enough sunshine and take in foods like milk, cheese, and other milk products, 'dilis', 'alamang', and leafy vegetables. These foods contain calcium needed for strong bones.			
	5. Excess weight due to lack of physical activity and overeating.			
	a. Take in only moderate amounts of energy foods. Steam, boil, or broil foods. Avoid rich sauces, salad dressings and pastries or cakes with heavy icings.			
	b. Eat only the lean part of fish and meat. Avoid the fatty portion.			

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity																																																																																																				
16. Give an example of a one-day menu for the elderly	Sample menu for the elderly:	Food demonstration	Actual food samples of serving portions for an elderly man or woman																																																																																																					
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	Man		Woman				
	Age (yr)						
	50-69	70+	50-69	70+			
Amount							
	SNACK						
	Soda cracker (pc)	4	4	3	3		
	Pineapple juice (glass)	1	1	1	1		
	SUPPER						
	'Lumpia' (pc)	1/2	1/2	1/2	1/2		
	Fried fish (pc, small)	1	1	1	1		
	Rice (c)	1 3/4	1	1 1/2	1		
	Banana (pc)	1	1	1	1		

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MODULE V - COMMON NUTRITIONAL DISORDERS AND ILLNESSES

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
At the end of the session the BHW must be able to discuss the following:				
A. Protein-energy malnutrition (PEM):	<i>What is PEM?</i>			
1. Explain what PEM is.	PEM is a condition that occurs when there is not enough protein and energy in the diet for a long time. It is very common among children under 5 years of age from families who are unable to provide proper nutrition. The first sign of all forms of PEM is growth failure. Weeks or months before a child looks like a case of malnutrition, he will have stopped growing. Weighing a child regularly, plotting the weight on a growth chart and noting the direction of the growth curve are the most important steps in recognizing early malnutrition.	Show flip chart and build discussion on this:	Flip chart on PEM:	
2. Recognize the main types of PEM	<i>What are the two types of severe PEM?</i> 1. Marasmus. Comes from a Greek word meaning 'wasting'. It is an outcome of severe calorie deficiency or total lack of food.	Participants enumerate the signs of marasmus as they look at picture.	Picture of a marasmic child	Role playing. BHW teaches mother to recognize signs of PEM in her children.

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
	<p>Signs of marasmus:</p> <ul style="list-style-type: none"> a. The body is thin and wasted. b. Loose folds of skin in the arms, legs and buttocks are seen. c. Child has an old man's face. d. The hair is usually normal in color but may be rather sparse. e. Prominent rib bones are found. f. The abdomen is distended partly because the abdominal muscles are weak. 			
	<p>2. Kwashiorkor. Caused by lack of protein, a body-building nutrient. It is also an African term which means the sickness of the older child when the next baby is born. This is the most serious form of PEM.</p> <p>Signs of kwashiorkor:</p> <ul style="list-style-type: none"> a. There is swelling of the body, especially forearms, hands, legs and feet. b. Child has low resistance to infection. c. The hair is thin, light-colored, and easy to pull out. d. Child is always unhappy and often irritable. e. The skin is often paler than 	<p>Participants identify signs of kwashiorkor as they look at picture.</p>	<p>Picture of a child with kwashiorkor</p>	

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
	<p>normal and has cracks over the legs.</p> <p>f. Lack of appetite.</p> <p>Kwashiorkor may occur at a later age than marasmus, often in children between 18 and 48 months old.</p> <p>Children with kwashiorkor may also have anemia and vitamin A deficiency that affects the eyes.</p>			
3. State the causes of PEM	<p><i>What are the causes of PEM?</i></p> <p>Malnutrition which includes PEM is caused by a number of complex and closely related factors which relate to the social and economic conditions of the family. These factors are poverty, ignorance, superstition, lack of food, inadequate hygiene (lack of cleanliness) and occurrence of infectious diseases in the area where the family lives.</p>	<p>Ask the questions and build discussion on this supplemented by flip chart.</p>	<p>Flip chart: Food sources of proteins and calories</p>	<p>Oral exam</p>
4. Explain the management of children suffering from PEM	<p><i>How do you manage children suffering from PEM?</i></p> <p>Modification and improvement of the diet is the method used. This is called NUTRITION REHABILITATION. Parents should know that a modified diet is essential for the child. They must also know what</p>			

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
	<p>foods a child should eat and the mother must be willing to make the best use of foods available to the family. Involving the family in the process of recovery is the best way to make them learn about malnutrition and prevent its recurrence.</p> <p>Instructions for the better feeding of malnourished children are as follows:</p> <ol style="list-style-type: none"> 1. Give more of the food you are already giving. This is particularly useful if the child is already eating a mixed diet of cereals and legumes and preferably some vegetables. 2. Increase the number of meals per day. A malnourished child eats six meals a day. 3. Add edible oil to the diet if possible. This can be a vegetable oil like coconut oil. This will increase the calorie content of the diet, make the food tasty and acceptable and as a result, the child will eat more. 4. Give more foods which come from animals such as eggs, milk, meat or fish. This will help a malnourished child recover rapidly. <p>Children need very special care because their lives are in great</p>			

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
	<p>danger. These children should be referred to the Rural Health Unit personnel but they will still need the support and help of the BHW.</p> <p><i>What is vitamin A deficiency or xerophthalmia?</i></p> <p>It is an eye disease which mainly affects children under the age of four whose dietary intake of vitamin A has been grossly inadequate for a long time. It is also known as the 'Disease of Darkness'.</p>			
B. Vitamin A deficiency	<i>What are the signs of vitamin A deficiency?</i>			
1. Explain the signs of vitamin A deficiency	<ol style="list-style-type: none"> 1. Poor growth. 2. Lowered resistance against infections. 3. Night blindness or 'matang manok' which is inability to see in the dark. 4. Slightly rough and dry eyeballs. Normal eyeballs are moist, smooth and shiny. 5. Foamy patches called Bitot's spots appear on the sides of the eyeballs. 	<p>Throw the questions. Show poster and build discussion on members' responses.</p>	<p>Poster showing individuals with vitamin A deficiency</p> <p>Oral exam</p>	

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
2. Enumerate ways of preventing vitamin A deficiency in young children	<p><i>How can vitamin A deficiency be prevented?</i></p> <ol style="list-style-type: none"> Breastfeeding infants for as long as there is milk plus adequate supplementary feedings. Feeding children with foods rich in vitamin A such as mashed green leafy and yellow vegetables. Examples are: 'gabi' leaves, 'malunggay', 'alugbati', 'kangkong', 'kamote' tops, squash, carrots, yellow fruits, 'tsesa', ripe papaya, ripe mango, and yellow corn. Feeding children foods fortified with vitamin A such as enriched margarine, evaporated milk fortified with vitamin A. Having the child immunized at the health center or the Rural Health Unit. Supplementation of vitamin A capsules as prescribed by the physician. 	Ask members how: vitamin A deficiency can be prevented.		
3. Recognize sources of vitamin A	<p><i>What are the sources of vitamin A?</i></p> <p>Vegetables: 'kangkong', squash leaves, 'kamote' tops, 'gabi' leaves, 'alugbati', 'ampalaya' leaves, carrots, squash, 'saluyot', 'malunggay'.</p>	Ask mothers to give examples of food sources of vitamin A.	Flip chart: Food sources of vitamin A	

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
	Fruits: Mango (ripe), 'tse-sa', papaya (ripe) yellow corn, melon			
	Animal sources: Evaporated milk (fortified with vitamin A), 'alimangco', 'alige', egg yolk, dried whole milk, liver, butter			
C. Anemia	<i>What is iron?</i>	Throw questions to class and build discussion on this		
1. Explain what iron is.	Iron is a substance (mineral) essential in the formation of red blood cells. Red blood cells provide the necessary nutrients for the body cells and tissues.			
	<i>Who needs iron?</i>			
	Everybody needs iron for daily maintenance, but most especially the vulnerable groups:			
	1. Pregnant women.			
	2. Adolescent and school children.			
	3. Infants and preschool children.			
2. Describe the signs of anemia	<i>What are the signs of anemia?</i>		Poster on anemia	
	1. Lack of concentration or attention.			
	2. Dizziness.			
	3. Weakness.			
	4. Paleness of conjunctiva, lips and palms.			
	5. Gastric pain (vague).			

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
3. State the causes of anemia	<p><i>What are the causes of anemia?</i></p> <p>Iron deficiency anemia is a condition that results from lack of iron in the body. The most common causes of nutritional anemia are:</p> <ol style="list-style-type: none"> 1. Dietary. Lack of iron-rich foods or eating foods in which the iron is poorly absorbed because of the lack of other nutrients. 2. Parasitic infections. Caused by hookworms, malarial parasites. 			
4. Give advice to anemic patients	<p><i>What do you do with anemic patients?</i></p> <ol style="list-style-type: none"> 1. For all cases with frank signs of anemia, refer to a doctor for further clinical evaluation. 2. For pregnant women, advise food and iron supplements. 3. Promote environmental sanitation and personal hygiene. 4. Improve general nutritional status of the community. 			
5. Explain ways of preventing anemia	<p><i>What are some ways of preventing anemia?</i></p> <ol style="list-style-type: none"> 1. A good diet during pregnancy is important for prevention of anemia. The diet should be rich in iron-containing foods. E.g., green leafy vegetables like 'kinchay', 'alugbati', 'saluyot', 'petsay', 	Assign a group to report on the prevention of anemia.	Flip chart: Food sources of iron	

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
	soybeans, lima beans, 'monggo' beans: (red), whole grain cereals like brown rice (pinaros); enriched bread, crude dark sugar, dried 'dilis', 'tulingan', 'alamang', sea- weeds, 'tahong', liver, heart, kidney, pork, beef, chicken.			
	2. Premature babies have inadequate iron stores and should be given small doses of iron in the first 3 months of life.			
	3. Aside from breastmilk, infants should have a mixed diet contain- ing iron-rich foods from about 6 months of age.			
	4. Hookworm infestation can be prevented by improved hygiene, and wearing some form of foot- wear.			
	5. In malaria-infested areas, give anti-malarial tablets to prevent malarial infections.			
D. Goiter	What is goiter?	Invite members	Poster showing	
1. Describe what goiter is	It is an enlargement of the thyroid gland found at the front of the neck. When the iodine supply is low, the gland increases in size in order to maintain its normal func- tions.	to present their ideas on goiter and build dis- cussion on this:	goitrous patients:	

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
2. Enumerate the signs of simple goiter	<p><i>What are the signs of simple goiter?</i></p> <ol style="list-style-type: none"> 1. Enlargement on the front of the neck. 2. Feeling of difficulty in swallowing. <p>If developed during pregnancy, the child may become a deaf-mute and be mentally and physically retarded.</p> <p><i>Who may develop goiter?</i></p> <p>A person whose diet is deficient in iodine may develop goiter. Others who are likely to develop goiter will include pregnant and lactating women as well as adolescent boys and girls. This is due to the several body changes that occur during these periods which make the thyroid gland very active.</p>			
3. State the causes of goiter	<p><i>What are the causes of goiter?</i></p> <ol style="list-style-type: none"> 1. Presence of infections which may bring about poor absorption of iodine in the body. 2. Certain conditions like pregnancy, lactation, and puberty wherein there is an increased activity of the thyroid gland. 			

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
4. Give advice on the prevention of goiter	How can we prevent goiter? Daily intake of foods rich in iodine. These are seafoods like oysters, seaweeds, shrimps, 'tahong', crabs, 'kukhol', 'halaan', dried 'dilis', 'alamang', 'tanigi', 'pugita' and vegetables like 'gabi berde', 'kangkong', 'sayote'.	Assign a group to report on the prevention of goiter.	Flip chart: Food sources of iodine.	Let somebody summarize the lesson. Encourage the group to ask questions or you may ask questions yourself.
5. Give advice to goitrous patients	What do you do with goitrous patients? Take or refer them to a health center or hospital for further diagnosis and treatment.			Nutrition game on the different food sources of: a. Proteins b. Calories c. Vitamin A d. Iron e. Iodine
E. Common cold	What do you do with patients who have common colds?	Ask mothers their common nutrition practices for the common cold.	Leaflet: MOH. 1980. What you should know about common colds.	Role playing about sensible treatment of the common cold
1. Give practical nutrition advice for the common cold	1. Let patient take more fluids (water, soup, milk, fruit juices). For babies, drinking water should be boiled first. 2. Feed patients with foods rich in protein, calories, vitamins, and minerals such as the following: a. Good sources of calories - rice, corn, sweet potato, bananas. b. Good sources of proteins - skimmed milk, eggs, fish, meat, diced legumes.			

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
	c. Good sources of vitamins and minerals - dark green leafy vegetables, yellow vegetables, and fruits.			
	3. Let the patient take plenty of fruits rich in vitamin C such as papaya, pineapple, 'guyabano', guava, 'dalanghita', mango, melon, etc.			
	4. If the cold persists for a number of days or the fever (with a temperature of 38°C and above) lasts for more than four days, refer to the nearest Health Center or doctor.			
F. Diarrhea	<i>Diarrhea</i>			
1. State causes of diarrhea	A person has diarrhea if he passes loose or watery stools two or more times in a day.	Invite audience remarks. Reinforce discussion with flip chart.	Flip chart on the role of environmental sanitation as a cause of diarrhea	
	<i>What causes diarrhea?</i>			
	The most common causes of diarrhea are the following:			
	1. Infections due to viruses (intestinal flu), bacteria or amoeba.			
	2. Infections due to parasites.			
	3. Food poisoning (spoiled food).			
	4. Allergic reactions to some foods (like seafoods, cow's milk).			

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
2. Explain why diarrhea needs immediate attention	<p><i>Why does diarrhea need immediate attention?</i></p> <p>When a child has diarrhea, he has loose watery stools which lead to the loss of a large amount of body fluids. This results in dehydration, which if not prevented or treated as early as possible, may lead to death within an hour or two.</p>			
3. Recognize signs of dehydration	<p><i>What are the signs of dehydration?</i></p> <p>Signs of dehydration:</p> <ol style="list-style-type: none"> 1. Sinking of the fontanelle in infants. 2. Sunken, tearless eyes. 3. Fast, weak pulse. 4. Dry mouth. 5. Loss of elasticity or stretch of the skin. 6. Sudden weight loss. 7. Little or no urine which may be dark yellow. 	Ask participants to identify signs of dehydration as they look at picture.	Flip chart with picture of a dehydrated child.	Oral exam
4. Explain how dehydration can be prevented	<p><i>How do you prevent dehydration?</i></p> <p>Dehydration can be prevented by giving an Oral Rehydration Solution (ORESOL) as soon as diarrhea starts. ORESOL is a solution which can replace the fluids and nutrients which the body loses during diarrhea.</p>			

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity										
	Do not stop giving milk to infants with diarrhea; continue breastfeeding or bottlefeeding.													
5. Explain the preparation of ORESOL	<p>How do you prepare ORESOL?</p> <p>Preparation of ORESOL:</p> <ol style="list-style-type: none"> Put 5 glasses of water in a pitcher. (Make sure that pitcher is clean and boil the water first if it is not safe to drink). Open the two compartments of the ORESOL pack. Pour all contents in the pitcher with water and stir. The ORESOL is now ready for drinking. 	<p>Demonstration on the preparation of ORESOL.</p> <p>Let each participant taste the prepared ORESOL solution.</p>	<p>ORESOL preparation materials: glass, water, pitcher, spoon, ORESOL pack</p>	<p>Return demonstration on the preparation of ORESOL</p>										
6. Explain the use of ORESOL	<p>How do you use ORESOL?</p> <p>ORESOL is given to a child in small amounts for a certain period of time according to his age:</p> <table border="1"> <thead> <tr> <th>Age (yr)</th> <th>Duration (hr)</th> </tr> </thead> <tbody> <tr> <td>less than 1</td> <td>24</td> </tr> <tr> <td>1 to less than 2</td> <td>12</td> </tr> <tr> <td>2 to less than 6</td> <td>6 - 8</td> </tr> <tr> <td>6 and above</td> <td>4</td> </tr> </tbody> </table> <p>If diarrhea persists, continue giving ORESOL.</p>	Age (yr)	Duration (hr)	less than 1	24	1 to less than 2	12	2 to less than 6	6 - 8	6 and above	4	<p>Throw questions to audience.</p>	<p>Famphlet: MOH. 'Mga dapat malaman tungkol sa pag-tatae' (What you should know about diarrhea).</p>	
Age (yr)	Duration (hr)													
less than 1	24													
1 to less than 2	12													
2 to less than 6	6 - 8													
6 and above	4													

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
7. Give additional information in the treatment of diarrhea	<p>What else should you know in the treatment of diarrhea?</p> <p>Additional information in the treatment of diarrhea:</p> <ol style="list-style-type: none"> 1. If periorbital edema occurs, stop giving ORESOL temporarily and continue giving other fluids like rice, water, fruit juices, etc. If edema subsides but there is still diarrhea resume giving ORESOL. 2. If the patient's condition does not improve in 24 hours or he develops fever, bring or refer him to the nearest health center or hospital. 3. The ORESOL solution is good for 24 hours only after which the left-over should be discarded. If it is still needed, a fresh solution should be made. 4. Vomiting is not a contraindication in giving ORESOL. If there is some vomiting, let the patient rest for 5-10 minutes, then resume giving ORESOL in small amounts at frequent intervals. 			<p>Divide the class into groups.</p> <p>Allow groups to summarize the lesson in the form of oral reports.</p>

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
8. Give steps on preparation of an alternative home remedy for diarrhea	<p><i>How do you prepare an alternative home remedy for diarrhea?</i></p> <p>If ORESOL is unavailable, a home remedy for diarrhea can be made out of salt, sugar and boiled water.</p> <p>Procedure:</p> <ol style="list-style-type: none"> 1. Boil water. 2. Fill a glass with the boiled water. 3. Add one pinch of salt. If it tastes saltier than tears, discard the solution and repeat the preparation. 4. Add one level teaspoon of sugar. 5. Let solution cool off before giving it. <p>Give one full glass of the mixture each time the child has diarrheic stools. Continue giving the mixture until the diarrhea stops.</p> <p>If salt and sugar are not available in the house and the need is immediate, give coconut water instead.</p>	<p>Demonstration on preparation of a home remedy for diarrhea.</p>	<p>Flip chart on the preparation of a home remedy for diarrhea</p> <p>Water, glass, teaspoon, salt, sugar</p>	<p>Return demonstration</p>

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MODULE VI - HOW TO ORGANIZE AND CONDUCT HOUSEHOLD TEACHING FOR NUTRITION

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
At the end of the session the BHW must be able to:				
1. Define household teaching for nutrition	<p><i>What is household teaching for nutrition?</i></p> <p>Household teaching for nutrition means equipping families in a barangay with the necessary knowledge, attitudes and skills in carrying out nutrition activities to attain better health and healthful living. This is done through discussions, demonstrations, and group dynamics.</p>	<p>Throw questions to audience.</p> <p>Use flip chart to help explanations.</p>	<p>Flip chart on household teaching</p>	<p>Case study: Given a particular situation, describe the organization of a household teaching for nutrition.</p>
2. Explain the objectives of a household teaching for nutrition:	<p><i>What are the objectives of a household teaching for nutrition?</i></p> <p>1. To help families in a 'purok' understand the principles of good nutrition as related to good health.</p> <p>2. To plan, prepare and serve nutritionally adequate meals for the family.</p> <p>3. To identify malnourished individuals and to learn proper nutrition of vulnerable groups.</p>			

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
	4. To increase family productivity.			
3. Organize a household teaching for nutrition	<p><i>How do you organize a household teaching for nutrition?</i></p> <ol style="list-style-type: none"> 1. See the barangay captain and seek his involvement and support in all your activities. 2. Introduce yourself and the institution you are in. 3. Explain the objectives of the class. 4. Explain the benefits that the community will gain from the class. 5. Hold a meeting with the mothers or concerned individuals. Explain to them the purpose of the organization and its importance. 6. Organize a 'Mother's Club'. 7. Start the training or seminar. 	<p>Ask participants to share their experiences in organizing household teachings.</p>		
4. Recognize the importance of the use of appropriate Information, Education, and Communication (IEC) materials in the conduct of a household teaching for nutrition	<p><i>What are IEC materials?</i></p> <p>IEC materials are teaching tools in the form of posters, handouts, pictures, films, taped lectures, comics, etc. which help in the discussion or explanation of the topics in the household teaching for nutrition.</p>	<p>Lecture and discussion. Display IEC materials.</p>	<p>Samples of IEC materials from different agencies</p>	

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
	<p><i>What are the two classifications of IEC materials?</i></p> <p>The two classifications are:</p> <ol style="list-style-type: none"> 1. Teaching aids such as posters and flip charts. 2. Reading materials such as leaflets, pamphlets, and handouts. 			
5. Identify other uses of IEC materials besides their use in the nutrition class	<p><i>What are the other uses of IEC materials?</i></p> <ol style="list-style-type: none"> 1. To suggest ways and means of integrating and strengthening nutrition messages in the different activities of the community or agencies. 2. To serve as reference materials for future nutrition activities. 			
6. Describe the characteristics of good IEC materials	<p><i>What are the characteristics of good IEC materials?</i></p> <ol style="list-style-type: none"> 1. Simple 2. Easy to understand 3. Always available 	<p>Show sample materials and ask participants to identify the good and bad features.</p> <p>Workshop: Participants are asked to prepare IEC materials.</p>	<p>Same samples shown earlier</p>	<p>Divide class into groups to criticize materials prepared by participants.</p>

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MODULE VII - FAMILY PRODUCTIVITY

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
At the end of the session, the BHW must be able to:				
1. Explain the importance of family productivity	<p><i>What is the importance of family productivity?</i></p> <p>Family productivity increases the capabilities of earning additional income.</p> <p><i>What are some ways of increasing family productivity?</i></p> <ol style="list-style-type: none"> 1. Backyard gardening 2. Piggery 3. Poultry or duck raising 4. Tilapia raising 5. Handicrafts 	<p>Throw questions to audience.</p>		
2. Teach skills on a case-to-case basis of increasing family productivity through:	<p><i>What are some methods of increasing family productivity relevant to your community situation and needs?</i></p> <p>a. Backyard gardening</p> <ol style="list-style-type: none"> 1. Use any available piece of land. Even flower pots, cans, and plastic bags with soil can be used for planting. 2. Crops should be selected according to the local accep- 	<p>Divide the class into groups to discuss how to implement or adopt the different types of activities in their barangays.</p>	<p>Poster: Family Productivity</p>	<p>Role playing. A barangay meeting is held to discuss methods of increasing family productivity.</p>
a. Backyard gardening				
b. Piggery				
c. Poultry or duck raising				

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Materials	Evaluation Activity
d. Tilapia raising e. Handicrafts	<p>tability, nutritional value and availability of seeds.</p> <p>3. The garden soil must be cultivated deeply. Cultivate at least two times to break the hard layer.</p> <p>4. The soil must be harrowed twice to ensure an even land surface for planting.</p> <p>5. For variety and for nutritious diets for families, one can plant the following groups of vegetables throughout the year in the backyard:</p> <p>a. Calorie or energy-rich foods Corn, sweet potato, cassava and 'gabi'</p> <p>b. Protein-rich foods Bush 'sitac', 'monggo', 'patani', and peanuts</p> <p>c. Vitamin C-rich foods 'Malunggay', 'gabi', sweet potato, 'alugbati', 'kangsong', 'petsay', 'mustasa', 'kalabasa', tomato or 'saluyot' and papaya</p> <p>b. Piggery</p> <p>1. Choose a piece of land that easily drains. Construct a</p>	<p>Ask participants to report about their experiences in piggery,</p>		

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
	blind drainage.			
	2. A good water supply is important in order to keep the pen clean.	poultry and duck: raising, tilapia: raising, and handicrafts.		
	3. Choose pigs of native breed, if possible.	Build discussion: on reports.		
	4. Feed pigs with fresh leftovers from the kitchen or give them molasses, corn bran, rice bran, and copra.			
	5. The pen should be 3 meters sq for every 2 rows.			
	<u>c. Poultry</u>			
	1. Select a dry place.			
	2. Build a house 1 1/2 meters wide by 3 meters high for a flock of 10 hens or less.		Pamphlet: Tech. Resource Center (TRC). 1981. Mag-alaga ng leyer (Poultry raising).	
	3. Fit the front with poultry wire netting or bamboo slots.			
	4. Drinking trough should be made of bamboo joints or open vessels.			
	5. The fence should be 6 feet high so as to keep in chickens which can jump as high as 5 feet.			
	Feed chickens with left-overs like rice, bread, 'binatog', 'sapal', meat trimmings, gills, banana and papaya peelings, 'petsay', 'kangkong' and 'kamote' leaves, heads and shells of shrimps, clams, and oysters.			

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
	<u>Duck raising</u>			
	1. Select a shady place.		Pamphlet: TRC.	
	2. The pen should be made of bamboo and nipa.		1983. 'Mag-alaga ng bibi' (Duck raising).	
	3. The fence should be facing the river or drainage.			
	4. Two to three - day old ducklings must have a space of at least 2.5 sq meters. One-week old ducklings must have at least 2 sq meters.			
	5. Ducks must be housed in groups according to age.			
	6. Feed ducks with boiled rice, tiny fresh water snails, boiled 'palay' and feeds with protein, vitamins and mineral supplements.			
	d. Tilapia raising			
	1. A fishpen must be of sturdy materials.		Pamphlet: TRC.	
	2. It must be fixed in a bamboo pole and submerged in a river or bay.		1981. 'Mag-alaga ng tilapya' (Tilapia raising)	
	3. The number of fingerlings to be raised will depend on the size of the fishpen constructed.			
	4. Feed tilapia with rice bran and fishmeal, apart from the			

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
	feeds obtained in the river.			
	5. Tilapia may be harvested after 2 months.			
	6. A fishpen can also be built behind the house.			
	e. Handicrafts		Samples of raw materials	
	1. Contact the office of the National Cottage Industries Development Authority for the training of families.			
	2. An initial capital or budget for the project should be made available. (This is acquired through solicitation or through the municipal fund).			
	3. The basic equipment must be ready before the start of the project.			
	4. Work closely with other sectors concerned such as the Bureau of Agricultural Extension (BAEX) and Ministry of Social Services and Development (MSSD).			

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
:	<p data-bbox="523 319 1087 380"><i>What are the sources of capital for increasing family productivity?</i></p> <ol data-bbox="523 400 1087 1132" style="list-style-type: none"> <li data-bbox="523 400 1087 561">1. Commercial Banks. Anybody who has a share of 60% in any coöperative and is a Filipino citizen can avail of the service of the bank although he/she must have a collateral of some kind. <li data-bbox="523 561 1087 1132">2. MSSD. The Self-Employment Assistance project rendered by the MSSD helps the following to start small livelihood projects: <ul data-bbox="566 682 1087 1132" style="list-style-type: none"> <li data-bbox="566 682 1087 810">Unemployed and underemployed heads of families, other needy adults, out-of-school youths, the disabled, and the low-income group. <li data-bbox="566 830 1087 1038">The service involves the extension of no-collateral no-interest, small capital assistance for income generating projects. The service is tied up with the National Livelihood Program or the Kilusang Kabuhayan at Kaunlaran (KKK). <li data-bbox="566 1059 1087 1132">Net amounts of P300-P500 can be loaned from the MSSD and P3,000 from the KKK. 	Discussion supported by handouts	<p data-bbox="1421 340 1687 387">Pamphlets: TRC. 1983.</p> <ul data-bbox="1421 407 1687 696" style="list-style-type: none"> <li data-bbox="1421 407 1687 508">- 'Kurtina at dormat' (Curtains and doormats). <li data-bbox="1421 528 1687 575">- 'Dasura' (Garbage). <li data-bbox="1421 595 1687 696">- 'Mga produkto mula sa niyog' (Coconut products). 	Written exercise on sources of capital

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity
3. List agencies involved in family productivity	<p><i>What agencies give technical assistance regarding seedlings and handicrafts?</i></p> <ol style="list-style-type: none"> 1. Bureau of Plant Industry. Procures, produces and distributes vegetable seeds and other materials. 2. Green Revolution Command Centers. Produce and distribute vegetable seeds and other materials. 3. Metro Bank. Distributes free seeds to its depositors in its 51 branches. 4. Ministry of Education, Culture, and Sports. Has 35 school gardens as seed centers funded by USAID, CARE and National Food and Agricultural Council. 5. Bureau of Agricultural Extension. Has its Home Management Technician to teach handicrafts. 6. Bureau of Fisheries. Distributes fingerlings to families who are interested in fish raising. 	<p>Discussion supplemented by demonstration</p>	<p>Demonstration: Samples of seedlings (Bureau of Plant Industry)</p>	<p>Written exercise on family productivity assistance</p>
4. Explain the importance of herbs or medicinal plants	<p><i>Why are herbs or medicinal plants important?</i></p> <p>They are cheap and easy to use for different ailments.</p>	<p>Throw questions to group and supplement discussion with demonstration of plant samples</p>	<p>Samples of medicinal plants</p>	<p>Oral exercise. Let the members ask questions to be answered by others in the class.</p>

Learning Objective	What to Teach/Learn	Learning Activity	Teaching-Learning Material	Evaluation Activity																
5. Enumerate some medicinal plants and their uses	<p><i>What are some kinds of medicinal plants and their uses?</i></p> <table border="1"> <thead> <tr> <th><u>Plant</u></th> <th><u>Use</u></th> </tr> </thead> <tbody> <tr> <td>'Lagundi' leaves</td> <td>Fever</td> </tr> <tr> <td>'Sampaguita' flowers</td> <td>Eye wash</td> </tr> <tr> <td>'Sorosoro'</td> <td>Wounds with pus</td> </tr> <tr> <td>'Gulasiran' leaves</td> <td>Nose bleeding</td> </tr> <tr> <td>'Bawang' and 'bayabas' tops</td> <td>Toothache</td> </tr> <tr> <td>'Oregano' leaves</td> <td>Cough</td> </tr> <tr> <td>'Ipil-ipil'</td> <td>Intestinal worms</td> </tr> </tbody> </table>	<u>Plant</u>	<u>Use</u>	'Lagundi' leaves	Fever	'Sampaguita' flowers	Eye wash	'Sorosoro'	Wounds with pus	'Gulasiran' leaves	Nose bleeding	'Bawang' and 'bayabas' tops	Toothache	'Oregano' leaves	Cough	'Ipil-ipil'	Intestinal worms			
<u>Plant</u>	<u>Use</u>																			
'Lagundi' leaves	Fever																			
'Sampaguita' flowers	Eye wash																			
'Sorosoro'	Wounds with pus																			
'Gulasiran' leaves	Nose bleeding																			
'Bawang' and 'bayabas' tops	Toothache																			
'Oregano' leaves	Cough																			
'Ipil-ipil'	Intestinal worms																			
6. Give pointers on the preparation and use of medicinal plants	<p><i>What are some tips on preparation and use of medicinal plants?</i></p> <ol style="list-style-type: none"> 1. Use the plant according to the dosage and directions recommended. 2. Use only one kind at a time for each ailment. 3. Discontinue the use of the plant if there are untoward reactions or side effects. 4. If there is no sign of improvement after 2-3 administrations of the plant, consult a physician. 	Demonstration on the preparation of a medicinal herb concoction: SLK (Sampalok, luya, kalamansi)																		

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- Nutrition Center of the Philippines. 1975. Philippine Nutrition Program. 1975-1976. 48 p. Makati.
- Bureau of Animal Industry. Duck raising. Pamphlet. n.p.
- Ministry of Health. 1983. Primary health care household teaching manual. 198 p. Manila.

EXHIBIT 1. LIST OF TAGALOG WORDS WITH ENGLISH TRANSLATIONS

78

Tagalog	-	English
Abitsueñas	-	Snap bean
Adobo	-	One of the most popular dishes in the Philippines. It is a preparation of pork or poultry or fish stewed with vinegar, garlic and fat
Alamang	-	Small shrimp
Alige	-	Crab fat
Alimango	-	Crab
Alugbati	-	Malabar night shade leaves
Ampalaya	-	Bitter melon
Anak Bukid	-	A club organized by the Bureau of Agricultural Extension
Bagoong	-	Fermented salted fish
Bawang	-	Garlic
Bayabas	-	Guava
Binatog	-	Hominy
Kalabasa	-	Squash
Palamansi	-	Philippine lemon
Kamote	-	Sweet potato
Kangkong	-	Swamp cabbage
Kareng-kareng or ayungin	-	Grunt silver (dried)
Kinchay	-	American celery
Kunol	-	Snail
Dalanghita	-	Orange
Dilis	-	Long jawed anchovy (dried)
Duhac	-	Black plum
Gabi	-	Taro
Gisado	-	Sauteed
Gula-iman	-	Purslane
Guyabano	-	Soursop
Halaan	-	Clam
Ilaw ng Buhay	-	An organization led by a religious congregation
Lagundi	-	Five-leaved chaste tree
Lugaw	-	Rice gruel
Lumpia	-	A combination of sauteed vegetables served with sauce (made of flour and soy sauce)
Luya	-	Ginger

Malunggay	-	Horse radish
Matang manok	-	Eye of the chicken
Monggo	-	Mungbeans
Mustasa	-	Mustard leaves
Nutripak	-	A high-protein food supplement that provides one-half of a child's daily requirements
Oregano	-	Mexican sage
Paksiw	-	A meat or fish that is prepared by stewing with vinegar, garlic and ginger with or without sugar
Palay	-	Rice with husk
Pandesal	-	Bread rolls made of wheat flour
Pangat	-	A fish dish that is prepared by simmering with vinegar until the liquid evaporates
Patani	-	Lima beans
Petsay	-	Chinese cabbage
Pugita	-	Octopus
Pusit	-	Squid
Purok or Peck	-	Zone
Sampaguita	-	Arabian jasmine
Sampalok	-	Tamarind
Saluyot	-	Jute
Sapal	-	Dessicated coconut
Sayote	-	Chayote fruit
Sinigang	-	A preparation of meat, fish or shrimps stewed with sour fruit, tomatoes, vegetables and water
Sitaw	-	Yard-long bean
Sorosoro	-	Common milk hedge
Tahong	-	Salt-water mussel
Tamban inihaw	-	Indian sardine (broiled)
Tanigi	-	Spanish mackerel
Tapa	-	Dried salted beef
Tulingan	-	Tuna

EXHIBIT 2. TABLE OF AGE IN MONTHS

Month of weighing: JANUARY

Month of birth	Year of birth							
	Present:							
	Year	1984	1983	1982	1981	1980	1979	1978
	1985							
1. January	0	12	24	36	48	60	72	
2. February		11	23	35	47	59	71	83
3. March		10	22	34	46	58	70	82
4. April		9	21	33	45	57	69	81
5. May		8	20	32	44	56	68	80
6. June		7	19	31	43	55	67	79
7. July		6	18	30	42	54	66	78
8. August		5	17	29	41	53	65	77
9. September		4	16	28	40	52	64	76
10. October		3	15	27	39	51	63	75
11. November		2	14	26	38	50	62	74
12. December		1	13	25	37	49	61	73

Month of weighing: FEBRUARY

Month of birth	Year of birth							
	Present:							
	Year	1984	1983	1982	1981	1980	1979	1978
	1985							
1. January	1	13	25	37	49	61	73	
2. February	0	12	24	36	48	60	72	
3. March		11	23	35	47	59	71	83
4. April		10	22	34	46	58	70	82
5. May		9	21	33	45	57	69	81
6. June		8	20	32	44	56	68	80
7. July		7	19	31	43	55	67	79
8. August		6	18	30	42	54	66	78
9. September		5	17	29	41	53	65	77
10. October		4	16	28	40	52	64	76
11. November		3	15	27	39	51	63	75
12. December		2	14	26	38	50	62	74

Month of weighing: MARCH

Month of birth	Year of birth							
	Present:							
	Year : 1985	1984	1983	1982	1981	1980	1979	1978
1. January	2	14	26	38	50	62	74	
2. February	1	13	25	37	49	61	73	
3. March	0	12	24	36	48	60	72	
4. April		11	23	35	47	59	71	83
5. May		10	22	34	46	58	70	82
6. June		9	21	33	45	57	69	81
7. July		8	20	32	44	56	68	80
8. August		7	19	31	43	55	67	79
9. September		6	18	30	42	54	66	78
10. October		5	17	29	41	53	65	77
11. November		4	16	28	40	52	64	76
12. December		3	15	27	39	51	63	75

Month of weighing: APRIL

Month of birth	Year of birth							
	Present:							
	Year : 1985	1984	1983	1982	1981	1980	1979	1978
1. January	3	15	27	39	51	63	75	
2. February	2	14	26	38	50	62	74	
3. March	1	13	25	37	49	61	73	
4. April	0	12	24	36	48	60	72	
5. May		11	23	35	47	59	71	83
6. June		10	22	34	46	58	70	82
7. July		9	21	33	45	57	69	81
8. August		8	20	32	44	56	68	80
9. September		7	19	31	43	55	67	79
10. October		6	18	30	42	54	66	78
11. November		5	17	29	41	53	65	77
12. December		4	16	28	40	52	64	76

Month of weighing: MAY

Month of birth	Year of birth							
	Present:							
	Year	1984	1983	1982	1981	1980	1979	1978
	1985							
1. January	4	16	25	40	52	64	76	
2. February	3	15	27	39	51	63	75	
3. March	2	14	26	38	50	62	74	
4. April	1	13	25	37	49	61	73	
5. May	0	12	24	36	48	60	72	
6. June		11	23	35	47	59	71	83
7. July		10	22	34	46	58	70	82
8. August		9	21	33	45	57	69	81
9. September		8	20	32	44	56	68	80
10. October		7	19	31	43	55	67	79
11. November		6	18	30	42	54	66	78
12. December		5	17	29	41	53	65	77

Source: Phil. Nutr. Prog. Operation Timbang.

EXHIBIT 3. COMPUTATION OF AGE IN MONTHS IF THERE IS NO TABLE

1. Record the date of weighing, date of birth, and actual weight.

Date of weighing - April 10, 1985
 Date of birth - September 15, 1983
 Actual weight - 8.10 kg

2. Subtract the date of birth (September 15, 1983) from date of weighing (April 10, 1985).

	<u>Year</u>	<u>Month</u>	<u>Day</u>
Date of weighing -	85	04	10
Date of birth -	83	09	15

3. Since "15" days cannot be subtracted from "10", we have to borrow one month (30 days) first and rewrite the figures as follows:

<u>Year</u>	<u>Month</u>	<u>Day</u>
85	03	10 + 30 = 40
83	09	15

4. Again, "09" months cannot be subtracted from "03" months. We have to borrow one year (12 months) from "85" and rewrite the figures as follows:

	<u>Year</u>	<u>Month</u>	<u>Day</u>
	84	3 + 12 = 15	40
	83	09	15
Answer	1	6	25

5. We have to convert this answer of 1 year, 6 months and 25 days into months. We do this by converting 1 year into months, thus:

$$1 \text{ year} \times 12 \text{ months} = 12 \text{ months}$$

Now we add to this the extra 6 months, thus:

$$12 \text{ months} + 6 \text{ months} = 18 \text{ --- age in months}$$

Disregard the "25" days. As a rule, disregard the extra days if they are less than 30. If the extra days equal 30, add 1 month to the total so that the 18 months will become 19.

Source: Phil. Nutr. Prog. 1975-1976.

EXHIBIT 4. WEIGHT TABLE FOR PRESCHOOLERS (0-45 MO)

Age as: of last: birth- date (mo.)	U n d e r w e i g h t						Normal Weight		Over Weight
	Severely (3rd degree)	Moderately (2nd degree)		Mildly (1st degree)					
	Below & up to	From	To	From	To	From	To	From & above	
0	2.0	2.1	2.6	2.7	3.1	3.2	3.7	3.6	
1	2.5	2.6	3.2	3.3	3.8	3.9	4.6	4.7	
2	3.0	3.1	3.6	3.7	4.5	4.6	5.5	5.6	
3	3.4	3.5	4.3	4.4	5.1	5.2	6.3	6.4	
4	3.8	3.9	4.7	4.8	5.7	5.8	6.9	7.0	
5	4.1	4.2	5.2	5.3	6.2	6.3	7.6	7.7	
6	4.4	4.5	5.6	5.7	6.7	6.8	8.1	8.2	
7	4.7	4.8	5.9	6.0	7.1	7.2	8.7	8.8	
8	5.0	5.1	6.3	6.4	7.6	7.7	9.2	9.3	
9	5.3	5.4	6.7	6.8	8.0	8.1	9.8	9.9	
10	5.5	5.6	6.9	7.0	8.3	8.4	10.1	10.2	
11	5.8	5.9	7.2	7.3	8.6	8.7	10.6	10.7	
12	5.9	6.0	7.4	7.5	8.9	9.0	10.9	11.0	
13	6.1	6.2	7.6	7.7	9.1	9.2	11.1	11.2	
14	6.2	6.3	7.7	7.8	9.3	9.4	11.3	11.4	
15	6.4	6.5	8.0	8.1	9.5	9.6	11.7	11.8	
16	6.5	6.6	8.1	8.2	9.7	9.8	11.9	12.0	
17	6.6	6.7	8.2	8.3	9.9	10.0	12.1	12.2	
18	6.7	6.8	8.4	8.5	10.1	10.2	12.3	12.4	
19	6.8	6.9	8.5	8.6	10.2	10.3	12.4	12.5	
20	6.9	7.0	8.6	8.7	10.4	10.5	12.7	12.8	
21	7.0	7.1	8.8	8.9	10.5	10.6	12.9	13.0	
22	7.1	7.2	8.9	9.0	10.7	10.8	13.1	13.2	
23	7.2	7.3	9.0	9.1	10.8	10.9	13.2	13.3	
24	7.3	7.4	9.2	9.3	11.0	11.1	13.4	13.5	
25	7.4	7.5	9.3	9.4	11.2	11.3	13.6	13.7	
26	7.5	7.6	9.4	9.5	11.2	11.3	13.8	13.9	
27	7.6	7.7	9.4	9.5	11.3	11.4	13.9	14.0	
28	7.7	7.8	9.6	9.7	11.5	11.6	14.1	14.2	
29	7.7	7.8	9.7	9.8	11.6	11.7	14.2	14.3	
30	7.9	8.0	9.8	9.9	11.8	11.9	14.4	14.5	
31	7.9	8.0	9.9	10.0	11.9	12.0	14.5	14.6	
32	8.0	8.1	10.0	10.1	12.0	12.1	14.6	14.7	
33	8.1	8.2	10.1	10.2	12.2	12.3	14.9	15.0	
34	8.2	8.3	10.2	10.3	12.2	12.3	15.0	15.1	
35	8.2	8.4	10.4	10.5	12.4	12.5	15.2	15.3	
36	8.3	8.4	10.4	10.5	12.5	12.6	15.3	15.4	
37	8.4	8.5	10.5	10.6	12.6	12.7	15.4	15.5	
38	8.5	8.6	10.6	10.7	12.8	12.9	15.6	15.7	
39	8.6	8.7	10.7	10.8	12.9	13.0	15.7	15.8	
40	8.6	8.7	10.8	10.9	13.0	13.1	15.8	15.9	
41	8.7	8.8	10.9	11.0	13.1	13.2	16.0	16.1	
42	8.8	8.9	11.0	11.1	13.2	13.3	16.2	16.3	
43	8.9	9.0	11.1	11.2	13.3	13.4	16.3	16.4	
44	8.9	9.0	11.2	11.3	13.4	13.5	16.4	16.5	
45	9.0	9.1	11.2	11.3	13.5	13.6	16.5	16.6	

Instructions:

Look for the child's age in months in the first column, then run your fingers horizontally until you find the column where the actual weight of the child falls. For example, a 5-month old child weighing 5.5 kg is mildly underweight.

WEIGHT TABLE FOR PRESCHOOLERS (46-83 MO)

85

Age as: of last birth- date (mo)	U n d e r w e i g h t						Normal Weight	Over Weight
	Severely (3rd degree)	Moderately (2nd degree)	Mildly (1st degree)					
	Below & up to	From	To	From	To	From	To	From & above
46	9.1	9.2	11.3	11.4	13.6	13.7	16.6	16.7
47	9.1	9.2	11.4	11.5	13.7	13.8	16.7	16.8
48	9.2	9.3	11.6	11.7	13.9	14.0	16.9	17.0
49	9.3	9.4	11.6	11.7	14.0	14.1	17.1	17.2
50	9.4	9.5	11.7	11.8	14.0	14.1	17.2	17.3
51	9.4	9.5	11.8	11.9	14.1	14.2	17.3	17.4
52	9.5	9.6	11.8	11.9	14.2	14.3	17.4	17.5
53	9.6	9.7	12.0	12.1	14.4	14.5	17.6	17.7
54	9.7	9.8	12.1	12.2	14.5	14.6	17.7	17.8
55	9.7	9.8	12.2	12.3	14.6	14.7	17.8	17.9
56	9.8	9.9	12.2	12.3	14.7	14.8	17.9	18.0
57	9.8	9.9	12.3	12.4	14.8	14.9	18.0	18.1
58	10.0	10.1	12.4	12.5	14.9	15.0	18.3	18.4
59	10.1	10.2	12.6	12.7	15.1	15.2	18.5	18.6
60	10.1	10.2	12.7	12.8	15.2	15.3	18.6	18.7
61	10.3	10.4	12.8	12.9	15.4	15.5	18.8	18.9
62	10.3	10.4	12.9	13.0	15.5	15.6	18.9	19.0
63	10.4	10.5	13.1	13.2	15.7	15.8	19.1	19.2
64	10.5	10.6	13.1	13.2	15.8	15.9	19.3	19.4
65	10.6	10.7	13.2	13.3	15.8	15.9	19.4	19.5
66	10.7	10.8	13.4	13.5	16.0	16.1	19.6	19.7
67	10.8	10.9	13.5	13.6	16.2	16.3	19.8	19.9
68	10.9	11.0	13.6	13.7	16.3	16.4	19.9	20.0
69	11.0	11.1	13.7	13.8	16.5	16.6	20.1	20.2
70	11.1	11.2	13.9	14.0	16.6	16.7	20.4	20.5
71	11.2	11.3	14.0	14.1	16.7	16.8	20.5	20.6
72	11.3	11.4	14.1	14.2	16.9	17.0	20.7	20.8
73	11.4	11.5	14.2	14.3	17.0	17.1	20.8	20.9
74	11.4	11.5	14.2	14.3	17.1	17.2	20.9	21.0
75	11.5	11.6	14.3	14.4	17.2	17.3	21.0	21.1
76	11.5	11.6	14.4	14.5	17.3	17.4	21.1	21.2
77	11.6	11.7	14.5	14.6	17.4	17.5	21.2	21.3
78	11.6	11.7	14.6	14.7	17.5	17.6	21.3	21.4
79	11.7	11.8	14.7	14.8	17.6	17.7	21.6	21.7
80	11.9	12.0	14.9	15.0	17.8	17.9	21.7	21.8
81	12.0	12.1	15.0	15.1	17.9	18.0	21.9	22.0
82	12.1	12.1	15.1	15.2	18.1	18.2	23.1	23.2
83	12.2	12.3	15.2	15.3	18.2	18.3	24.3	24.4

Instructions:

Look for the child's age in months in the first column, then run your fingers horizontally until you find the column where the actual weight of the child falls. For example, a 60-month old child weighing 13.2 kg is mildly underweight.

Source: National Nutrition Council. 1981. Philippine Nutrition Program Operation Timbang.

EXHIBIT 5. SAMPLE MENUS FOR PREGNANT AND LACTATING MOTHERS

86

	Pregnant	Lactating
	Amount	
BREAKFAST		
Toasted 'dilis' (c)	1/4	1/3
Soft-cooked egg (pc)	1	1
Coffee with milk		
Coffee (c)	1/2	1/2
Milk (T)	2	2
Brown sugar (t)	2	2
Rice (c)	1	1
Banana (pc, med)	1	1
MID-MORNING SNACK		
Fried yellow 'kamote' with brown sugar		
'Kamote' (pc, small)	1	1
Brown sugar (t)	2	2
LUNCH		
'Tahong' with 'malunggay' leaves		
Broth	As desired	As desired
Shelled 'tahong' (T)	2	2
'Malunggay' leaves (c)	1/4	1/2
'Tamban inihaw' with fresh tomato		
'Tamban' (pc, med)	2	2
Tomato (pc, med)	1	1
Rice (c)	2	2
Pineapple (sl)	1 1/2	1 1/2
MID-AFTERNOON SNACK		
Boiled peanuts (c)	1/2	1/2
SUPPER		
Pork 'sinigang'		
Broth	As desired	As desired
Pork (pc)*	1	1
'Kangkong' (c)	1/2	1/2
'Sitaw' (c)	3/4	3/4
Tamarind		
Tomatoes		
Rice (c)	2	2
Papaya (sl)	2	2
EVENING SNACK		
Whole milk with sugar		
Milk (c)	3/4	3/4
Sugar (t)	2	2

*1 pc = 3 cm cube

Source: FNRI. 1979. Subject information guide on food and nutrition.

EXHIBIT 6. SUPPLEMENTARY FEEDING FOR BREASTFED INFANTS¹

Age (mo)	Cereals ² ('lugaw', oatmeal, boiled rice)	Fruits ³ (banana, papaya, mango, avocado)	Vegetable, cooked ⁴ (preferably leafy green and yellow)	Egg ⁵ (hard-cooked)	Dried beans (monggo, peanuts)	Fish, liver, meat and poultry ⁶	Fat ⁷ (cooking-oil margarine)
4	5 T thin 'lugaw'	2 T scraped or mashed	1 T vegetable water in which green and yellow vegetables were cooked	-	-	-	-
5	8 T thick 'lugaw'	3 T mashed	1 T pureed	1/2 yolk	1 T strained	-	-
6	12 T thick 'lugaw'	4 T bite-size	2 T pureed	1 whole yolk	2 T pureed	1 T flaked fish or chicken, or finely ground meat	2 T
7	14 T thick 'lugaw'	5 T bite-size	3 T mashed	1 whole yolk	3 T mashed	1 T flaked fish or chicken, or ground meat	2 T
8	3/4 c soft rice	5 T bite-size	4 T mashed	1 whole yolk	3 T mashed	2 T flaked fish or chicken, or chopped meat	2 T
9	3/4 soft rice	5 T bite-size	4 T mashed	1 whole yolk	4 T mashed	2 T flaked fish or chicken or chopped meat	2 T
10	1 c rice	6 T bite-size	4 T chopped	1 whole egg	4 T mashed	3 T flaked fish or chicken, or chopped meat	2 T

Footnotes appear on page 88

Age (mo)	Cereals ¹ ('lugaw', oatmeal, boiled ribs)	Fruits ³ (banana, papaya, mango, avocado)	Vegetables, cooked ⁴ (preferably leafy green and yellow)	Egg ⁵ (hard-cooked)	Dried beans (munggo, peanuts)	Fish, liver, meat and poultry ⁶	Fat ⁷ (cooking-oil, margarina)
11	1 c rice	6 T bite-size	4 T chopped	1 whole egg	4 T mashed	4 T flaked fish or chicken, or thinly sliced meat	2 T
12	1 c rice	6 T bite-size	4 T chopped	1 whole egg	5 T whole	5 T flaked fish or chicken, or thinly sliced meat	2 T

Footnotes:

¹This table suggests the kinds and amounts of foods to supplement milk at specific ages starting at age 4 months when the baby shows readiness. Introduce new foods one at a time at least three days apart.

²See recipes for preparing different types of 'lugaw' and soft-cooked rice.

³Start with banana. Press with fork or spoon into a pulpy consistency. Give the other fruits (avocado last) as he grows older.

⁴Rub soft-cooked pulpy foods through a sieve to remove tough fibers for babies 4-6 months old.

⁵Egg yolk only should be given for additional iron. Egg white may cause allergy if given to too early; 1/2 piece chicken yolk is equivalent to 2 1/2 pieces quail's yolk.

⁶Powdered 'dilis' or mini-s' humps can also be given in place of flaked fish or ground meat starting at 6 months of age.

⁷Fat may be incorporated in either sauteed or fried dishes for the baby.

EXHIBIT 7. DAILY RECOMMENDED AMOUNTS OF FOOD FOR YOUR
PRESCHOOL CHILD

Food Group	Age (yr)	
	1 - 3	4 - 6
	Amount	
ENERGY:		
Rice and other cereals (c)*	2 1/3	3 1/2
Root crops (pc, small)	1	1
Sugar (for milk, fruit, juices) (t)	6	6
Fats and oils (t)	5	6
BODY-BUILDING:		
Milk, whole (c)	1	1
Fish, meat or poultry (serving)**	2/3	1
Eggs	1/2	1/2
Legumes, beans or nuts (c)	1/4	1/3
REGULATING:		
Greenleafy and yellow vegetables (c)	1/4	1/3
Vitamin C-rich foods Papaya, 'naranghita' or mango, etc.	3 3/4 T	3/4 serving***
Other fruits and vegetables (Banana or avocado or chico, etc. 'sitaw', eggplant, etc.)	2 T fruit and 2 T vegetable, cooked	1/2 serving fruit 1/4 c vegetable, cooked

*One cup cooked rice (160 g) - 5 pc 'pandesal' or about 15 g each
or 4 sl loaf bread or about 17 g each
or 1 1/8 c cooked cornmeal or about 230 g
or 1 c cooked kamote or 1 small pc or about 160 g

**One serving meat - Row lean meat: 60 g or about 4.0 cm cube
Cooked lean meat: 30 g or about 3.0 cm cube
or Raw dried beans: 60 g or about 1/3 c
Cooked beans: 300 g or about 1 1/2 c
or Med-sized fish: 2 pc about 16 cm long,
55-60 g each as purchased
or Med-sized egg: 2 pc or about 50 g each.

***One serving fruit - One med-sized fruit or one slice of a big fruit

Source: FNRI. 1983. Foods for the preschool child.