Complementary Feeding for Children Aged 6-23 Months

A RECIPE BOOK FOR MOTHERS AND CAREGIVERS
To reduce the effects of volatile food prices, the European Union has provided financial support to the Food and Agriculture Organization of the United Nations (FAO) to help address the food insecurity in Cambodia. The FAO / European Union Food Facility Project focuses on the sustainability of increased productivity, improved management practices and improves access to agricultural inputs and services and to improve dietary diversity and family feeding practices, starting with Infant and Young Child Feeding (IYCF). FAO has implemented the project in collaboration with the General Directorate of Agriculture of the Ministry of Agriculture, Forestry and Fisheries, with cooperation from Ministry of Women’s Affairs, Ministry of Water Resources and Meteorology, Fisheries Administration, their relevant provincial departments and local non-government organizations.

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The nutrition messages and recipes in this book were developed, field-tested and refined in nine provinces (Kampong Speu, Takeo, Prey Veng, Svay Rieng, Kampong Thom, Preah Vihear, Banteay Meanchey, Siem Reap and Otdar Meanchey) by teams of officers from the Ministry of Women’s Affairs, Ministry of Agriculture, Forestry and Fisheries, Ministry of Health, and the Food and Agriculture Organization of the United Nations (FAO).

This book was produced by FAO in collaboration with the Ministry of Agriculture, Forestry and Fisheries, the Ministry of Women’s Affairs and the Ministry of Health. National master trainers, provincial and district level staff from the three ministries were actively involved in nutrition training activities and facilitated the testing of nutrition recommendations and recipes in communities.

Our profound thanks go to the mothers and caregivers of children who generously shared their knowledge and experiences and actively participated in preparing and tasting the complementary foods. Our gratitude also goes to the local authorities in the nine provinces who facilitated introductions and supported the field work. Special thanks are due to the volunteers involved in the Trials of Improved Practices (TIPs) on Infant and Young Child Feeding, who helped to test this book and provided valuable comments and inputs.

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## ACKNOWLEDGEMENTS

### PHOTO
Photo 2, 3, 4, 6, 8, 9, 11, 12 (FAO/EU Food Facility Project)
Photo 1, 5, 7, 10, 13 (National Nutrition Program)

### FIGURE
Figure 1, 2, 7 (INVENT Cambodia)
Figure 3, 4, 5, 6 (UNICEF)
Figure 8, 9, 10, 11, 12, 15, 16, 17, 18, 19, 21, 22, 23, 24, 26, 27, 28, 29 (FAO/EU Food Facility Project)
Figure 13, 14, 20, 25 (National Nutrition Program)

### DIAGRAM
Diagram 1 (FAO/EU Food Facility Project)
INTRODUCTION

Purpose of the Booklet
Seven out of 10 children aged 6 months and over are fed plain rice porridge (borbor) with salt and sometimes a little sugar. Others receive plain rice with liquid part of soup. These foods fill the child's stomach but they do not provide enough energy and nutrients for good physical growth and mental development, often resulting in malnutrition. This recipe booklet gives guidance on how to prepare nutritious and safe complementary foods for young children.

Recipe Development
The Recipes in this booklet have been developed to meet the specific dietary needs of children aged 6 to 23 months, using foods available in different provinces of Cambodia. Some of the foods are grown on family farms and home gardens and others can be purchased from the local market. The recipes were field-tested with mothers and caregivers in a real home setting to ensure that the foods are available and affordable to most families.

Users of the Recipe Booklet
The recipe booklet is for mothers, grandmothers and other caregivers who feed small children.

Contents of the guide
This booklet is organized in 6 sections which provide information and guidance on:

- Good complementary feeding.
- Proper food and personal hygiene to prevent diarrhea.
- Appropriate food preparation methods and household measurements to ensure that children get enough energy and nutrients for growth and development.
- Complementary feeding guide and recipes for children of different age groups.
SECTION 1
What is Good Complementary Feeding?
The period of transition from exclusive breastfeeding to family foods, referred to as complementary feeding, covers a child from 6-23 months of age, and is a very vulnerable period. It is the time when malnutrition starts in many infants, contributing to the high prevalence of malnutrition in children under two years of age.

Malnutrition in young children can be prevented by feeding them enough nutritious and safe complementary foods.

Good complementary feeding means feeding your child enriched borbor every day and offer additional nutritious snacks between meals, for example mashed ripe fruit. You can prepare good enriched Borbor from a variety of local foods that are available in your home, from your garden or the local market.

The diagram shows a wide variety of foods from which you can choose to make enriched borbor:

- Rice, sweet potato or taro
- Fish, meat, liver, egg or beans (peanut, mungbean)
- Vegetables such as morning glory, ivy gourd leaves, star gooseberry leaves (ngub), amaranth leaves, pumpkin squash or leaves, moringa leaves (marom) etc.
- Add a little oil to enhance the taste of food and to increase its energy content.
**Section 1**
What is Good Complementary Feeding?

- Chose one food item from each group to make different types of enriched borbor.
- Vary your child’s diet every day.
- Your child will have more appetite, if you feed him/her different foods daily.
- He/she will eat more and grow well.

**Diagram 1**

**Remember!** Feed your child enough Borbor, and give different fruits every day. Your child will be strong, healthy and smart.

**Photo 3**
- Scooped ripe papaya
- Scooped ripe mango
SECTION 2
Guide on Food Safety and Personal Hygiene in Complementary Feeding
Practicing **good food safety and personal hygiene** is important for preparing safe and healthy complementary foods and feeding children. It helps to prevent child illnesses, especially diarrhea. Therefore wash hands with soap (or ash) and clean water.

**SECTION 2**

Guide on Food Safety and Personal Hygiene in Complementary Feeding

- Use clean utensils to prepare and serve food
- Select fresh or wholesome food
- Reheat left-over food until hot and steaming
Guide on Food Safety and Personal Hygiene in Complementary Feeding

Pour clean water on both hands

Rub soap on the palm and back part of the hands

Clean fingers and palms

Clean palms, fingernails and space between the fingers

Rinse both hands with clean water

Dry with clean towel. If you do not have a clean towel, simply shake water off your hands

Good hand washing practice

Figure 3 (UNICEF)
Section 2
Guide on Food Safety and Personal Hygiene in Complementary Feeding

Cover your water jar
Figure 4 (UNICEF)

Always drink safe water (From safe source or boiled)
Figure 5 (UNICEF)

Always cover food
Figure 6 (UNICEF)

Keep your home and surroundings clean
Figure 7
SECTION 3
Guide to Food Preparation and Household Measurements
SECTION 3

Guide to Food Preparation and Household Measurements

Food Preparation and Cooking Methods

- Wash fresh sweet potato or taro
- Peel sweet potato or taro
- Cut and chop tuber to dice shape
- Cut and chop tuber to dice shape
- Measure and add tuber to pot
- Mash the cooked tuber into paste when soft
- Clean fish by removing scale and gut
- Boil fish in pot
- Debone fish
- Mash fish with ladle or spoon
- Measure and add mashed fish to pot
- Wash egg
- Break egg
- Scramble egg
- Add well scrambled egg to pot

Figure 8
Food Preparation and Cooking Methods

Wash meat
Finely slice meat
Finely chop meat into mince
Measure and add meat to pot

Remove poor quality peanuts
Roast peanuts
Remove roasted peanut skins
Pound roasted peanuts
Measure and mix pounded peanuts with rice soup to make paste
Add peanut paste to pot

Wash Vegetables
Finely cut vegetable leaves
Finely chop vegetable leaves
Measure and add vegetable to pot

Figure 9
Remember! Household or local measurements used in this recipe booklet are bowls, tablespoons, teaspoons and the local tin.
## Uncooked Food Measurement Equivalent

<table>
<thead>
<tr>
<th>Uncooked Food</th>
<th>Measurement Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice</td>
<td>1 tin = 20 tablespoons = 1 bowl</td>
</tr>
<tr>
<td>Fish</td>
<td>1 bowl = 14 tablespoons</td>
</tr>
<tr>
<td>Meat</td>
<td>1 bowl = 14 tablespoons</td>
</tr>
<tr>
<td>Peanut</td>
<td>1 bowl = 14 tablespoons</td>
</tr>
</tbody>
</table>

Figure 11
<table>
<thead>
<tr>
<th>Uncooked Food</th>
<th>Measurement Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peanut</td>
<td>1 bowl = 8 tablespoons</td>
</tr>
</tbody>
</table>

Figure 12
SECTION 4
Complementary Feeding Guide and Recipes

For Children

6–8 MONTHS OLD
SECTION 4

Complementary feeding guide and recipes for children 6-8 months old

From 0-6 Months

Breastfeed only up to the age of 6 months

- Breast Milk is best
- Start breastfeeding within first hour of birth
- Breastfeed on demand
- Breastfeed at least 8 times a day, day and night
- Empty both breasts
- Look your child in the eyes when breastfeeding and respond positively to him/her

⚠️ Remember! Eat more to produce enough milk

1. Eat a little extra food at each meal
2. Eat snacks between the main meals
3. Drink a plenty of fluids (e.g. soups, juices)
At 6 Months

Introduce good complementary foods

- From 6 months, breast milk is no longer enough to support child growth
- Give your child enriched bborbor and introduce one new food at a time (rice, sweet potatoes, fish, eggs, vegetables, a little oil,...)

Feeding

- Start to give 2-3 tablespoons of enriched bborbor twice a day
- Food must be well cooked and soft but thick in consistency
- Continue breastfeeding on demand

Figure 13 (National Nutrition Program)
Children Aged 7-8 Months

Increase amount of enriched bborbor. Complementary food can be made using:

- Rice, sweet potato or taro
- Fish, meat, liver, egg or beans (peanut, mungbean)
- Vegetables such as morning glory, ivy gourd leaves, star gooseberry leaves (ngub), amaranth leaves, pumpkin squash or leaves, or moringa leaves (marom) etc.
- Add a little oil to increase the energy content and make the food tasty.

Feeding

- Increase feeding to 3 times per day, up to half a bowl (Chan Chang Koeh) at each meal.
- Continue breastfeeding at least 8 times per day, day and night!
Examples of complementary feeding recipes for children 6-8 months

**Rice with fish and morning glory borbol**

**Ingredients**
- Rice: 2 tablespoons
- Fish: 1 tablespoon
- Morning Glory: 1 tablespoon
- Oil: 1 teaspoon

**How to cook**

**Cooked food**
Half Bowl

**Figure 15**

**Sweet potato with peanuts and pumpkin leaves borbol**

**Ingredients**
- Sweet Potato: Half Bowl
- Peanut: 1 tablespoon
- Pumpkin Leaves: 1 tablespoon

**How to cook**

**Cooked food**
Half Bowl

**Figure 16**
Section 4
Complementary Feeding Guide and Recipes for Children 6-8 Months Old

1. Complementary Feeding Recipes for Children Aged 6-8 months: Using Rice

What to select and cook for 1 meal

- Rice
- Fish
- Pumpkin
- Egg
- Ivy gourd
- Beans
- Morning glory
- Meat and liver
- Amaranth
- Cooking oil (1 tea spoon)

Child Feeding

- ½ bowl
- Clean water for cooking
- Feed child 2 times a day 2-3 table spoons per meal
- Continue breastfeeding
- Feeding child 3 times a day

Remember!
- Wash hands with soap using clean water before preparing food and feeding children
- Wash ingredients with clean water before cooking
- Clean bowls, spoons, plates in hot water and use dish washing liquid if available
- Provide boiled water to the child
- Where possible, choose good quality ingredients and products

Ingredients used in this poster are only examples, use similar, locally available foods

Remember! The more the variety, the more the child eats.

Figure 17
Remember! The more the variety, the more the child eats.

Ingredients used in this poster are only examples, use similar, locally available foods.

Remember!
- Wash hands with soap using clean water before preparing food and feeding children
- Wash ingredients with clean water before cooking
- Clean bowls, spoons, plates in hot water and use dish washing liquid if available
- Provide boiled water to the child
- Where possible, choose good quality ingredients and products

Child Feeding
- Feed child 2 times a day
- 2-3 table spoons per meal
- Continue breastfeeding
- Feeding child 3 times a day

What to select and cook for 1 meal

Sweet potato (Yellow Sweet Potato is better than White)
or
Taro
or
Egg
or
Beans
or
Meat and liver
or
Pumpkin
or
Ivy gourd
or
Morning glory
or
Amaranth
or
Fish
or
Cooking oil (1 tea spoon)

½ bowl

Clean water for cooking

Remember! The more the variety, the more the child eats.
What you will need for the preparation of more than one meal (6-8 months)

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>1 meal</th>
<th>2 meals</th>
<th>3 meals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Quantity</td>
<td>Water</td>
<td>Quantity</td>
</tr>
<tr>
<td>Rice</td>
<td>2 tablespoons</td>
<td>1 &amp; ½ Bowls</td>
<td>4 tablespoons</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sweet potato or Taro</td>
<td>½ Bowl</td>
<td>1 Bowl</td>
<td>1 Bowl</td>
</tr>
<tr>
<td>Fish or Meat or Peanut</td>
<td>1 tablespoon</td>
<td></td>
<td>2 tablespoons</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Egg</td>
<td>One Egg</td>
<td></td>
<td>One Egg</td>
</tr>
<tr>
<td>Vegetable</td>
<td>1 tablespoon (chopped)</td>
<td>2 tablespoons</td>
<td>2 tablespoons</td>
</tr>
<tr>
<td>Oil</td>
<td>1 teaspoon</td>
<td></td>
<td>½ teaspoon</td>
</tr>
</tbody>
</table>

Figure 19
SECTION 4
Complementary Feeding Guide and Recipes
For Children 9-11 MONTHS OLD

Photo 8
SECTION 5
Complementary Feeding Guide and Recipes for Children 9-11 Months Old

Children Aged 9-11 Months

As your child gets older, increase the quantity of enriched bborbor. Continue making complementary foods using:

- Rice, sweet potato or taro
- Fish, meat, liver, egg or beans (peanut, mungbean)
- Vegetables such as morning glory, ivy gourd leaves, star gooseberry leaves (ngub), amaranth leaves, pumpkin squash or leaves, or moringa leaves (marom) etc.
- Add a little oil to increase the energy content and make the food tasty.

Feeding

- Feed bborbor 3 times per day. Increase the amount of food to an almost full bowl (Chan Chang Koeh) at each meal.
- Give a snack each day, preferably fruits (banana, papaya, mango, jackfruit or milk fruit).

Yellow sweet potato, ripe papaya and ripe mango are good sources of vitamin A and can prevent night blindness.

Continue to breastfeed on demand, day and night.
Example of Complementary Feeding Recipe for Children 9-11 Months

Rice with egg and pumpkin borbor

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>How to cook</th>
<th>Cooked food</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice</td>
<td>+</td>
<td>Almost Full Bowl</td>
</tr>
<tr>
<td>Egg</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Pumpkin</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Oil</td>
<td>→</td>
<td></td>
</tr>
</tbody>
</table>

2 & ½ tablespoons 1 Egg 1 & ½ tablespoons ½ tablespoon

Figure 21
Section 5
Complementary Feeding Guide and Recipes for Children 9-11 Months Old

What to select and cook for 1 meal

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice</td>
<td>Almost full bowl</td>
</tr>
<tr>
<td>Fish</td>
<td>Clean water for cooking</td>
</tr>
<tr>
<td>Pumpkin</td>
<td>Cooking oil (½ table spoon)</td>
</tr>
<tr>
<td>Egg</td>
<td></td>
</tr>
<tr>
<td>Ivy gourd</td>
<td></td>
</tr>
<tr>
<td>Beans</td>
<td></td>
</tr>
<tr>
<td>Morning glory</td>
<td></td>
</tr>
<tr>
<td>Meat and liver</td>
<td></td>
</tr>
<tr>
<td>Amaranth</td>
<td></td>
</tr>
<tr>
<td>Beans</td>
<td></td>
</tr>
<tr>
<td>Meat and liver</td>
<td></td>
</tr>
</tbody>
</table>

Child Feeding

- Feed child 3 times a day and provide snack once a day
- Continue breastfeeding

Remember!
- Wash hands with soap using clean water before preparing food and feeding children
- Wash ingredients with clean water before cooking
- Clean bowls, spoons, plates in hot water and use dish washing liquid if available
- Provide boiled water to the child
- Where possible, choose good quality ingredients and products

Remember! The more the variety, the more the child eats.

Ingredients used in this poster are only examples, use similar, locally available foods

Figure 22
Section 5
Complementary Feeding Guide and Recipes for Children 9-11 Months Old

What to select and cook for 1 meal

- Sweet potato (Yellow Sweet Potatoes are better than White)
- Fish
- Pumpkin
- Cooking oil (½ table spoon)
- Almost full bowl
- Clean water for cooking
- Feed child 3 times a day and provide snack once a day
- Continue breastfeeding

Ingredients used in this poster are only examples, use similar, locally available foods

Remember! The more the variety, the more the child eats.

Remember!
- Wash hands with soap using clean water before preparing food and feeding children
- Wash ingredients with clean water before cooking
- Clean bowls, spoons, plates in hot water and use dish washing liquid if available
- Provide boiled water to the child
- Where possible, choose good quality ingredients and products

Figure 23
What you will need for the preparation of more than one meal (9-11 months)

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>1 meal</th>
<th>2 meal</th>
<th>3 meal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Quantity</td>
<td>Water</td>
<td>Quantity</td>
</tr>
<tr>
<td>Rice</td>
<td>2 &amp; ½ tablespoons</td>
<td>1 &amp; ½ Bowls</td>
<td>5 tablespoons</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sweet potato OR Taro</td>
<td>1 Bowl</td>
<td>1 &amp; ½ Bowls</td>
<td>2 Bowls</td>
</tr>
<tr>
<td>Fish OR Meat OR Peanut</td>
<td>1 &amp; ½ tablespoons</td>
<td></td>
<td>3 tablespoons</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Egg</td>
<td>1 Egg</td>
<td></td>
<td>1 Egg</td>
</tr>
<tr>
<td>Vegetable</td>
<td>1 &amp; ½ tablespoons</td>
<td></td>
<td>3 tablespoons</td>
</tr>
<tr>
<td>Oil</td>
<td>½ tablespoon</td>
<td></td>
<td>1 tablespoon</td>
</tr>
</tbody>
</table>

Figure 24
SECTION 6
Complementary Feeding Guide and Recipes

For Children 12 - 23 Months Old
Children Aged 12-23 Months

In addition to enriched borbor, your child can start eating part of the family meal from 12 months on. Continue preparing enriched Borbor from variety of food in the home and include:

- Rice, sweet potato or taro
- Fish, meat, liver, egg or beans (peanut, mungbean)
- Vegetables such as morning glory, ivy gourd leaves, star gooseberry leaves (ngub), amaranth, pumpkin, etc.
- Add a little oil to increase the energy content and make the food tasty.

Feeding

- Feed enriched borbor 3 times per day.
- Increase the amount of the food to a full bowl at each meal.
- Give snacks, especially fruits 2 times per day.

Continue breastfeeding on demand, day and night.
Example of Complementary Feeding Recipe for Children 12-23 Months

**Taro with meat and ivy gourd leaves borbor**

**Ingredients**
- Taro
- Meat
- Ivy Gourd Leaves
- Oil

**How to cook**
- 1 & ½ bowl
- 2 tablespoons
- 2 tablespoons
- ½ tablespoon

**Cooked food**
- Full Bowl

Figure 26
Section 6
Complementary Feeding Guide and Recipes for Children 12-23 Months Old

5
Complementary Feeding Recipes for Children Aged 12-23 months: Using Rice

What to select and cook for 1 meal

- Rice
- Fish
- Pumpkin
- Cooking oil (½ table spoon)
- Full bowl
- Clean water for cooking
- Egg
- Ivy gourd
- Morning glory
- Beans
- Meat and liver
- Amaranth

Child Feeding

- Feed child 3 times a day and provide snack once a day
- Continue breastfeeding

Remember!
- Wash hands with soap using clean water before preparing food and feeding children
- Wash ingredients with clean water before cooking
- Clean bowls, spoons, plates in hot water and use dish washing liquid if available
- Provide boiled water to the child
- Where possible, choose good quality ingredients and products

Ingredients used in this poster are only examples, use similar, locally available foods

Remember! The more the variety, the more the child eats.

Figure 27
Remember! The more the variety, the more the child eats.

Ingredients used in this poster are only examples, use similar, locally available foods.

Remember!
- Wash hands with soap using clean water before preparing food and feeding children.
- Wash ingredients with clean water before cooking.
- Clean bowls, spoons, plates in hot water and use dish washing liquid if available.
- Provide boiled water to the child.
- Where possible, choose good quality ingredients and products.

Figure 28

Complementary Feeding Guide and Recipes for Children Aged 12-23 months: Using Sweet Potato or Taro

What to select and cook for 1 meal

Child Feeding

Feed child 3 times a day and provide snack once a day.

Continue breastfeeding.

12 Months on.
<table>
<thead>
<tr>
<th>Ingredients</th>
<th>1 meal</th>
<th>2 meal</th>
<th>3 meal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Quantity</td>
<td>Water</td>
<td>Quantity</td>
</tr>
<tr>
<td>Rice OR sweet potato or Taro</td>
<td>3 &amp; ½ tablespoons</td>
<td>2 Bowls</td>
<td>7 tablespoons</td>
</tr>
<tr>
<td>Fish or Meat or Peanut OR Egg</td>
<td>1 &amp; ½ Bowls</td>
<td>2 Bowls</td>
<td>3 Bowls</td>
</tr>
<tr>
<td>Vegetable</td>
<td>2 tablespoons</td>
<td>4 tablespoons</td>
<td>2 tablespoons</td>
</tr>
<tr>
<td>Oil</td>
<td>½ tablespoon</td>
<td>1 tablespoon</td>
<td>1 tablespoon</td>
</tr>
</tbody>
</table>

Figure 29

What you will need for the preparation of more than one meal (12-23 months)