Complementary Feeding for Children Aged 6-23 Months

A RECIPE BOOK FOR MOTHERS AND CAREGIVERS

សហភាពអឺរ៉ុប កម្មវិធីស្បៀងអាហារ FAO European Union Food Facility Project







FAO/EU Food Facility Project

"Improve the Food Security of Farming Families Affected by Volatile Food Prices"

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.



The designations employed and the presentation of material in this information product do not imply the expression of any opinion whatsoever on the part of the Food and Agriculture Organization of the United Nations (FAO) concerning the legal or development status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. The mention of specific companies or products of manufacturers, whether or not these have been patented, does not imply that these have been endorsed or recommended by FAO in preference to others.

The views expressed in this information product are those of the author(s) and do not necessarily reflect the views of FAO.

All rights reserved. FAO encourages the reproduction and dissemination of material in this information product. Non-commercial uses will be authorized free of charge, upon request. Reproduction for resale or other commercial purposes, including educational purposes, may incur fees. Applications for permission to reproduce or disseminate FAO copyright materials, and all queries concerning rights and licences, should be addressed by e-mail to copyright@fao.org or to the Chief, Publishing Policy and Support Branch, Office of Knowledge Exchange, Research and Extension, FAO, Viale delle Terme di Caracalla, 00153 Rome, Italy.





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.

This book was produced under Project GCP/CMB/033/EC – "Improving Food Security of Farming Families Affected by Volatile Food Prices" and would not have been possible without the financial contribution from the European Union.

Contributors: Ellen Muehlhoff, Charity Dirorimwe, Shan Huang, Khin Meng Kheang, Ly Koung Ry Design and Layout: Nova Cambodia Photos: Khin Meng Kheang, Ly Koung Ry, Shan Huang



TABLE OF CONTENTS

ACKNOWLEDGEMENTS PAGE i

INTRODUCTION PAGE 1

SECTION 1

What is Good Complementary Feeding? PAGE **3**

SECTION 2

Guide on Food Safety and Personal Hygiene in Complementary Feeding

PAGE 7

SECTION 3

Guide to Food Preparation and Household Measurements

PAGE **11**

SECTION 4

Complementary Feeding Guide and Recipes for Children 6-8 Months Old PAGE **17**

SECTION 5

Complementary Feeding Guide and Recipes for Children 9 - 11 Months Old PAGE **25**

SECTION 6

Complementary Feeding Guide and Recipes for Children 12 - 23 Months Old PAGE **31**



TABLE OF CONTENTS

ACKNOWLEDGEMENTS

ΡΗΟΤΟ

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.

small children. 1 year Old 1

SECTION 1 What is Good Complementary Feeding?





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.

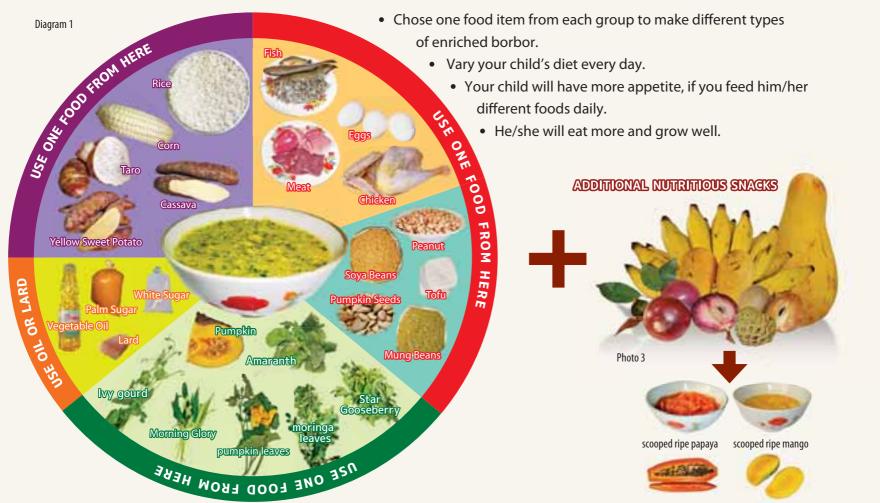
The diagram shows a wide variety of foods from which you can choose to make enriched borbor:

- 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.



4





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

Guide on Food Safety and Personal Hygiene in Complementary Feeding

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

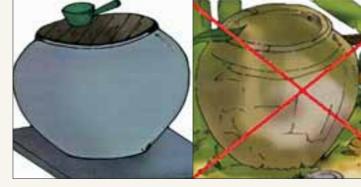


8

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

Guide to Food Preparation and Household Measurements

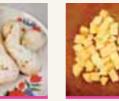


Guide to Food Preparation and Household Measurements



Wash fresh sweet potato or taro

Food Preparation and Cooking Methods



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



Peel sweet potato

or taro

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







12



Wash meat

Food Preparation and Cooking Methods



Finely chop meat into mince



Measure and add meat to pot



Remove poor quality peanuts



Finely slice meat

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



Section 3 Guide to Food Preparation and Household Measurements



Wash mango with clean water

Fruit Preparation



Slice mango



Lightly scoop mango with tablespoon



Mash mango



Wash banana with clean water



Half remove skin banana



Lightly scoop banana with tablespoon

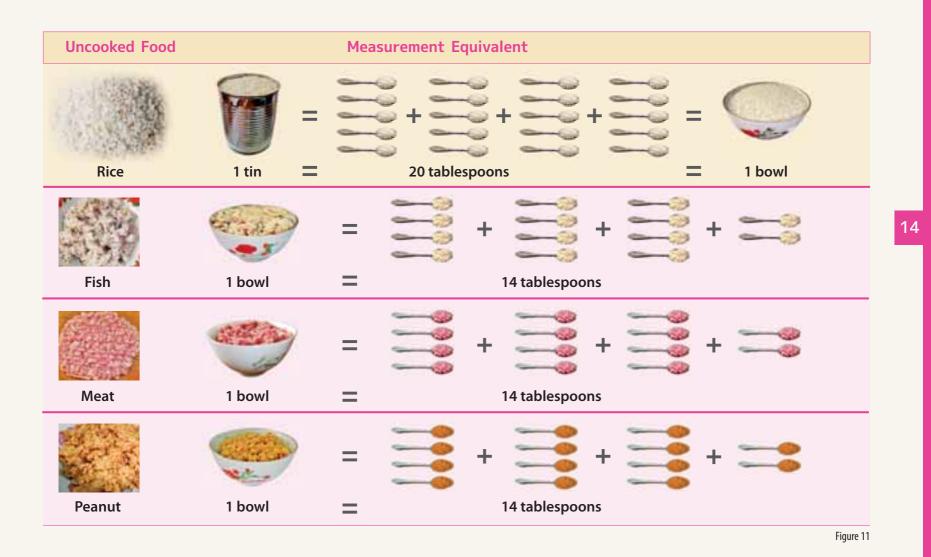


Mash banana

Figure 10

Remember! Household or local measurements used in this recipe booklet are bowls, tablespoons, teaspoons and the local tin.







Section 3 Guide to Food Preparation and Household Measurements

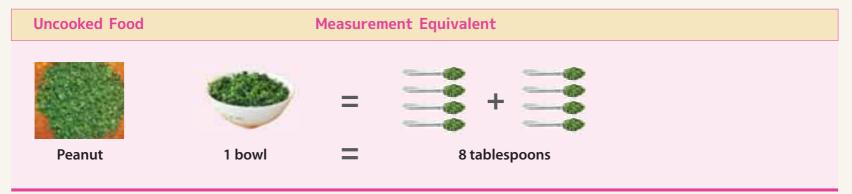


Figure 12

SECTION 4 Complementary Feeding Guide and Recipes

For Children 6-8 MONTHS OLD

SECTION 4 omplementary Feeding or Children 6-8 Months

Photo 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

- 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 borbor 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 borbor twice a day
- Food must be well cooked and soft but thick in consistency
- Continue breastfeeding on demand



6 months

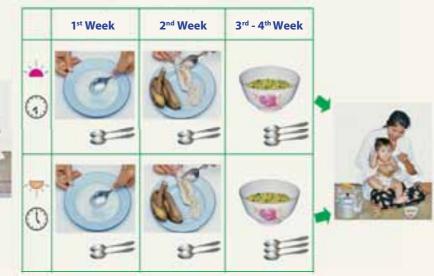


Figure 13 (National Nutrition Program)



Children Aged 7-8 Months

Increase amount of enriched borbor. 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.
- G 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 borbor



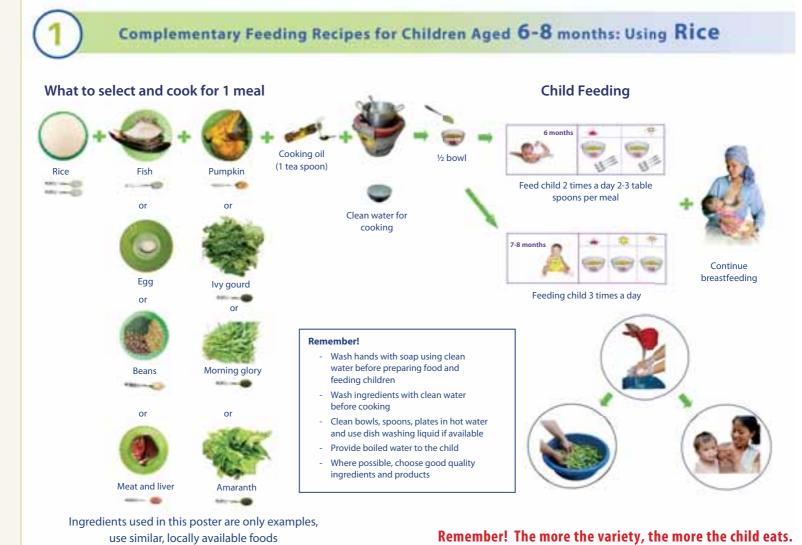
Sweet potato with peanuts and pumpkin leaves borbor





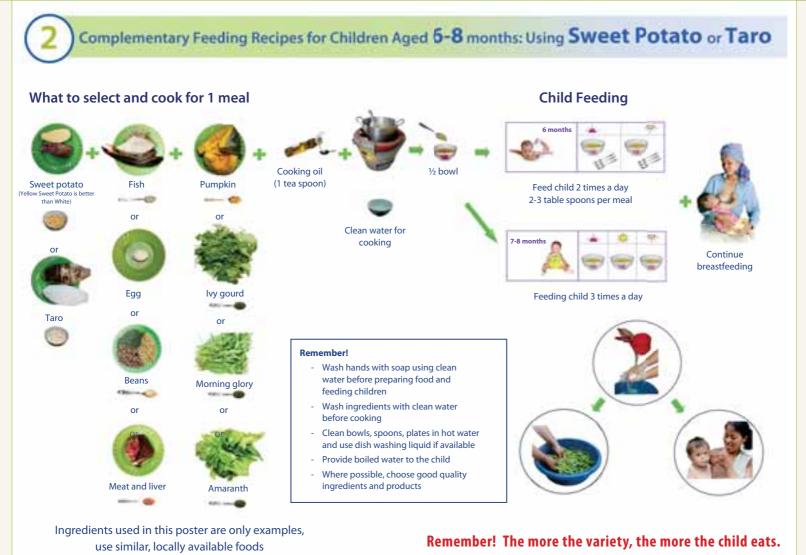
Section 4

Complementary Feeding Guide and Recipes for Children 6-8 Months Old



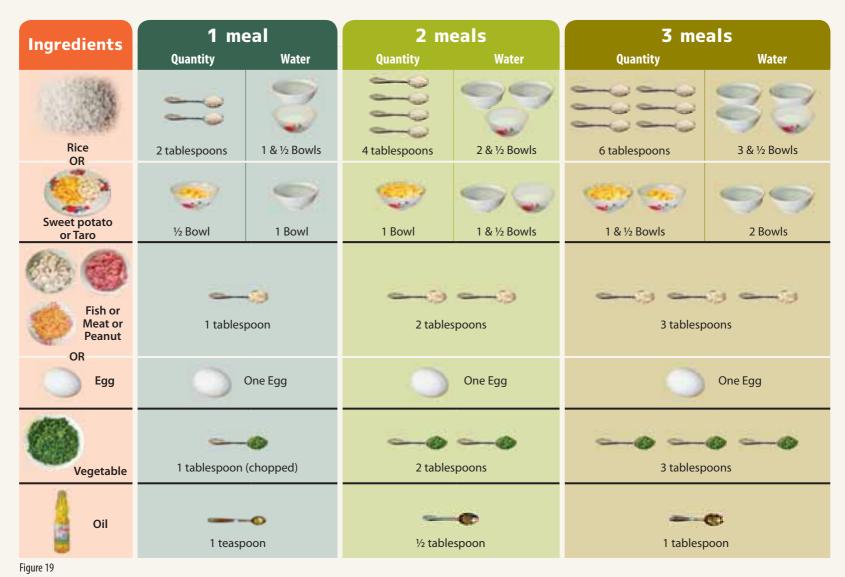








What you will need for the preparation of more than one meal (6-8 months)



SECTION 5 omplementary Feeding or Children 9-11 Months

SECTION 4

Complementary Feeding Guide and Recipes

For Children

9-11 MONTHS



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 borbor. 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.

Photo 9

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

Feeding

- Feed borbor 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).



Figure 20 (National Nutrition Program)



Continue to breastfeed on demand, day and night.



Example of Complementary Feeding Recipe for Children 9-11 Months

Rice with egg and pumpkin borbor





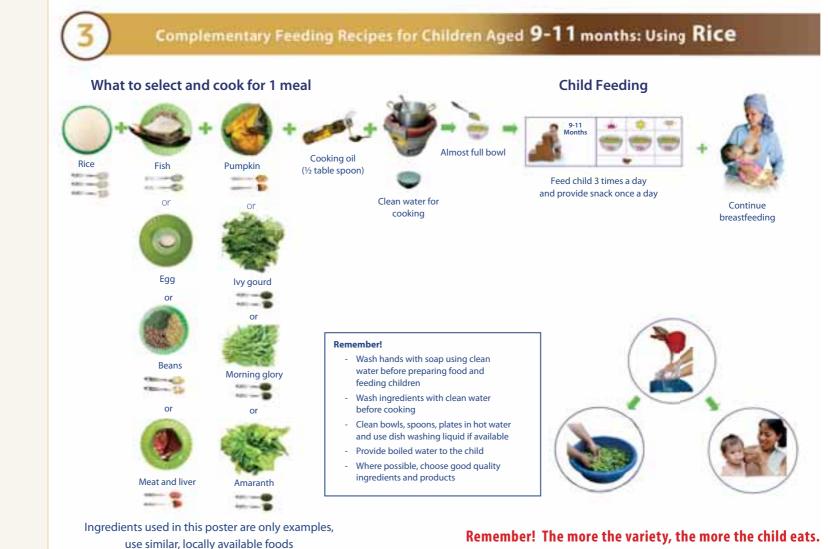
Figure 21



Section 5

Figure 22

Complementary Feeding Guide and Recipes for Children 9-11 Months Old





28

Complementary Feeding Guide and Recipes for Children 9-11 Months Old

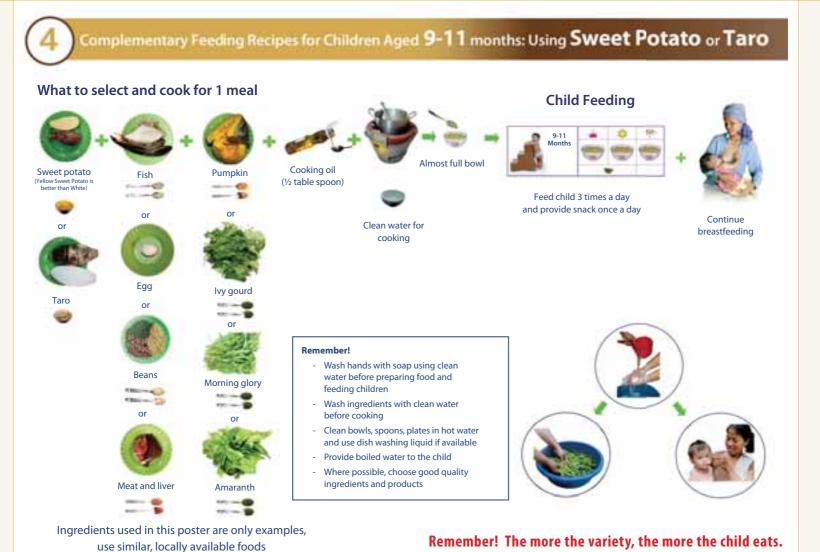
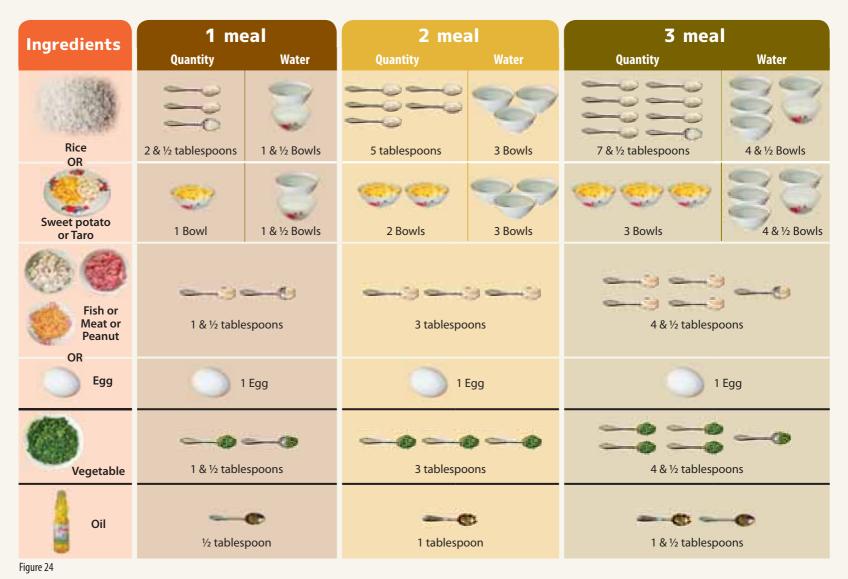


Figure 23



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



Complementary Feeding Guide and Recipes

For Children 12 - 23 MONTHS

> **SECTION 6** Complementary Feeding For Children 12-23 Month

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)
- Get Add a little oil to increase the energy content and make the food tasty.

Feeding

Photo 12

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



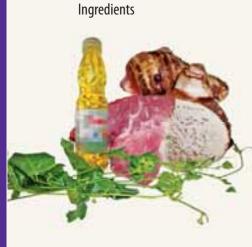


Continue breastfeeding on demand, day and night.



Example of Complementary Feeding Recipe for Children 12-23 Months

Taro with meat and ivy gourd leaves borbor

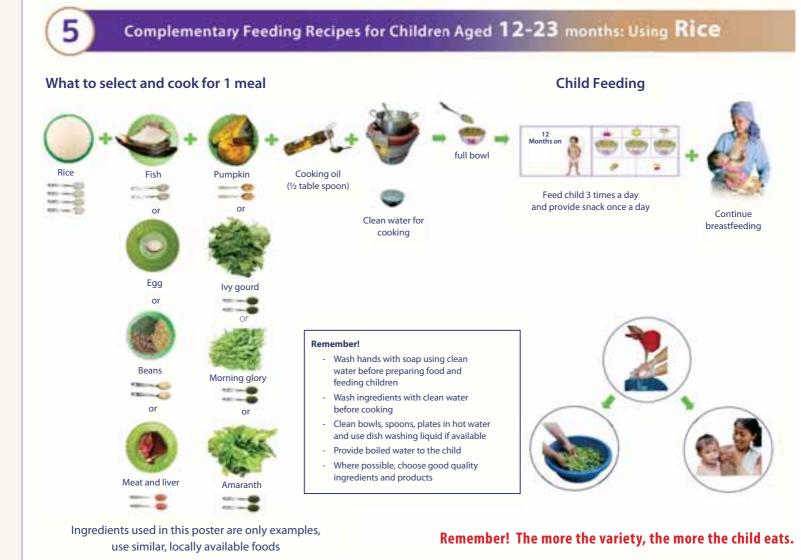






Section 6

Complementary Feeding Guide and Recipes for Children 12-23 Months Old

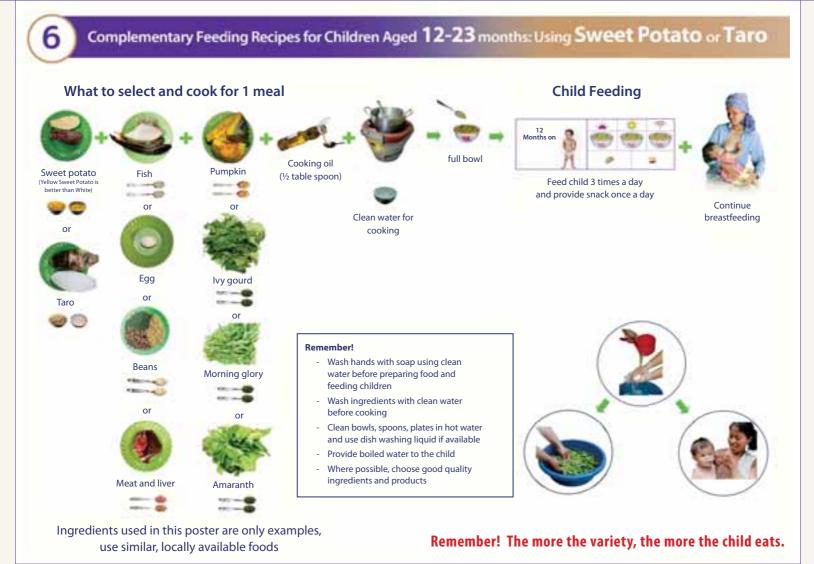




34

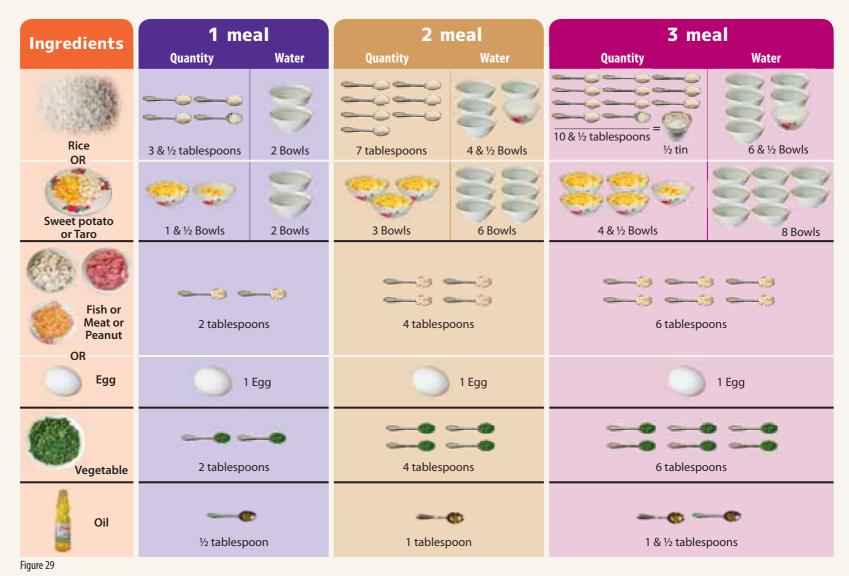
Section 6

Complementary Feeding Guide and Recipes for Children 12-23 Months Old





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



Food and Agriculture Organization of the United Nations (FAO) Project: GCP/CMB/033/EC

#5, Street 370, Boeng Kengkang 1, Khan Chamcar Morn Phnom Penh, Cambodia Tel: + 855 (0) 23 21 17 02/21 65 66 Fax: + 855 (0) 23 21 65 47 P.O.BOX: 53 Website: www.fao.org

Ministry of Women's Affairs Women and Health Department

Street 47, Sangkat Srah Chak, Khan Daun Penh Phnom Penh, Cambodia Tel: + 855 (0) 23 42 65 39 Fax: + 855 (0) 23 42 65 39 E-mail: mwa@online.com.kh