



**National Food and  
Nutrition Commission**



**Government of the  
Republic of Zambia**

# **Improved Complementary Foods Recipe Booklet**



**Family Foods for Breastfed  
Children in Zambia**

Technical collaboration and  
financial support by



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## **Family Foods for Breastfed Children in Zambia**

Lusaka, Zambia  
2007

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# Acknowledgements

The recipes in this booklet were developed and field-tested in Luapula Province. However, the general guiding principles and recommendations for young child feeding are applicable in Zambia as a whole. The recipes can easily be adapted for use in different parts of Zambia so as to fit in with local food and eating patterns and the seasonal availability of different foods.

The National Food and Nutrition Commission in Zambia would like to express our thanks to the people who contributed to preparing this booklet.

The booklet was written by Charity Dirorimwe, FAO Nutrition Education Consultant.

The recipes were developed and tested by an intersectoral team of health, agriculture and community development staff from Kawambwa, Mwense, Chienge and Nchelenge Districts in Luapula Province in collaboration with the Ministry of Health. Technical and financial support was provided by the Food and Agriculture Organization of the United Nations through Project GCP/ZAM/059/BEL – Luapula Food Security, Nutrition Action and Communication Project.

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We hope that the information in this booklet will help to improve the health and nutrition of young children in Zambia.



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# Introduction

This recipe booklet fills an important gap: it provides information and guidance on the selection and preparation of good, nutritious and safe complementary foods for feeding infants and young children, aged 6 to 24 months.

## Purpose and use of this booklet

This recipe booklet is the first of its kind available in Zambia. It is for everyone who genuinely cares about improving the nutrition and health of infants and young children. It is for community service providers such as community nutrition promoters, peer educators and other development agents from the health, community development and agricultural sectors working with families and community groups. The booklet is intended as a companion guide to the ***Growth Promotion Counselling Cards***, to be used primarily by community nutrition promoters.



## What is complementary feeding?

Complementary feeding means giving other foods in addition to breastmilk. Previously, the term “weaning” was used, but there was confusion about its meaning. Some people thought that weaning meant stopping breastfeeding; others thought that it meant the period during which the child changed from having only breastmilk to only family foods. “Weaning foods” could mean foods given when the child stopped breastfeeding or during the change from breastmilk to family foods.

Using the term “complementary foods” helps to avoid this confusion and ensures that the recommended feeding of children aged over six months is:

- continued breastfeeding; plus
- giving additional foods and fluids.

## **Infant and child feeding problems in Luapula Province**

The recipes were developed after carrying out a comprehensive assessment of infant and young child feeding practices in Luapula Province.

The assessment showed that infant and young child feeding was generally inadequate. Some of the common feeding problems that need to be addressed are:

- Most mothers do not breastfeed their children exclusively (meaning breastfeeding only) for the first 6 months of life. This means that a child does not get all the energy and nutrients needed for optimal child growth and development, as well as protection from infection.
- About half of the children are given water with salt during the first month of life. This practice may displace breastmilk, with the child receiving less of the protective factor in breastmilk. Also the water may be contaminated, so the risk of illness, especially diarrhoea, increases.
- About half of the children are given foods in addition to breastmilk from about three months onwards. Foods introduced consist of cassava or maize porridge with a little salt and/or sugar. Such foods often fill the child's stomach but provide less energy and nutrients than breastmilk, thus contributing to early growth faltering.
- When the child reaches 6 months of age, breastmilk alone is no longer adequate. Complementary foods given to children frequently do not provide the needed energy and nutrients.

The result is that many infants and young children under one year of age do not receive enough of the right kind of foods to grow and develop well, and they are often sick. In order to grow well

and remain healthy during this critical period of growth and development (6-24 months) children need to be fed well.



That means: breastmilk only up to 6 months; followed by breastmilk **plus** complementary foods from 6 months onwards.

## Development of the recipes

The recipes in this booklet have been developed to meet the specific needs of small children aged 6 to 24 months. The recipes are based on local Zambian foods and child feeding patterns. All foods used in the recipes are available in Luapula Province and affordable to most families; they can be grown in the family farm or home garden, or purchased in local markets.

As a unique feature, recipes take into account the seasonal availability of different foods during the dry and the rainy seasons. This is intended to help mothers make the best food choices for variety, nutritional value and cost at different times of the year. The recipes strive to follow the World Health Organization (WHO) guidelines on Complementary Feeding: family foods for breastfed children (WHO, 2000).

Mothers, caregivers and other community members from Chienge, Mwense, Nchelenge, and Kawambwa Districts actively participated in the development and testing of the recipes.



They generously shared their knowledge on local child feeding practices, participated in food preparation and tasting sessions with their children, provided feedback on their children's likes and dislikes and were willing to try the recipes at home.

The complementary food recipes presented in this booklet are the ones that were liked best by the children, mothers and/or caretakers who participated in the trials.



## Guiding principles for improved local porridges



Good complementary foods are rich in energy, protein, vitamins and minerals. They should be clean and safe, soft and easy for the child to eat and they should not be too spicy and salty. Ingredients for making them must be locally available and affordable and the foods must be easy to prepare.

The traditional cassava, maize or rice porridge recipes were therefore improved by:

- **Adding** pounded groundnuts, beans or dried fish flour when these ingredients are readily available in households. These foods add nutritional value, taste and energy. They are especially important for child growth and mental development.
- **Adding** shredded or pounded green leafy vegetables. Green leafy vegetables provide vitamins and minerals and protect the body from infection. They are important for staying healthy.
- **Adding** red palm oil or vegetable oil to increase the energy content of the porridge without increasing its bulk (volume). Only a small amount of oil (e.g. one teaspoon) is needed as it is full of energy. Vegetables and fatty foods (e.g. groundnuts, fatty fish or meat) are also good because they help the body to absorb more vitamins from others foods, especially vitamins A, D, and E. Red palm oil is especially good as it contains a lot of vitamin A, which helps the body to fight disease and keeps children's eyes healthy.

The complementary foods were further improved by reducing the salt content to a two-finger pinch of salt per feed and not more than 4 two-finger pinches of salt per day.



*Two-finger pinch of salt*