



# **Guiding principles for feeding infants and young children during emergencies**



**WORLD HEALTH ORGANIZATION  
GENEVA**

# **Guiding principles for feeding infants and young children during emergencies**



**WORLD HEALTH ORGANIZATION**  
**GENEVA**  
2004

## WHO Library Cataloguing-in-Publication Data

World Health Organization.

Guiding principles for feeding infants and young children during emergencies.

1. Infant nutrition 2. Child nutrition 3. Nutrition disorders - prevention and control 4. Nutritional requirements 5. Emergencies 6. Guidelines

I. Title.

ISBN 92 4 154606 9

(NLM classification: WS 115)

### © World Health Organization, 2004

All rights reserved. Publications of the World Health Organization can be obtained from Marketing and Dissemination, World Health Organization, 20 Avenue Appia, 1211 Geneva 27, Switzerland (tel: +41 22 791 2476; fax: +41 22 791 4857; email: [bookorders@who.int](mailto:bookorders@who.int)). Requests for permission to reproduce or translate WHO publications – whether for sale or for noncommercial distribution – should be addressed to Publications, at the above address (fax: +41 22 791 4806; email: [permissions@who.int](mailto:permissions@who.int)).

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by the World Health Organization in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

The World Health Organization does not warrant that the information contained in this publication is complete and correct and shall not be liable for any damages incurred as a result of its use.

The named authors alone are responsible for the views expressed in this publication.

Photo credits: WHO photolibrary, except cover background photo and page 13: WHO/NHD  
Designed by minimum graphics  
Printed in France

# Acknowledgements

The World Health Organization gratefully acknowledges the contributions of the many organizations and individuals that commented on a review version of these guiding principles. The text has benefited greatly from practical experience-based suggestions from many sources, including: Children's University Hospital, Belgium; Commonwealth Department of Health and Family Services, Australia; Food and Agriculture Organization of the United Nations (FAO); Institute of Child Health, London; International Association of Infant Food Manufacturers (IFM); International Baby Food Action Network (IBFAN), Penang; International Lactation Consultant Association (ILCA); Makerere University, Uganda; Royal Tropical Institute, Australia; Tanzania Food and Nutrition Centre; Unit for Child Health, Uppsala University, Sweden; United Nations Children's Fund (UNICEF); United Nations High Commission for Refugees (UNHCR); World Food Programme (WFP); World Vision International; Wellstart International.

WHO acknowledges with gratitude the substantial technical contribution and advice of Dr Ken Bailey (former WHO staff member) and Professor A. Ashworth-Hill, London School of Hygiene and Tropical Medicine. Special thanks are extended to Mr James Akaré, Dr Sultana Khanum, and Mrs Zita Weise Prinzo of the Department of Nutrition for Health and Development for their technical contribution, comments and advice throughout the preparation and finalization of the guidelines. Also acknowledged are contributions from the nutrition advisers in all WHO regional offices; and Dr G.A. Clugston, Dr Barbara Reed, Ms Henrietta Allen, Mrs Randa Saadeh, Ms Catherine Melin, and inputs from the Department of Child and Adolescent Health.

The financial support of the Government of the Netherlands towards the development and publication of these guidelines is gratefully acknowledged.

# Guiding principles for feeding infants and young children during emergencies

## Breastfeeding

### Principle 1

**Infants born into populations affected by emergencies should normally be exclusively breastfed from birth to 6 months of age.**

- 1.1 Every effort should be made to identify alternative ways to breastfeed infants whose biological mothers are unavailable.

### Principle 2

**The aim should be to create and sustain an environment that encourages frequent breastfeeding for children up to two years or beyond.**

## Breast-milk substitutes

### Principle 3

**The quantity, distribution and use of breast-milk substitutes at emergency sites should be strictly controlled.**

- 3.1 A nutritionally adequate breast-milk substitute should be available, and fed by cup, only to those infants who have to be fed on breast-milk substitutes.
- 3.2 Those responsible for feeding a breast-milk substitute should be adequately informed and equipped to ensure its safe preparation and use.
- 3.3 Feeding a breast-milk substitute to a minority of children should not interfere with protecting and promoting breastfeeding for the majority.
- 3.4 The use of infant-feeding bottles and artificial teats during emergencies should be actively discouraged.

## Complementary feeding

### Principle 4

**To sustain growth, development and health, infants from 6 months onwards and older children need hygienically prepared, and easy-to-eat and digest, foods that nutritionally complement breast milk.**

### Principle 5

**Caregivers need secure uninterrupted access to appropriate ingredients with which to prepare and feed nutrient-dense foods to older infants and young children.**

- 5.1 Adequate feeding of infants and young children cannot be assured if the food and other basic needs of households are unmet.
- 5.2 Blended foods provided as food aid, especially if they are fortified with essential nutrients, can be useful for feeding older infants and young children. However, their provision should not interfere with promoting the use of local ingredients and other donated commodities for preparing suitable complementary foods.
- 5.3 Complementary foods should be prepared and fed frequently, consistent with principles of good hygiene and proper food handling.

### Caring for caregivers

#### Principle 6

**Because the number of caregivers is often reduced during emergencies as stress levels increase, promoting caregivers' coping capacity is an essential part of fostering good feeding practices for infants and young children.**

### Protecting children

#### Principle 7

**The health and vigour of infants and children should be protected so they are able to suckle frequently and well and maintain their appetite for complementary foods.**

### Malnutrition

#### Principle 8

**Nutritional status should be continually monitored to identify malnourished children so that their condition can be assessed and treated, and prevented from deteriorating further. Malnutrition's underlying causes should be investigated and corrected.**

- 8.1 Special medical care and therapeutic feeding are required to rehabilitate severely malnourished children.

## **The acute phase of emergencies**

### **Principle 9**

**To minimize an emergency's negative impact on feeding practices, interventions should begin immediately. The focus should be on supporting caregivers and channelling scarce resources to meet the nutritional needs of the infants and young children in their charge.**

## **Assessment, intervention and monitoring**

### **Principle 10**

**Promoting optimal feeding for infants and young children in emergencies requires a flexible approach based on continual careful monitoring.**

# Foreword

When disaster strikes, whole communities – sometimes entire countries and regions – are thrown into disarray. In the emergency period that follows, lives are seriously disrupted. The infrastructure and social networks on which people usually depend are often badly weakened, completely destroyed or simply left behind.

Caring for populations during emergencies remains a global humanitarian priority of major proportions. Every year for the last quarter century some 150 million people worldwide have been affected by some type of emergency. Tens of millions have been forced to leave their homes to become part of some of the world's most destitute population groups, including:

- **internally displaced persons** who have been forced to relocate within their own territories or countries;
- **refugees** who have been forced to relocate across national boundaries;
- **returnees** – former refugees or internally displaced persons – who are attempting to reintegrate their communities and homes.

Emergencies following in the wake of natural or human-induced calamities – for example drought, floods, earthquakes, epidemics, agricultural and ecological catastrophes, war, civil unrest, and severe political and economic upheaval – dramatically change living conditions for entire communities. Families are left without shelter and the basic necessities of life. Those forced to migrate typically leave their assets behind, become separated from family and friends, and live among strangers in strange, often hostile, environments where familiar methods of coping may work only partially or not at all. Hardships resulting from migration and resettlement into crowded and unsanitary camps are physically and mentally draining. Further sapping morale are the combined impact of fear, uncertainty, losses – of family, friends, possessions and independence – and, all too often, a lingering threat of violence and death.

In 2004 alone, major emergencies affected nearly 40 million people, including 5.8 million children under the age of five, in 55 countries. The main causes of death among children during emergencies are the same as those occurring among otherwise disadvantaged populations, namely malnutrition, diarrhoeal diseases, acute respiratory infection, measles and malaria. How-



ever, emergencies distinguish themselves by their frequently soaring crude mortality rates, which can be two to 70 times higher than average. Experience shows that even in previously healthy populations, child morbidity and crude mortality rates can increase twentyfold in as short a period as two weeks. The best hope for averting the disability and death that are so common among children during emergencies is to ensure that they are adequately cared for and fed.

The guiding principles that follow have been prepared to help prevent this increased morbidity and mortality; they serve as a basis for action and are intended:

- to clarify that optimal practices for feeding infants and young children during emergencies are essentially the same as those that apply in other, more stable conditions;
- to inform decision-makers about the key interventions required to protect and promote optimal feeding for infants and young children that should be *routinely* included in any emergency relief response;
- to provide a starting point for organizing pragmatic, sustained interventions that will ensure optimal feeding and care for infants and young children during emergencies.

Since feeding infants and young children during emergencies is only one aspect of a broader survival strategy for entire populations, the guiding principles should be applied *flexibly* in conjunction with manuals, guidelines, training curricula, and other practical field-oriented documentation that treat in detail a variety of related topics. Examples of such documentation are provided in **Annex 1**.

The guiding principles are presented individually, under topical headings, together with an explanation of the significance of each, its implications during emergencies, and suggested action. Responsible governmental authorities and concerned international and nongovernmental organizations are encouraged to use the guiding principles when planning and implementing programmes to meet the nutritional needs of emergency-affected populations. Specifically, they should foster the optimal feeding and care of infants and young children by:

- protecting, promoting and supporting breastfeeding;
- ensuring that breast-milk substitutes are used safely, and only when strictly necessary;
- ensuring that older infants and young children receive sufficient energy and nutrients to meet their requirements for healthy growth, development and activity;

- promoting the physical and mental health of those who are responsible for feeding and caring for infants and young children;
- identifying and eliminating the underlying causes of sub-optimal feeding practices among infants and young children;
- treating those who are malnourished according to internationally recommended guidelines.

User feedback is welcome based on practical experience in applying these principles. Kindly address comments and suggestions to:

Department of Nutrition for Health and Development  
World Health Organization  
1211 Geneva 27  
Switzerland  
Fax (41-22) 791 4156  
E-mail: [nutrition@who.int](mailto:nutrition@who.int)

# Contents

|  |     |
|--|-----|
| Acknowledgements   | vi  |
| Guiding principles for feeding infants and young children during emergencies | vii |
| Foreword   | x   |
| <b>Introduction</b>  | 1   |
| <b>Breastfeeding</b>   | 5   |
| Principle 1  | 7   |
| Principle 2  | 8   |
| Factors affecting successful breastfeeding                                   | 8   |
| Attitude   | 9   |
| Technique  | 9   |
| Confidence   | 9   |
| Frequency  | 9   |
| Other breast-milk feeding options  | 11  |
| Relactation  | 11  |
| Wet-nursing  | 11  |
| <b>Breast-milk substitutes</b>   | 13  |
| Principle 3  | 15  |
| <b>Complementary feeding</b>   | 19  |
| Principle 4  | 21  |
| Foods for older infants and young children                                   | 21  |
| Special problems   | 22  |
| Adjusting to change  | 22  |
| Inexperienced caregivers   | 22  |
| Factors related to children  | 23  |
| Feeding frequency  | 23  |
| Child/caregiver interaction  | 23  |
| Principle 5  | 24  |
| General food aid   | 25  |
| Using general food aid commodities to feed older infants and young children  | 25  |

|   |    |
|---|----|
| Possible inadequacies in general food aid commodities | 26 |
| Blended foods   | 27 |
| Distribution of special commodities                   | 28 |
| Supplementary food distribution                       | 28 |
| Food from other sources                               | 29 |
| Household food production                             | 29 |
| Purchase and barter                                   | 29 |
| Natural food collection                               | 30 |
| Safe food, safe feeding                               | 30 |
| <b>Caring for caregivers</b>                          | 33 |
| Principle 6   | 35 |
| All caregivers  | 35 |
| Households with only one adult                        | 35 |
| Meeting women's special needs                         | 36 |
| Rape prevention and response                          | 37 |
| Other trauma  | 37 |
| <b>Protecting children</b>                            | 39 |
| Principle 7   | 41 |
| The prenatal and postpartum periods                   | 41 |
| Illness   | 41 |
| The physical environment                              | 42 |
| <b>Malnutrition</b>                                   | 43 |
| Principle 8   | 45 |
| <b>The acute phase of emergencies</b>                 | 47 |
| Principle 9   | 49 |
| Suggestions for early interventions                   | 49 |
| <b>Assessment, intervention and monitoring</b>        | 51 |
| Principle 10  | 53 |
| Initial assessment and preparation for action         | 53 |
| Practical considerations                              | 54 |
| Information   | 54 |
| Resources   | 54 |
| Communication   | 54 |
| Support networks                                      | 55 |
| Special programmes                                    | 55 |
| Community-based action                                | 55 |
| Monitoring  | 55 |
| <b>Conclusion</b>                                     | 57 |

**Annexes**

|   |    |
|---|----|
| Annex 1. Recommended reading  | 59 |
| Annex 2. Practical steps to ensure appropriate infant and young child feeding in emergencies  | 62 |
| Annex 3. Feeding in exceptionally difficult circumstances   | 65 |
| Annex 4. WHO Technical Consultation on Behalf of the UNFPA/ UNICEF/WHO/UNAIDS Inter-Agency Task Team on Mother-to-Child Transmission of HIV | 68 |
| Annex 5. Ten steps to successful breastfeeding  | 72 |
| Annex 6. Article 9 (labelling) from the International Code of Marketing of Breast-milk Substitutes  | 73 |
| Annex 7. Examples of rations for general food distribution providing 2100 kcal per person per day   | 75 |
| Annex 8. Policy of the UNHCR related to the acceptance, distribution and use of milk products in feeding programmes in refugee settings     | 76 |
| Annex 9. Guiding principles for complementary feeding of the breastfed child  | 78 |
| Annex 10. Framework for implementing selective feeding programmes   | 81 |
| Annex 11. Determining initial assessment priorities at an emergency site  | 82 |
| Annex 12. Core indicators for assessing infant feeding practices  | 84 |

# Introduction

Meeting the specific nutritional requirements of infants and young children,<sup>1</sup> including protecting, promoting and supporting optimal feeding practices (**Annex 2**), should be a routine part of any emergency relief response. Indeed, it should be at the centre of efforts to protect the right of affected children to food, life and a productive future. As described in the Global Strategy for Infant and Young Child Feeding,<sup>2</sup> families in difficult circumstances require special attention and practical support to be able to feed their children adequately (**Annex 3**).

## **Malnutrition is a major threat to children's lives during emergencies.**

The mortality rate among under-five children is considerably higher than for any other age group. It is particularly high in emergency-affected populations due to the synergy of a high prevalence of malnutrition and increased incidence of communicable diseases. Even for children who are only mildly malnourished, the risk of death from a bout of illness is twice that of well-nourished children. The risk is greater still for those who are severely malnourished.

## **For those children who survive malnutrition, the enduring consequences include diminished quality of life and reduced productivity.**

Malnutrition during the early years has a negative impact on cognitive, motor skill, physical, social and emotional development. The consequences of severe malnutrition effectively block the full realization of intellectual and physical potential for both current and future generations.

## **The fundamental means of preventing malnutrition in infants and young children is to ensure their optimal feeding and care.**

Breast milk alone provides ideal nutrition for young infants,<sup>3</sup> and it can also contribute significantly to the nutrition of older infants and young children.

<sup>1</sup> "Infants" are children under the age of 12 months and "young children" are between 12 and 36 months of age.

<sup>2</sup> *Global Strategy for Infant and Young Child Feeding*. Geneva, World Health Organization, 2002 (<http://www.who.int/nut/publications.htm#inf>).

<sup>3</sup> "Young infants" are children under the age of 6 months.

Breast milk provides valuable protection from infection and its consequences, which is all the more important in environments lacking adequate water supply and sanitation. Indeed, during emergencies breast milk can make the difference between life and death.

Food other than breast milk benefits a child only if, in addition to relieving hunger, the food is safely prepared and fed and it contributes to meeting requirements for nutritional maintenance and growth by supplying energy, protein and key micronutrients such as iron, folate, calcium, zinc, and vitamins A, B and C.

**The challenging conditions typically faced during emergencies, together with the weakening or dismantling of family and community structures, can undermine breastfeeding practice and interfere with crucial support for breastfeeding women.**

Successful breastfeeding depends on frequent suckling, an abiding confidence among women in their ability to produce milk, and a supportive environment. During emergencies, physical and emotional stress can reduce women's confidence and diminish the capacity of other family members to help them. Traditional networks, through which knowledge has passed from caregiver to caregiver over generations, may no longer function. As families become separated and communities dispersed, key counsellors and other traditional participants in childcare may no longer be available. High demands placed on women's time and energy, reduced household size and loss of privacy are among the conditions that most directly threaten the frequency and duration of breastfeeding during emergencies – and thus the nutritional and health status of infants and young children.

**The shortage – and often the unsuitability – of food resources during emergencies make essential aspects of feeding and care still more difficult.**

Basic food aid commodities, whether because of their form or nutrient content, often fail to meet the specific nutritional needs of young children. Caregivers, with few resources at their disposal, may be unable to find ingredients for traditional recipes. Frequent infections and emotional stress – reflected in reduced appetite and poor eating behaviour – only compound the difficulty, in unfamiliar environments, of locating, preparing and feeding safely, foods that young children will eat. Many people who become caregivers during emergencies – for example fathers, grandfathers, older siblings, young mothers with newborn babies, and benevolent strangers – have never before looked after small children. Despite their best efforts to cope with their new responsibilities, they may fail to meet satisfactorily the nutritional needs of

children in their care. Frequent, safe food preparation and feeding are hampered by insufficient time and further complicated by lack of cooking utensils, fuel, soap and water.

**Supplementary feeding programmes, by themselves, may not adequately prevent malnutrition.**

When food is in short supply, supplementary feeding programmes can help offset the shortfall for all young children, malnourished or not. However, once general rations are adequate and their distribution well established supplementary feeding should no longer be necessary. Continued reliance on supplementary feeding programmes to reduce malnutrition suggests that underlying problems are being overlooked, and only postpones – or even prevents – identifying sustainable solutions.

**Many malnourished children do not benefit from supplementary or – for the severely malnourished – therapeutic feeding programmes and thus remain vulnerable to the ravages of disease.**

Many children do not benefit from feeding programmes because their nutritional status is not severe enough to make them eligible, or their eligibility is overlooked. For children whose moderate or severe malnutrition is recognized, caregivers might be unable to meet their special needs because participation in supplementary or therapeutic feeding programmes obliges them to devote time at the expense of other family members, or they may simply be unaware of malnutrition's dire consequences. Selective feeding as a curative measure for malnourished children can save lives. However, its purpose will be defeated if children simply return to the same damaging environment that initially caused the problem.



