GUIDELINES
FOR SELECTIVE FEEDING:
THE MANAGEMENT OF MALNUTRITION
IN EMERGENCIES

ANNOTATED BIBLIOGRAPHY
of
DOCUMENT REFERENCES
and
OTHER RELEVANT PUBLICATIONS (1999-2008)

May 2009

With the collaboration of the United Nations Standing Committee on Nutrition
and the World Health Organization
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EMERGENCY HUMANITARIAN ASSISTANCE

Emergency Humanitarian Assistance - Assessment
Emergency Humanitarian Assistance - Gender
Emergency Humanitarian Assistance - Management
Micronutrient Deficiencies
Nutrition - Miscellaneous
MISCELLANEOUS
### ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>ACF</td>
<td>Action Contre la Faim</td>
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<td>AED</td>
<td>Academy for Educational Development</td>
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<tr>
<td>CAP</td>
<td>Consolidated Appeal Process</td>
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<td>CDC</td>
<td>Centre for Disease Control and Prevention</td>
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<td>CI</td>
<td>Confidence Interval</td>
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<tr>
<td>CMAM</td>
<td>Community-Based Management of Acute Malnutrition</td>
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<tr>
<td>Concern WW</td>
<td>Concern Worldwide</td>
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<tr>
<td>CTC</td>
<td>Community-Based Therapeutic Care</td>
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<tr>
<td>CVD</td>
<td>Cardio Vascular Disease</td>
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<tr>
<td>DHS</td>
<td>Demographic and Health Surveys</td>
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<td>EB</td>
<td>Executive Board</td>
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<td>EPF</td>
<td>Emergency Food Security Assessment</td>
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<td>EMOP</td>
<td>Emergency Operations</td>
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<td>ENN</td>
<td>Emergency Nutrition Network</td>
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<td>ERC</td>
<td>Emergency Relief Coordinator</td>
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<td>FANTA</td>
<td>Food and Nutrition Technical Assistance</td>
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<td>FAO</td>
<td>Food and Agriculture Organization</td>
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<td>HIV/AIDS</td>
<td>Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome</td>
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<td>HPS</td>
<td>Humanitarian Practice Network</td>
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<td>IASC</td>
<td>Interagency Standing Committee</td>
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<td>IBFAN</td>
<td>International Baby-Food Action Network</td>
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<td>ICCIDD</td>
<td>International Council for the Control of Iodine Deficiency Disorders</td>
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<td>IDA</td>
<td>Iron Deficiency Anaemia</td>
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<td>IDD</td>
<td>Iodine Deficiency Disorders</td>
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<td>IDP</td>
<td>Internally Displaced People</td>
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<td>IFE</td>
<td>Infant and Young Feeding in Emergencies</td>
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<td>IFRC</td>
<td>International Federation of Red Cross and Red Crescent Societies</td>
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<td>IMCI</td>
<td>Integrated Management of Childhood Illness</td>
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<tr>
<td>LSHTM</td>
<td>London School of Hygiene and Tropical Medicine</td>
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<td>MAMI</td>
<td>Management of Acute Malnutrition in Infants</td>
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<td>MI</td>
<td>Micronutrient Initiative</td>
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<td>MUAC</td>
<td>Mid-Upper Arm Circumference</td>
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<td>NRU</td>
<td>Nutrition Rehabilitation Unit</td>
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<td>OCHA</td>
<td>Office for the Coordination of Humanitarian Affairs</td>
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<td>ODI</td>
<td>Overseas Development Institute</td>
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<td>PMNCH</td>
<td>Partnership for Maternal, Newborn and Child Health (PMNCH)</td>
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<td>PRRO</td>
<td>Protracted Relief and Recovery Operations</td>
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<td>RUTF</td>
<td>Ready-to-Use Therapeutic Food</td>
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<td>RUSF</td>
<td>Ready-to-Use Supplementary Food</td>
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<td>SAM</td>
<td>Severe Acute Malnutrition</td>
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<td>SC US</td>
<td>Save the Children US</td>
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<td>SFP</td>
<td>Supplementary Feeding Programme</td>
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<td>SO</td>
<td>Special Operations</td>
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<td>TDH</td>
<td>Terre des Hommes</td>
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<td>TFC</td>
<td>Therapeutic Feeding Centre</td>
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<td>TFP</td>
<td>Therapeutic Feeding Programme</td>
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<td>UCL</td>
<td>United Nations Children’s Fund (UNICEF)</td>
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<td>UNAIDS</td>
<td>Joint United Nations Programme on HIV/AIDS</td>
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<td>UNFPA</td>
<td>United Nations Population Fund</td>
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<td>Acronym</td>
<td>Full Name</td>
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<td>UNHCR</td>
<td>United Nations High Commissioner for Refugees</td>
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<td>UNICEF</td>
<td>United Nations Children’s Fund</td>
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<td>UNSCN</td>
<td>United Nations System Standing Committee on Nutrition</td>
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<td>USAID</td>
<td>United States Agency for International Development</td>
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<td>USDA</td>
<td>United States Department of Agriculture</td>
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<td>USI</td>
<td>Universal Salt Iodization</td>
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<td>VAD</td>
<td>Vitamin A Deficiency</td>
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<td>VALID</td>
<td>Valid International</td>
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<td>WFH</td>
<td>Weight-for-Height</td>
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<td>WFP</td>
<td>World Food Programme</td>
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<td>WHO</td>
<td>World Health Organization</td>
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INTRODUCTION

This annotated bibliography is a guide to the various publications used in revising the “UNHCR/WFP Guidelines for Selective Feeding Programmes in Emergency Situations” published in 1999. The references included in this annotated bibliography cover documents published between 1999 and 2008.

The publications are grouped under generic headings which are listed in alphabetical order as show in the table of contents. Under each heading, sub-headings are also listed in alphabetical order. On the other hand, publications are listed in chronological order starting with the most recently published.

For each reference, the following information is provided:

- Author, Title and year of publication.
- Photo of the cover page
- Abstract
- Target audience (as relevant)
- Languages
- On-line link to download or order a copy of the publication.
I. REFERENCES

1. EMERGENCY HUMANITARIAN ASSISTANCE

1.1 Emergency Humanitarian Assistance - Contingency Planning


The overall objective of these guidelines (46 pages) is to enhance humanitarian response capacity, predictability, accountability and partnership in order to reach more people with comprehensive, appropriate, needs-based relief and protection in a more effective and timely manner. They provide recommendations on:

- How to establish and implement an inter-agency contingency planning process.
- How to develop integrated plans.
- How to monitor ongoing preparedness actions.

The annexes to these guidelines provide useful tools and information to assist planners, in particular annexes 2, 3 and 4:

- Inter-Agency Contingency Planning Brainstorming Guide and Contingency Plan Checklist
- Terms of Reference for an Inter-Agency Contingency Planning Working Group
- Generic Terms of Reference for Sector/Cluster Leads at the Country Level

Target audience: Members of the Humanitarian Country Teams, namely agencies/organizations involved in providing international assistance and protection to those affected by emergencies.

Languages: English

1.2 Emergency Humanitarian Assistance - Guidelines


The handbook (595 pages) is divided into 4 sections.

In section 3, Chapter 16 “Food and Nutrition” is particularly relevant. It covers the following topics:

- Organization of food support: WFP/UNHCR cooperation, joint assessment and planning
- Nutrition assessment
- General feeding programmes
- *Selective Feeding Programmes (as per UNHCR/WFP guidelines of 1999)*
- Infant and young child feeding and use of milk products.

**Target audience:** UNHCR staff

**Languages:** English and French

To download whole document or individual chapters: [http://www.unhcr.org/publ/PUBL/471db4c92.html](http://www.unhcr.org/publ/PUBL/471db4c92.html)


This handbook (424 pages) is limited to topics addressed in the Core Commitments for Children in Emergencies and is structured to provide answers to the questions UNICEF staff ask about what needs to be done and how to do it when implementing those commitments. It provides guidance to UNICEF staff for planning and organizing actions to address the rights and needs of children and women. This practical tool covers programme areas and supporting operational functions.

The Emergency Field Handbook contains essential checklists and templates. It does not cover every aspect of programme implementation in an emergency but rather gives the basics in a user-friendly format.

It covers the following main topics:

1) First actions; 2) Coordination; 3) Assessment and monitoring; 4) Special circumstances: Negotiating with non-state entities; Humanitarian-military relations; Assisting displaced persons; Natural disasters; 5) Programme Core Commitments; and 6) Operational Core Commitments.

**Target audience:** UNICEF staff

**Languages:** English, French and Spanish


1.2 Emergency Humanitarian Assistance - Guidelines


The purpose of these guidelines (358 pages) is to ensure effective collaboration in the planning and organization of all joint UNHCR-WFP assessment activities, adherence to agreed procedures and standards, the consistent production of reliable information, and the effective use and analysis of that information. While the focus is on refugees, these guidelines also apply in joint operations in favour of returnees and internally displaced people (IDPs).

Sections 7.2 and 7.6 “Assessing the health and nutrition situation” provide information on “Food aid targeting, distribution and monitoring” and outline the enquiries needed to understand the health and nutrition situation, and the causes of health problems and any observed malnutrition.

Brief guidance on analysing the nutrition situation, the use of nutrition survey data and interpretation of the results are provided in sections 9.7 to 9.9. Section 9.10 “Determining the need for and effectiveness of selective feeding” is a condensed version of UNHCR/WFP Guidelines for Selective Feeding Programmes in Emergency Situations, 1999.

The guidelines are complemented by a CDROM.

Target audience: Staff of UNHCR, WFP and their partners.

Languages: English  
http://www.unhcr.org/publ/PUBL/45f81d2f2.pdf


This pocketbook (180 pages) is a quick-reference resource for all WFP staff engaged in the provision of humanitarian assistance in the field, whether in Emergency Operations (EMOPs), Protracted Relief and Recovery Operations (PRROs) or Special Operations (SOs). The Pocketbook provides the following information:

1. Brief aide-mémoire on relevant WFP policies, guidelines and procedures
2. Checklists for assessment, planning, monitoring and problem-solving field visits
3. Cross-references to more detailed guidance when it exists

Chapter 6 “Food and Nutrition” is organised as follows:

6.1 to 6.3: brief guidance on malnutrition, nutrition surveys and nutritional requirements
6.4 to 6.6: information for defining rations and food aid requirements
6.7: data on the nutritional value of key food items
6.8: brief notes on how to avoid common micronutrient deficiencies
6.9: the limits on the use of milk powders and infant formula
6.10 and 6.11: brief guidance on the provision of food assistance at the onset of an acute emergency and how to produce bread and biscuits.

Target audience: WFP Staff

Languages: English  
**1.3 Emergency Humanitarian Assistance - Policy**


This document (41 pages) seeks to:

1. Highlight factors that particularly affect older people in emergencies, especially health-related concerns
2. Propose a strategy to raise awareness about older people in emergencies
3. Recommend policies and practices to address these considerations.

It proposes the following objectives at the different stages of an emergency:

**Preparedness phase**
- Increase visibility and raise awareness among health agencies and humanitarian organizations of older people’s needs and priorities in emergencies.
- Develop essential medical and health resources for older people in emergency practices.
- Develop emergency management policies and tools to address older people’s health

**Emergency response and operations phase**
- Ensure that older people are aware of and have access to essential emergency health care services.
- Provide age-sensitive and appropriate health and humanitarian services to maintain older people’s health.
- Promote cross-sectoral planning and coordination to raise awareness of older people’s needs in crises and reduce their risk of marginalization and deteriorating health in emergencies.

**Recovery and transition phase**
- Build institutional capacity and commitment to ensuring the health and safety of older people in emergencies.
- Strengthen the capacity of ministries of health and health care systems to meet the needs of older people in emergencies.
- Develop mechanisms to ensure continuing development and exchange of expertise as these relate to older people in emergencies.
- Promote active ageing as a strategy to reduce vulnerability and develop resiliency to disasters.

**Languages: English**

1.4 Emergency Humanitarian Assistance - Reform


The review *(112 pages)* was conducted by four independent consultants, between February and June 2005 and covered complex emergencies and natural disasters. The major gap identified is the low level of preparedness of the humanitarian organizations, in terms of human resources and sectoral capacities. As regards *food aid, nutrition and livelihoods* *(sections 4.7 and 5.8)*, the review revealed an unclear mix of capacity and a lack of clearly defined approaches to the utilization of the established service resources, with resulting shortfalls in the provision of assistance.

One major recommendation emerging from the report is the need to obtain a global mapping of humanitarian response capacities that would cover not only international actions but also national and regional action, the private sector and the military. Such a mapping should also aim at obtaining a more complete picture of the capacities of NGOs. This mapping exercise should be pursued in an appropriate framework, including the IASC.

As regards *food aid, nutrition and livelihoods*, the review team recommended creating a working group in order to:
- Establish common inter-agency assessment teams
- Ensure reliable data and a common emergency strategy among the agencies
- Establish means of sharing infrastructure resources such as aircrafts, boats and trucks in food distribution
- Expand understanding and the inclusion of livelihood approaches in the design of emergency response.

Languages: English


A 3-page briefing note providing concise answers to the following key questions:
- Why is there a need to designate sector/cluster leads in major new emergencies?
- What constitutes a “major new emergency”?
- Can the cluster approach be used in countries where there is a UN Resident Coordinator but no Humanitarian Coordinator?
- What is a “sector/cluster lead”?
- What are the responsibilities of sector/cluster leads and who is accountable to the HC?
- What is expected of sector/cluster partners?
- How are sector/cluster leads expected to relate to local government structures?
- What sectors/clusters should be established and who should lead them?
- How long should sectors/clusters continue to function?

This note also describes the procedures and steps for designating sector/cluster leads in major new emergencies.

Languages: English
1.4 Emergency Humanitarian Assistance - Reform


This (54 pages) document presents the appeal made to cover the costs of implementing the cluster approach at the global level in 2006. While all organisations are maximising resources already at their disposal, cluster leads and cluster partners have recognised the need for varying levels of additional resources to fulfil their cluster obligations in order to ensure that effective response capacity exists in the identified areas. These additional needs are outlined in the document for each cluster:

1. Camp coordination and camp management cluster
2. Early recovery cluster
3. Emergency shelter cluster
4. Emergency telecommunications cluster
5. Health cluster
6. Logistics cluster
7. Nutrition cluster
8. Protection cluster
9. Water, sanitation and hygiene cluster

The Nutrition Cluster Chapter identifies five major gaps and proposes relevant interventions to address them, namely:

a) Coordination
b) Capacity Building
c) Emergency Preparedness and Response
d) Assessment, Monitoring and Surveillance
e) Supply

Languages: English

1.5 Emergency Humanitarian Assistance - Standards


The Sphere handbook (344 pages) is designed for use in disaster response, and may also be useful in disaster preparedness and humanitarian advocacy. It is applicable in a range of situations where relief is required, including natural disasters as well as armed conflict. It is designed to be used in both slow- and rapid-onset situations, in both rural and urban environments, in developing and developed countries.

The handbook is organised as follows:

- What is Sphere?
- The Humanitarian Charter
- Chapter 1: Minimum Standards Common to All Sectors
- Chapter 2: Minimum Standards in Water, Sanitation and Hygiene Promotion
- Chapter 3: Minimum Standards in Food Security Nutrition and Food Aid
- Chapter 4: Minimum Standards in Shelter, Settlement and Non-Food Items
- Chapter 5: Minimum Standards in Health Services

The initial chapter on common standards sets out guidelines for programme design and implementation, which are applicable to all sectors. This chapter should be read first, before turning to the relevant technical chapter. Each technical chapter has its own set of standards and indicators.

Target audience: Humanitarian workers.

Languages: Arabic, English, French, Russian and Spanish


To download chapters or whole document:

To download Chapter 3:

To download handbook in other languages:
[http://www.sphereproject.org/component/option,com_docman/task,cat_view/gid,70/Itemid,203](http://www.sphereproject.org/component/option,com_docman/task,cat_view/gid,70/Itemid,203)
2. FOOD

2.1 Food - Codex Alimentarius


The purpose of this document (10 pages) is to provide guidance on nutritional and technical aspects of the production of formulated supplementary foods for older infants and young children, namely:

- Formulation of such foods, based on the nutritional requirements of older infants and young children
- Processing techniques
- Hygienic requirements
- Provisions for packaging
- Provisions for labelling and instructions for use.

Formulated Supplementary Foods for Older Infants and Young Children are defined as “foods suitable for use during the infant’s weaning period and for feeding young children as a supplement to breastmilk or breastmilk substitutes or other food available in the country where the product is sold. They are not suitable for use for infants before the beginning of the weaning period. These foods provide those nutrients which either are lacking or are present in insufficient quantities in the basic staple foods”.

http://www.codexalimentarius.net/download/standards/298/CXG_008e.pdf
2.2 Food - Commodities


This concise *(9 pages)* document provides useful practical information to potential interested suppliers on the registration requirements and specifications of the following products:

- F-100 therapeutic milk
- F-75
- Ready to Use Therapeutic Foods

For each product the following information is provided:

- Nutritional composition
- Processing instructions
- Additional quality specifications (such as shelf-life, energy density, etc.)
- Packaging and labelling

Languages: English

http://www.unhcr.org/admin/ADMIN/4860c3d34.pdf

For information on Compact food (BP-5), High energy biscuits and Ration meal, ready to eat, vegetarian:

http://www.unhrd.org/catalog.asp#food


In 1981, Member States of the World Health Organization adopted the International Code of Marketing of Breast-milk Substitutes, with the aim to protect, promote and support appropriate infant and young child feeding practices. The adoption of the Code was a key milestone in global efforts to improve breastfeeding, and countries have taken action to implement and monitor the Code and subsequent relevant World Health Assembly resolutions.

This booklet of Frequently Asked Questions *(18 pages)* aims to increase awareness and understanding of how the Code can help to ensure that mothers and caregivers are able to make fully-informed choices of how best to feed their infants, free of commercial interest. It provides concise answers to several questions, such as:

- What is the International Code of Marketing of Breast-Milk Substitutes?
- What are the current WHO recommendations for feeding infants and young children?
- Why is breastfeeding important?.

*Target audience:* policymakers and others concerned with the Code, as well as the general public.

Languages: English

2.2 Food - Commodities


This revised version *(18 pages)* of the first 1989 was produced in consultation with the Emergency Nutrition Network, the Infant Feeding in Emergencies Core Group (UNICEF, UNHCR, WHO, WFP, IBFAN-GIFA, CARE, TDH, ENN) and the Institute of Child Health, London.

It includes the following sections:

- Summary of UNHCR use of milk products
- Issues related to the safe use of milk products in feeding programmes in refugee settings
- Infant and young child feeding
- Nutritional value of milk
- Summary of the health hazards associated with the use of milk products
- Guidelines for the safe use of milk products
- Accountability
- Key Definitions
- Key References

Languages: English and French

English: [http://www.unhcr.org/publ/PUBL/4507f7842.pdf](http://www.unhcr.org/publ/PUBL/4507f7842.pdf)
French: [http://www.unhcr.fr/cgi-bin/textis/vtx/publ/opendoc.pdf?tbl=PUBLandid=45fa6bd42](http://www.unhcr.fr/cgi-bin/textis/vtx/publ/opendoc.pdf?tbl=PUBLandid=45fa6bd42)


The overall aim of these guidelines *(57 pages)* is to promote timely, coordinated and effective action through improved understanding of food and nutrition needs during emergencies. They are meant as practical tools for estimating food and nutritional needs of populations in emergency situations, in particular to provide:

1. Practical operational guidelines for United Nations and other agency staff involved in planning a basic general food ration for emergency situations
2. Guidance on how to estimate the food and nutritional needs for vulnerable groups
3. Clear outline of the main factors to take into consideration when planning an adequate ration
4. A framework for training activities and/or supporting ongoing training activities related to planning food assistance.

It consists of three main chapters:

1. Basic principles
2. Planning a ration
3. Monitoring and follow-up

*Target audience:* field staff involved in planning and delivering a basic general food ration for emergency-affected populations.

Languages: English

[http://www.unhcr.org/publ/PUBL/45fa745b2.pdf](http://www.unhcr.org/publ/PUBL/45fa745b2.pdf)
2.2 Food - Commodities


This publication (62 pages) provides useful information on the following topics:

1. Background:
   - Why fortified foods
   - Practical uses and preparation techniques
2. Food Safety and Fortified Blended Foods
3. Storage of Fortified Blended Foods
4. Preparation and Use of Fortified Blended Foods
5. Index of Suggested Recipes
6. Processing Instructions and Product Specifications
7. Nutritional Composition of Corn-Soya Blend
8. Nutritional Composition of Wheat-Soya Blend
9. WFP Support for Production of Blended Food Equipment

Languages: English


**OTHER PUBLICATIONS LISTED UNDER OTHER SECTIONS**


2.3 Food - Rations Distribution


These (89 pages) guidelines provide very practical guidance on the following major issues:

1. Guiding principles of food distribution
2. General food distribution
3. Food for work
4. School feeding
5. Supplementary feeding
6. Therapeutic feeding and caretaker support
7. Institutional feeding

As regards the two sections most relevant to selective feeding programmes, the following specific advice is provided to WFP staff:

**Supplementary feeding**:

- What is supplementary feeding?
- Coordinate
- Determine if distribution should be wet on-site or dry take-home ration
- Determine who will distribute
- Establish a signed agreement with the CP
- Seek beneficiary participation
- Arrange for food delivery
- Carry out the distribution
- Make use of empty food containers
- Carry out monitoring
- Complete the Distribution Report

**Therapeutic feeding**:

- What is therapeutic feeding?
- Recognize WFP’s role
- Coordinate with lead agency and CP
- Establish a signed agreement with the CP
- Arrange for food delivery
- Be familiar with the steps of the distribution process

Languages: English

Not available on-line. Electronic version included in CD-ROM.
2.4 Food - Rations Nutritional Value


NutVal, which was originally developed by UNHCR, is a spreadsheet application for planning and monitoring the nutritional content of general food aid rations.

Due to the recent sharp increases in food prices and continuing market volatility it is no longer possible to provide a meaningful guide price for planning purposes. To prevent confusion this data has now been removed in version 2. Users are advised to obtain up to date food commodity, and transport and handling prices for planning and monitoring programmes.

Update the NutVal database of food aid commodity nutrient content and price, and implement a ration optimisation function using linear programming. The project is undertaken by WFP in collaboration with UCL/ICH. NutVal.Net has been created to allow users to always access the latest version of the software, to facilitate feedback and bug reporting, and encourage suggestions for new features and modifications.

Languages: English

http://www.nutval.net/2008/05/download-page.html
or
http://www.nutval.net/
3. HEALTH AND CARE


This (250 pages) publication book provides an overview of the continuum of care through the lifecycle and opportunities to address gaps at all levels - family and community care, outreach services and health care facilities. Case studies are analysed in order to learn the practical steps for phasing interventions, strengthening and integrating service provision, and providing every mother, newborn and child in Africa with essential care. It covers the following topics:

- New information on Africa’s newborns - Where, when and why do they die? How many lives could be saved?
- An overview of the continuum of care through the lifecycle at all levels - family and community care, outreach services and health care facilities.
- The current situation, opportunities and next steps needed to strengthen and integrate newborn health within nine key packages and programmes related to newborn health: health of girls and women before pregnancy, antenatal care, childbirth care, postnatal care, Integrated Management of Childhood Illness (IMCI), nutrition and breastfeeding promotion, malaria control programmes, programmes for prevention of mother-to-child transmission of HIV and immunisation programmes.
- Reaching every mother and baby in Africa with essential care: what can we learn from countries who are progressing? Case studies and practical steps for phasing interventions, strengthening and integrating service provision to provide newborn care.

**Target audience:** policymakers and programme managers as well as UN agencies, partners and donors

**Languages:** English, French and Spanish

http://www.who.int/pmnch/media/publications/oanfullreport.pdf


This manual (301 pages) sets standards for communicable disease control in emergencies in order to promote effective, coordinated action towards the prevention and control of communicable diseases in emergencies. It deals with the fundamental principles of communicable disease control in emergencies, which are:

- **Rapid assessment:** identify the communicable disease threats faced by the emergency-affected population, including those with epidemic potential, and define the health status of the population by conducting a rapid assessment
- **Prevention:** prevent communicable disease by maintaining a healthy physical environment and good general living conditions
- **Surveillance:** set up or strengthen disease surveillance system with an early warning mechanism to ensure the early reporting of cases, to monitor disease trends, and to facilitate prompt detection and response to outbreaks
- **Outbreak control:** ensure outbreaks are rapidly detected and controlled through adequate preparedness (i.e. stockpiles, standard treatment protocols and staff training) and rapid response (i.e. confirmation, investigation and implementation of control measures)
- **Disease management:** diagnose and treat cases promptly with trained staff using effective treatment and standard protocols at all health facilities.

**Target audience:** health professionals and public health coordinators working in emergency situations

**Languages:** English

http://www.who.int/infectious-disease-news/IDdocs/whocds200527/whocds200527chapters/
3. HEALTH AND CARE


The 2002 report (268 pages) describes the amount of disease, disability and death in the world today that can be attributed to a selected number of the most important risks to human health. It also shows how much this burden could be lowered in the next 20 years if the same risk factors were reduced. The report also calculates how much of this present burden could be avoided in the next couple of decades if the same risk factors were reduced from now onwards.

Furthermore, it shows how some of those possible reductions can be achieved in a range of cost-effective ways. The ultimate goal is to help governments of all countries to raise the healthy life expectancy of their populations. The report says that very substantial health gains can be made for relatively modest expenditures. It suggests that at least an extra decade of healthy life could be within the grasp of the populations of many of the world's poorest countries.

Languages: English

4. HIV/AIDS IN EMERGENCIES


The goal of the guide (296 pages) is to improve capacity to design and implement food assistance programmes in the context of HIV by providing a set of tools and key considerations.

Chapter 10 “Health and Nutrition” discusses programming food-aid supported health, nutrition and food interventions in areas of high HIV prevalence and including food and nutrition interventions in HIV programming where there is high food insecurity or pockets of food insecurity. The principles described in this chapter also apply to slow-onset emergencies.

Chapter 13 “Emergency Response” offers guidance to help plan and implement emergency responses in a variety of settings where HIV-related challenges and opportunities should be considered. The chapter first looks at modifications to food assistance programme design and implementation needed to ensure that the food security needs of PLHIV and affected households are appropriately addressed. It then outlines specific guidelines for HIV interventions in emergency settings. This chapter identifies approaches that could be employed in quick-onset emergencies where international organizations and government are likely to provide large amounts of food assistance to refugee camps, the internally displaced or communities affected by conflict or natural disaster.

**Target audience:** programme directors and advisors and senior managers directly involved in the analysis and formulation of food assistance strategies in WFP regional and country offices, USAID regional and country Mission Offices, as well as WFP implementing partners, other governmental and non-governmental organizations that use food assistance to food-insecure households and those affected by HIV.

**Languages:** English


In 2003 UNHCR, WFP and UNICEF launched a joint effort to develop, through multi-site field research in refugee communities in Africa, a set of strategies for using food and nutrition-based interventions to support HIV transmission prevention, impact mitigation, and care, treatment, and support for people living with HIV. This important collaborative initiative grew out of the recognition that refugee settings are unique. It was recognized also that specific research is required conducted among and with refugees. This Best Practice document (38 pages) discusses the research process and findings of this interagency initiative. Twenty integrated programme strategies were explored and grouped along the following two axes:

<table>
<thead>
<tr>
<th>HIV Interventions</th>
<th>Food and Nutrition Interventions</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV prevention including prevention of mother-to-child transmission</td>
<td>Emergency food distribution and nutrition</td>
</tr>
<tr>
<td>Care and support for people living with HIV and their families, and children affected by AIDS (including orphans and vulnerable children)</td>
<td>Food for training, capacity building and institutional support</td>
</tr>
<tr>
<td>Health care and treatment for people living with HIV and their families</td>
<td>Household food and livelihood security</td>
</tr>
</tbody>
</table>

**Languages:** English & French


The purpose of these guidelines (108 pages) is to promote the delivery of the minimum required multisectoral response to HIV/AIDS during the early phase of emergency situations. The document consists of 4 chapters, the last being the Guidelines themselves. Chapters 1 through 3 provide background and orientation information. Chapter 4 describes specific interventions on a sector-by-sector basis. A Matrix, incorporating these sectors, provides a quick-but-detailed overview of the various responses. Action sheets, one for each sector, provide more in-depth information.

Sector 5 Food security and nutrition includes 5 Action Sheets:
- Target food aid to affected and at-risk households and communities
- Plan nutrition and food needs for populations with high HIV prevalence
- Promote appropriate care and feeding practices for PLWHA
- Support and protect food security of HIV/AIDS affected and at risk households and communities
- Distribute food aid to affected households and communities

Target audience: authorities, personnel and organizations operating in emergency settings at international, national and local levels.

Languages: English

5. INFANT AND YOUNG CHILD FEEDING IN EMERGENCIES

5.1 Infant and Young Child Feeding in Emergencies - Principles and Guidelines


This module covers how to feed infants, by breastfeeding and, when necessary, other options. It also addresses existing recommendations and protective policies, and gives guidance on how to provide adequate support for appropriate infant feeding. Module 1 issued in 2001 comprises three parts:

1. Core manual (57 pages)
2. Presenters notes
3. Slides content. The slides content is available as a PowerPoint presentation and has been updated (Feb 2008) to reflect the current Operational Guidance on IFE (v2.1, Feb 2007) and latest guidance on infant feeding and HIV.

Target audience: all staff working in or with emergencies such as managers, logisticians, water and sanitation technicians, health and nutrition workers, donors (non exhaustive list).

Languages: English


This guide (26 pages) provides concise practical but mainly non technical guidance on how to ensure appropriate infant and young child feeding (below two years of age) in emergencies. The document is organised into six sections of practical steps:

1. Endorse or develop policy
2. Train staff
3. Co-ordinate operations
4. Assess and monitor
5. Protect, promote and support optimal infant and young child feeding with multi-sectoral interventions
6. Minimise the risks of artificial feeding.

The guide also provides a very useful list of references organised by topic, namely: policies and guidelines; advocacy and technical information.

Target audience: emergency relief staff and programme managers of all agencies working in emergency programmes, including national governments, UN agencies, national and international NGOs, and donors.

Languages: Arabic, Bahasa (Indonesia), Chinese, English, French, Japanese, Portuguese, Russian and Spanish.

5.1 Infant and Young Child Feeding in Emergencies - Principles and Guidelines


This manual (244 pages) was designed to specifically address emergency situations when time for full training is scarce. The Core Manual comprises parts 1 to 5 which deal with basic information on:

- How breast milk is produced and flows and how babies suckle
- The support women need to breastfeed effectively
- How to assess infant feeding
- How to help mothers and other caregivers overcome any feeding difficulties.

Parts 6 to 9 deal with specific conditions:

- Relactation
- Breast conditions and specific situations
- Severely malnourished infants under six months old
- When infants are not breast fed.

These last two sections on artificial feeding and management of acute malnutrition in infants under six months aim to reflect realities in the field. The manual also includes various annexes and overhead figures.

Target audience: Health and nutrition workers directly concerned with care of mothers/caregivers and infants.

Languages: English and French


This document (96 pages) is intended to serve as a starting point for organizing sustained pragmatic interventions that will ensure appropriate feeding and care for infants and young children at all stages of an organized emergency response. They are presented individually, under topical headings together with an explanation of the significance of each, its implications during emergencies, and suggested action:

- Breastfeeding
- Breast-milk substitutes
- Complementary feeding
- Caring for caregivers
- Protecting children
- Malnutrition
- The acute phase of emergencies
- Assessment, intervention and monitoring

Supplementary feeding is discussed under Complementary Feeding/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.”

Languages: English

5.2 Infant and Young Child Feeding in Emergencies - HIV/AIDS


The purpose of this Guidance (20 pages) is to provide an overview of the current technical and programmatic consensus on infant feeding and HIV, in order to facilitate effective implementation of HIV and infant feeding programmes in refugee and displaced situations. It is organized as follows:

1. International Policy Context on infant feeding and HIV
2. Influences of infant feeding practices on child HIV-free survival
   - The risk of HIV transmission from mother to child
   - Reducing the risk of HIV transmission
   - The risks of not breastfeeding.
3. UN Policy on Infant feeding and HIV
4. UN policy on infant feeding decision
   - Guidance on implementing AFASIS conditions
   - Wet nursing in the context of HIV
   - Heat treatment of breastmilk
5. Applying UN policy to UNHCR operations including emergency contexts.

Target audience: UNHCR staff and implementing/operational partners.

Languages: English

http://www.unhcr.org/publ/PUBL/488d85882.pdf


This report (48 pages) presents a summary of the new findings, conclusions and recommendations from the HIV and infant feeding Technical Consultation which took place in Geneva in October 2006. This Consultation was organized by WHO on behalf of the Inter-Agency Task Team on Prevention of HIV Infections in Pregnant Women, Mothers and their Infants in order to:

- Review new evidence on:
  a. The risk of HIV transmission through breastfeeding and ways to reduce it
  b. The impact of different feeding options on child survival
  c. Implementation of current WHO recommendations and guidance on HIV and infant feeding

- Identify gaps and specific areas where current tools need refining, such as:
  a. Early cessation of breastfeeding (timing, process, post-cessation feeding)
  b. Implementation of counselling (process, content, training, possible algorithms, risk based)
  c. Implications of early infant diagnosis for infant feeding recommendations

Languages: English and French

The tools consist of the following parts:

- **Counselling cards (45 pages)** that describe the counselling process. Infant feeding counsellors should use the flipchart during counselling sessions with HIV-positive pregnant women and/or mothers. The cards need local adaptation to a) identify the most acceptable/feasible feeding options from 0 to 6 months, and b) identify the most suitable foods to cover nutrient requirements from 6 to 24 months.

- A **Reference guide (97 pages)** that provides more technical and practical details than the counselling cards. Counsellors can use it as a handbook. Annex 2 consists of Take-home flyers that explain how to practice safer infant feeding, according to the mother's decision. The counsellor should use the relevant flyer to teach the mother, and she can then use it as a reminder at home.

- An **Orientation guide (66 pages)** that suggests ways for health care managers to train infant feeding counsellors on how to use these tools.

**Languages:** English, French and Spanish

6. MANAGEMENT OF ACUTE MALNUTRITION IN INFANTS (MAMI)

http://www.ucl.ac.uk/cihd/research/nutrition/mami

UCL/ENN/ACF. A Retrospective Review of the Current Field Management of Acutely Malnourished Infants under 6 Months of Age. [PowerPoint Presentation]

This power point presentation describes the proposed research project funded by the UN Interagency Standing Committee/Global Nutrition Cluster.

The overall aim of this project is to:

Investigate the management of moderately and severely malnourished infants under six months in emergency programmes in order to establish good practice guidelines.

More specifically:

1. Establish what currently is advised or recommended in the form of guidelines, policies and strategies by different Organizations regarding the Management of Acute Malnutrition in Infants (MAMI). Particularly to consider:
   - Admission and discharge criteria
   - Therapeutic management
   - Care practices and psychosocial support
   - Breastfeeding support.

2. Determine what is carried out in practice:
   - Are policies reflected by practice?
   - Numbers and % of TFP/SFP admissions 0-5.9 months of age
   - Numbers admitted versus numbers expected from Demographic and Health Surveys (DHS).

Languages: English

7. MANAGEMENT OF ACUTE MALNUTRITION

7.1 Management of Acute Malnutrition - Facility-Based


This report (52 pages) summarizes the results of the Consultation which took place in Geneva (6-7 September 2004) in order to:

1. Critically review new evidence in relation to the current WHO guidelines
2. Consider if changes to the guidelines may be required as a result of the new evidence
3. Consider if the guidelines for infants aged < 6 months should be modified
4. Assess the guidelines in relation to care of severely malnourished children with HIV/AIDS or children of unknown status in areas where there is a high prevalence of HIV
5. Identify a research agenda for inpatient care of severely malnourished children.

The consultation identified gaps in knowledge in several areas, particularly in relation to feeding very young infants and to caring for children living with HIV/AIDS.

Languages: English

http://www.who.int/nutrition/publications/Lit_review_report.pdf


These guidelines (50 pages) set out simple, specific instructions for the treatment of severely malnourished children.

They are divided into five sections:

1. General principles for routine care (the '10 steps')
2. Emergency treatment of shock and severe anaemia
3. Treatment of associated conditions
4. Failure to respond to treatment
5. Discharge before recovery is complete.

Target audience: staff responsible for the medical and dietary management of severely malnourished children.

Languages: English, French and Spanish

English: http://www.who.int/nutrition/publications/guide_inpatient_text.pdf
French: http://www.who.int/nutrition/publications/guide_inpatient_fra.pdf
Spanish: http://www.who.int/nutrition/publications/guide_inpatient_esp.pdf
7.1 Management of Acute Malnutrition - Facility-Based


This manual (175 pages) provides guidance on the management of:

1) Children who present with conditions that require admission to hospital:
   - Carrying out triage of all sick children (Chapter 1)
   - Giving treatment in common paediatric emergencies (Chapter 1)
   - Reaching the correct diagnosis when faced with a child presenting with a specific problem (Chapter 2)
   - Giving the recommended treatment for the most important paediatric medical problems in developing countries (Chapters 3 to 8)
   - Giving supportive care (Chapter 9)
   - How to monitor the child in hospital (Chapter 10)
   - Correct discharge procedures and counselling the mother (Chapter 11).

2) Sick children who have conditions that can be managed at home:
   - Carrying out medical assessment and treatment (Chapters 2–6, 8, 9 and 11)
   - Checking nutritional and immunization status (Chapter 11)
   - Assessment of feeding and nutrition counselling (Chapters 9 and 11)
   - Counselling the mother on home care and appropriate follow-up (Chapter 11)
   - Checking paediatric drug dosages (Appendix 2)
   - Carrying out practical procedures (Appendix 1).

Target audience: doctors, senior nurses and other senior health workers who are responsible for the care of young children at the first referral level in developing countries.

Languages: English, French and Russian


This manual (68 pages) provides practical guidelines for the management of patients with severe malnutrition. Emphasis is given to the management of severely malnourished children (under five years of age) in hospitals and health centres. The management of severely malnourished adults and adolescents is also considered briefly (in Chapter 9).

Management of malnutrition in disaster situations and refugee camps (is discussed in chapter 8), namely:
   - Establishing a therapeutic feeding centre
   - Location and capacity
   - Water supply and sanitation
   - Cooking facilities and supplies
   - Staff
   - Criteria for enrolment and discharge
   - Principles of management
   - Evaluation of the therapeutic feeding centre

Target audience: health personnel working at central and district level, including physicians, nurses, midwives, auxiliaries.

Languages: English, French, Spanish and Portuguese


This (7-page) brochure presents the joint endorsement by WHO, WFP, UNSCN and UNICEF of Community-Based Management of Severe Acute Malnutrition (SAM) using Ready-to-use therapeutic foods (RUTF).

The brochure provides a list of recommendations on action needed by countries to support community-based management of SAM:

- Adopting and promoting national policies and programmes
- Providing resources needed for management of SAM
- Integrating the management of SAM with other health activities

The brochure also provides a list of actions needed from the agencies and other partners to support national efforts through:

- Mobilisation of resources
- Local production or procurement of RUTF
- Capacity building
- Conducting operations research to improve protocols
- Jointly implementing expanded community-based programmes to combat SAM in major emergency situations.

Languages: English and French (a Press Release is available in Arabic, Chinese, English, French, Spanish and Russian)

For all available languages: [http://www.who.int/nutrition/topics/statement_community-based_malnutrition/en/](http://www.who.int/nutrition/topics/statement_community-based_malnutrition/en/)


This manual (247 pages) includes 12 chapters. Chapter 2 describes the principles and conceptual basis of Community-based Therapeutic care (CTC), with emphasis on:

- RUTF
- New classification of acute malnutrition
- Screening and admission by mid upper arm circumference (MUAC)

Chapters 6 “Supplementary Feeding Programme” and 7 “Outpatient Therapeutic Programme” provide a step-by-step guidance on how to plan, implement and monitor such programmes; namely: 1) planning; 2) equipment and supplies; 3) target group and admission/discharge criteria; 4) treatment protocols and procedures; 5) nutritional management; 6) medical management; 7) demonstration of food preparation; 8) data collection and monitoring.

**Target audience:** health and nutrition workers and programmes managers as well as government institutions and donors interested in supporting or implementing CTC programmes

Languages: English


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1 Also called Community-Based Therapeutic Care (CTC)
7.2 Management of Severe Malnutrition without Complications - Community-based Management of Acute Malnutrition (CMAM)¹


This report (58 pages) presents the results of a meeting on community-based management of severe malnutrition in children which had the following main objectives:

1. To collect evidence on the feasibility, safety and effectiveness of community-based approaches for treating severely malnourished children, considering published and unpublished research and field based experience.
2. To identify areas of consensus that can be translated into global guidelines and knowledge gaps, particularly on the following points:
   - Identification of severely malnourished children in the community and their referral
   - Dietary and medical protocols adapted for community-based treatment of severe malnutrition, including in situations of high HIV prevalence
   - Sustainability of community-based management of severe malnutrition in children
   - Integration of programmes for community-based management of malnutrition into the national health system and their scaling up.

As a follow-up of the meeting, participants agreed that WHO will lead a process to develop norms and standards and accompanying guidelines for policy makers and programme managers on community-based management of severe malnutrition in children including specifications of RUTF to facilitate production with local ingredients in countries.

Languages: English


This (56 pages) supplement presents a collection of articles written by people who have been involved in CTC programmes, mostly in emergency settings.

It is organised into sections based on field experiences relating to CTC:

- Section 2 describes the CTC approach
- Section 3 describes four country programme experiences of CTC
- Section 4 deals with technical and management issues of CTC including a discussion of cost issues
- Section 5 uses case studies to address issues around cultural, horizontal (across programmes), institutional and temporal integration.

Languages: English

This paper (35 pages) describes the CTC approach as a highly effective model for nutritional intervention in humanitarian emergencies, with substantial advantages over present intervention modalities. It includes 5 chapters:

1. Introduction: main disadvantages of Therapeutic feeding Centres (TFC), comparison of TFC and CTC in terms of coverage, risk of cross-infections, opportunity costs for families, impact on siblings, staff requirements, etc.
2. What is CTC: admission criteria, community mobilisation
3. Case studies: Ethiopia, Sudan and Malawi
4. Effectiveness of CTC: clinical outcomes, coverage and cost
5. Implications of CTC for humanitarian agencies and donors: staffing implications, logistics, interagency cooperation, prioritisation of resources.

The paper concludes that CTC is a highly effective model for nutritional intervention in humanitarian emergencies, with substantial advantages over present intervention modalities.

Languages: English  


This technical note (7 pages) responds to the frequently asked questions associated with CTC. It describes the CTC approach, implementation, and the role of RUTF. It summarizes results to date and outlines ongoing and planned activities.

The document concludes that experience to date has shown that CTC:
- Provides a promising alternative approach for selective feeding in emergencies and transition programming
- Meets or exceeds mortality, default and recovery rates against Sphere minimum standards
- Achieves high impact in terms of coverage
- Is well accepted by beneficiary communities and local and national authorities
- Appears to be cost-effective in comparison to Therapeutic Feeding Centres (TFC)/Nutrition Rehabilitation Units (NRU) approaches
- Differs in guiding principles from the standard TFC/NRU approaches used to date.

Languages: English  

This research aimed at assessing the effectiveness of outpatient treatment for severe malnutrition in an emergency relief programme. The authors conducted retrospective cohort study in an outpatient therapeutic feeding programme in Ethiopia from September 2000 to January 2001. They assessed clinical records for 170 children aged 6–120 months. The children had either marasmus, kwashiorkor, or marasmic kwashiorkor. Outcomes were mortality, default from programme, discharge from programme, rate of weight gain, and length of stay in programme.

The authors observed that outpatient treatment exceeded internationally accepted minimum standards for recovery, default, and mortality rates. However they report that time spent in the programme and rates of weight gain did not meet these standards. They conclude that outpatient care could provide a complementary treatment strategy to therapeutic feeding centres but that further research should be conducted to compare the effectiveness of outpatient and centre-based treatment of severe malnutrition in emergency nutritional interventions.

Languages: English

8. MICRONUTRIENT DEFICIENCIES


These guidelines (155 pages) have been developed by the Micronutrient Initiative (MI) and CDC in response to increasing interest by countries to undertake population-based assessment of vitamin and mineral deficiencies and the coverage of intervention programmes.

The main objective of this manual is to describe procedures and tools necessary to undertake a cross-sectional survey that will:

1. Provide estimates of the prevalence of iron deficiency anaemia, iodine deficiency, and vitamin A deficiency.
2. Provide information on the coverage of prevention and control programmes such as vitamin A capsule distribution, salt iodization, and flour fortification.

*Target Audience:* programme managers who are responsible for the design and implementation of surveys to assess vitamin and mineral deficiencies as well as others involved in the planning, implementation, analysis, and reporting of survey results.

*Languages: English*  


In this publication (24 pages), the authors explore options available for investigating micronutrient deficiencies, draw attention to best practices and include references to practical tools and guidelines.

- Chapter 2 describes indirect assessment of micronutrient deficiencies in food aid dependent populations: monitoring the micronutrient content of the diet.
- Chapter 3 reviews direct assessment: measurement of micronutrient deficiencies in individuals.
- Chapter 4: conclusion and way forward

The authors conclude that although tools for assessing micronutrient status are available, there are a number of challenges that still limit their implementation in the field: while some techniques have been developed using dried blood spots, direct collection and storage of liquid serum and urine remain a more reliable method of sample collection. They recommend that more work is needed on sample collection to make field surveys easier in remote locations.

*Languages: English*  
http://www.unsystem.org/SCN/Publications/RNIS/MicronutrientsSup.pdf
8. MICRONUTRIENT DEFICIENCIES


This 2-page statement reiterates the importance of averting micronutrient deficiencies or preventing them from getting worse among populations affected by emergencies. It emphasises the need to provide foods fortified with micronutrients (such as corn-soya blend, biscuits, vegetable oil enriched with vitamin A, and iodized salt) as part of food rations during emergencies. However, the three Organizations acknowledge the fact that foods fortified with micronutrients may not meet fully the needs of certain nutritionally vulnerable subgroups such as pregnant and lactating women, or young children. For this reason UNICEF and the WHO have developed the daily multiple micronutrient formula. The brochure includes a table summarising the nutrient composition of these multiple micronutrient supplements.

Languages: English


The package compiled by the Institute of Child health for UNHCR comprises:

1. A Power Point presentation
2. Handouts
3. Photo cards

It aims at raising awareness of micronutrient deficiencies among health and nutrition field staff. The handouts for group training (46 pages) provide simple information grouped under three sections:

Section 1: Important Nutrition Concepts
1. Food and Nutrition
2. Nutritional Requirements
3. Nutritional Deficiencies
4. Micronutrient Deficiency Disease
5. Nutritional Assessments
6. Causes of Malnutrition
7. Test Questions
8. Test Questions

Section 2: Micronutrient Deficiency Diseases
1. Anaemia
2. Vitamin A Deficiency
3. Iodine Deficiency Disorders
4. Beriberi
5. Aroboflavinosis
6. Pellagra
7. Scurvy
8. Rickets
9. Test Questions

Section 3: Detection and Prevention
1. Detection of Deficiencies
2. Intervention
3. Test Questions

Languages: English

http://www.ucl.ac.uk/cihd/research/nutrition/tools/mntraining
8.1 Micronutrient Deficiencies - Food Fortification


This report (36 pages) of an Expert Consultation held in Luxembourg in 2007 discusses how to reconcile the policy of reducing salt consumption to prevent chronic diseases and the policy of universal salt iodization (USI) to eliminate iodine deficiency.

The specific objectives of the meeting were to review and discuss:

- Benefits and disadvantages of using salt as a vehicle for micronutrient fortification
- Public health significance of mild-to-moderate iodine deficiency
- Public health significance of cardiovascular disease
- Impact of the message «Use iodized salt» on the overall salt consumption of the population
- Best way to deliver to the public a message addressing both the reduction of salt consumption and the consumption of iodized salt.

Languages: English

http://whqlibdoc.who.int/publications/2008/9789241596787_eng.pdf


The main purpose of these guidelines (376 pages) is to assist countries in the design and implementation of appropriate food fortification programmes, particularly in developing countries. They are intended to be a resource for governments and agencies that are currently implementing, or considering food fortification, and a source of information for scientists, technologists and the food industry. The document is organized into four complementary sections:

- Part I introduces the concept of food fortification as a potential strategy for the control of micronutrient malnutrition; and summarizes the prevalence, risk factors and health consequences of micronutrient deficiencies.
- Part II summarizes the prevalence, causes and consequences of micronutrient deficiencies, and the public health benefits of micronutrient malnutrition control. It lays the groundwork for public health personnel to assess the magnitude of the problem, and the potential benefits of fortification, in their particular situation.
- Part III provides technical information on the various chemical forms of micronutrients that can be used to fortify foods, and reviews experience of their use in specific food vehicles.
- Part IV describes the key steps involved in designing, implementing and sustaining fortification programmes, starting with the determination of the amount of nutrients to be added to foods, followed by the implementation of monitoring and evaluating systems, including quality control/quality assurance procedures, before moving on to the estimation of cost-effectiveness and cost–benefit ratios.

Target audience: nutrition-related public health programme managers, but should also be useful to all those working to control micronutrient malnutrition, including industry.

Languages: English

http://www.who.int/nutrition/publications/guide_food_fortification_micronutrients.pdf
8.1 Micronutrient Deficiencies - Food Fortification


This paper (pages) outlines three approaches by WFP to fortifying cereals in Afghanistan, Angola, and Zambia. It examines the challenges faced and the outcomes achieved.

- In Afghanistan, attempts to mill and fortify wheat flour using small-scale mills were successful but much larger-scale efforts would be needed to promote demand and reach the level of consumption required to address serious iron deficiencies across the country.

- In Angola, maize has been fortified to combat the persistent occurrence of pellagra. By providing fortification equipment to a commercial mill at the port of Lobito and using a vitamin and mineral pre-mix provided by UNICEF, this project has overcome many of the difficulties common in countries emerging from conflict to provide monthly fortified maize rations to some 115,000 beneficiaries.

- In Zambia, iron deficiency anaemia was a serious problem among camp-restricted refugees. WFP and its partners imported, installed, and trained workers in the use of two containerized milling and fortification units, halved iron-deficiency anaemia, and reduced vitamin A deficiency among camp residents.

All projects were successful in their own right, but also required a considerable amount of staff time and supervision as well as external technical expertise, limiting the potential for scaling up within the WFP operational context. In order to expand and sustain the provision of fortified cereal flour to WFP beneficiaries and beyond, getting the private milling sector as well as governments on board would be crucial.

Languages: English, French and Spanish


This manual (107 pages) was prepared to serve as a guide in the development and implementation of fortification programmes of wheat flour and maize meal. It consists of 10 sections:

1. Introduction
2. Cereal Staples
3. Milling and Processing
4. Types and Levels of Micronutrients to Add
5. Properties of Minerals
6. Properties of Vitamins
7. Fortification Methods – Large mills
8. Fortification Methods – Small mills
9. Quality Assurance and Control

Target audience policy makers, millers and programme managers, particularly in the developing countries.

Languages: English

http://www.micronutrient.org/resources/publications/Fort_handbook.pdf
8.1 Micronutrient Deficiencies - Food Fortification


This policy paper (16 pages) discusses the following:

1. Why WFP pays explicit attention to micronutrient deficiencies in its strategies and operations
2. WFP recent experiences with micronutrient-fortified foods and the fortification process
3. Recommendations on ways to expand such efforts at the policy level and through actions on the ground.

WFP Executive Board (EB) endorsed the policy paper and requested WFP Secretariat to add the following language to the Consolidated Framework of WFP Policies: A Governance Tool. (WFP/EB.A/2002/5-A/1):

“WFP will increase its efforts to meet micronutrient deficiencies among beneficiaries through the distribution of appropriately fortified foods and support for national and international fortification initiatives and policies, paying particular attention to micronutrient needs in emergencies and meeting the special needs of people living with HIV/AIDS. Ensuring adherence to WFP’s procurement specifications and quality control procedures and documenting effectiveness and impact of fortification activities are central to these efforts. WFP will expand its local initiatives in the production of fortified blended foods and biscuits, and in the milling and fortification of cereals. Institutional and staff capacity to implement these activities will be enhanced as necessary.”

Languages: Arabic, English, French and Spanish

8.2 Micronutrient Deficiencies - Iodine


This guide (108 pages) is the second revised version of the original document, which was entitled “Indicators for Assessing Iodine Deficiency Disorders and their Control through Salt Iodization” published in 1994.

It was produced following a consultation held in 2007 to update the manual in order to include new knowledge, such as new iodine requirements in pregnant and lactating women as well as refinements in monitoring household iodized salt use, and information on measuring thymoglobulin as an impact indicator.

The guide describes:

- The indicators used in assessing the magnitude of Iodine Deficiency Disorders (IDD) at different stages of the Universal Salt Iodization (USI) programme, and in monitoring and evaluating salt iodization and any other interventions for the control of IDD and their impact
- How to use and apply these indicators in practice
- How to assess whether iodine deficiency has been successfully eliminated
- How to judge whether achievements can be sustained and maintained for the decades to come.

**Target audience:** IDD programme managers and others in government who are involved in the implementation of IDD control programmes. It is also aimed at the salt industry and all others involved in IDD elimination.

**Languages:** English

8.3 Micronutrient Deficiencies - Iron


This *two-page* joint statement was issued following the publication of two studies evaluating the impact of iron and zinc supplementation on childhood mortality and severe morbidity in Nepal and Zanzibar.

The findings of the trial in Zanzibar where malarial transmission is intense and occurs year round, suggest that caution should be exercised in settings where the prevalence of malaria and other infectious diseases is high. Until the WHO recommendations are revised it is advised that iron and folic acid supplementation be targeted to those who are anaemic and at risk of iron deficiency. They should receive concurrent protection from malaria and other infectious diseases through prevention and effective case management.

The statement calls for a multi-sectoral approach which addresses the various factors in addition to iron deficiency play a significant role in producing anaemia in a given community, namely: infectious diseases such as malaria, helminth infections, other chronic infections, particularly HIV/AIDS and tuberculosis, as well as other nutritional deficiencies.

Languages: English


This *two-page* joint statement draws attention to the multi-factorial aetiology of anaemia and the need to combine food-based approaches to increase iron intake, with other measures in setting where infectious diseases are important factors contributing to the high prevalence of anaemia.

The statement calls for food-based approaches to increase iron intake through food fortification and dietary diversification as important sustainable strategies for preventing iron deficiency and iron deficiency anaemia (IDA) in the general population, as well as other strategies tailored to local conditions, taking into account the specific aetiology and prevalence of anaemia in a given setting and population group.

The following topics are briefly discussed:

- Anaemia, a public health problem
- The Multi-factorial aetiology of anaemia
- Strategies to combat anaemia.

Languages: English

8.3 Micronutrient Deficiencies - Iron


This document (35 pages) presents the conclusions and recommendations of a Joint World Health Organization/CDC Technical Consultation on the Assessment of Iron Status at the Population Level held in Geneva, Switzerland on 6–8 April 2004. The objectives of the consultation were to:

- Review the indicators currently available to assess iron status
- Select the best indicators to assess the iron status of populations
- Select the best indicators to evaluate the impact of interventions
- Control iron deficiency in populations
- Identify priorities for research related to assessing the iron status of populations.

The consultation concluded that serum ferritin is the best indicator of a response to an intervention to control iron deficiency and should be measured with the haemoglobin concentration in all programme evaluations. A table for classifying the prevalence of iron deficiency in populations is provided. However, this classification is based on experience of measuring ferritin and transferrin receptor in research studies and requires validation in population surveys.

Languages: English


This document (132 pages) is based in large part on a consultation convened in Geneva from 6-10 December 1993, jointly organized by the WHO, UNICEF, and the United Nations University (UNU). It deals primarily with indicators for monitoring interventions to combat iron deficiency, including iron deficiency anaemia, but it also reviews the current methods of assessing and preventing iron deficiency in the light of recent significant scientific advances. The document aims at providing scientists and national authorities worldwide with an up-to-date and authoritative review of iron deficiency anaemia, together with guidelines and recommendations on the following:

- Criteria for defining IDA, and the public severity of anaemia based on prevalence estimates
- Approaches to obtaining dietary information, and guidance in designing national iron deficiency prevention programmes
- Strategies for preventing iron deficiency through food-based approaches, i.e. dietary improvement or modification and fortification, and a schedule for using iron supplements to control iron deficiency and to treat mild-to-moderate iron deficiency anaemia.

For each strategy, desirable actions are outlined and criteria are suggested for assessment of the intervention. Attention is given to micronutrient complementarities in programme implementation, e.g., the particularly close link between the improvement of iron status and that of vitamin A.

Target audience: scientists and national authorities worldwide and managers of national programmes dealing with the prevention and control of micronutrient malnutrition.

Languages: English

8.4 Micronutrient Deficiencies - Niacin Deficiency “Pellagra”


This document (42 pages) on niacin deficiency/pellagra provides information on:

- The history of pellagra
- Niacin properties: chemistry, physiology and metabolic functions
- Recommended daily allowance
- Sources of niacin and its stability in foods
- Recent outbreaks of pellagra and lessons learnt
- Strategies to prevent pellagra in large populations affected by emergencies

A literature review of the epidemiology of thiamine deficiency, the properties and functions of the vitamin thiamine, and a discussion of food sources of this vitamin and its stability is also provided.

Languages: English

This document on thiamine deficiency looks at:

- The risk factors leading to outbreaks of thiamine deficiency
- Signs and symptoms of the deficiency disease
- The strategies to prevent the deficiency in populations affected by major emergencies.

A literature review of the epidemiology of thiamine deficiency, the properties and functions of the vitamin thiamine, and a discussion of food sources of this vitamin and its stability is also provided.

Languages: English

## 8.6 Micronutrient Deficiencies - Vitamin A Deficiency (VAD)

http://www.who.int/nutrition/topics/vad/en/
http://www.who.int/vaccines/en/vitamina.shtml
http://www.hki.org/programs/vitamin_a.html?gclid=CL7Lsbl05OCFSTMXgodqHRttA


This report (42 pages) focuses on vitamin A supplementation in 103 countries (considered ‘priority countries for vitamin A supplementation’) that meet at least one of the following criteria:

- **High under-five mortality rate (U5MR):** Supplementation with vitamin A is recommended in all countries where the U5MR exceeds 70 deaths per 1,000 live births, an internationally accepted proxy indicating a high risk of deficiency among children under five.

- **Vitamin A deficiency as a public health problem:** Deficiency may also exist in countries with relatively low under-five mortality. Thirty-five additional priority countries were selected based on an elevated prevalence of vitamin A deficiency, which was determined using data from national-level assessments registered in the Micronutrient Deficiency Information System of WHO.

- **History of programming:** Countries which did not meet the above criteria but whose governments have recognized vitamin A deficiency as a public health problem and are committed to programming for vitamin A supplementation.

**Languages:** English and French


Chapter 7 of this publication provides comprehensive information on vitamin A, namely:

- Its role in human metabolic process
- Populations at risk and consequences of vitamin A deficiency
- Dietary sources
- Evidence for making recommendations
- Determining mean requirements and setting safe levels of intake
- Recommended safe intakes
- Toxicity
- Future research

**Languages:** English

http://www.fao.org/DOCREP/004/Y2809E/y2809e0d.htm#bm13
8.7 Micronutrient Deficiencies - Vitamin C Deficiency “Scurvy”


This document (71 pages) is intended primarily for interventions involving refugees, but is also suitable as a guide for ensuring adequate vitamin C intake in most emergency settings. It reviews the strategies and past experiences of the prevention of scurvy in refugee situations, and analyses factors influencing their success or failure. Innovative ways of improving vitamin C intakes are recommended and interventions are proposed for field-testing. Also included are literature review of the epidemiology of scurvy and its signs and symptoms, the properties and functions of vitamin C, and a discussion of food sources of this vitamin and its stability. The recommended daily allowance (RDA) for vitamin C, including “minimum” as distinct from “optimum” intakes, is also discussed.

Languages: English

9. NUTRITION

9.1 Nutrition - Anthropometric Indicators


This (167 pages) report describes one of the Global Nutrition Cluster Projects undertaken by Save the Children UK to investigate the relationship between Mid-Upper Arm Circumference (MUAC) and Weight for Height (WFH) measurements of acute under nutrition. This research was undertaken because:

- Different indicators classify different children and different numbers of children as malnourished: and
- The choice of indicator will have an impact on decisions to intervene.

The report is based on the results of 560 anthropometric surveys of 459,036 children aged between six and fifty-nine months living in 31 countries collected under emergency conditions.

The authors conclude that MUAC is the most appropriate indicator for use in admission into emergency feeding programmes in terms of achieving SPHERE minimum standards for coverage and that MUAC is a better predictor of mortality than WFH (NCHS). However, although the evidence is strongly in favour of using MUAC for estimating prevalence and for admission to therapeutic feeding programmes, the authors conclude that more information is needed on the use of MUAC as a monitoring tool and for discharge. The authors also recommend research on the choice of MUAC thresholds for admission to supplementary feeding programmes.

Languages: English,

Part 1 Background, research aims and methods:
http://www.ocha.unog.ch/humanitarianreform/Portals/1/cluster%20approach%20page/clusters%20pages/Nutrition/Myatt_SAVE_UK_MUAC_Nutrition_Cluster_Oct22_07_Section1_2_Optimized.pdf

Part 2 Results:
http://www.ocha.unog.ch/humanitarianreform/Portals/1/cluster%20approach%20page/clusters%20pages/Nutrition/MyattSAVE_UK_MUAC_Nutrition_Cluster_Oct22_07_Section%203_4_optimized.pdf

Part 3: Conclusions and policy implications:
http://www.ocha.unog.ch/humanitarianreform/Portals/1/cluster%20approach%20page/clusters%20pages/Nutrition/MyattSAVE_UK_MUAC_Nutrition_Cluster_Oct22_07_Section_5_Conclusions_Recommendations_optimized.pdf

Part 4 Annexes:
http://www.ocha.unog.ch/humanitarianreform/Portals/1/cluster%20approach%20page/clusters%20pages/Nutrition/MyattSAVE_UK_MUAC_Nutrition_Cluster_Oct22_07_Section_5_Conclusions_Recommendations_optimized.pdf
9.1 Nutrition - Anthropometric Indicators


The Expert Committee’s report (460 pages) is intended to provide a framework and contexts for present and future uses and interpretation of anthropometry. Technical aspects of this framework are presented in section 2, and specific applications of anthropometry appropriate for a particular physical status or for particular age groups are dealt with in subsequent sections. For some groups, such as adolescents and the elderly, there has been little previous research, and the report provides a basis and impetus for future studies. For other age groups, such as infants and children, the report provides a re-evaluation in the light of current research, and allows for an integrated approach to anthropometry throughout life. It is intended to furnish scientists, clinicians, and public health professionals worldwide with an authoritative review, reference data, and recommendations for the use and interpretation of anthropometry that should be appropriate in many settings.

Languages: English

http://www.helid.desastres.net/?e=d-000who--000--1-0--010---4-----0--0-10l--11en-5000---50-about-0---01131-001-110utfZz-8-0-0&a=d&cI=CL5.8&d=Jh0211e
9.2 Nutrition - General Information


This report *160 pages* of a joint WHO/FAO Expert consultation examines the science base of the relationship between diet and physical activity patterns, and the major nutrition-related chronic diseases. It discusses changes in dietary and lifestyle patterns, chronic Non Communicable Diseases (NCDs) - including obesity, diabetes mellitus, cardiovascular disease (CVD), hypertension and stroke, and some types of cancer – which are becoming increasingly significant causes of disability and premature death in both developing and newly developed countries, placing additional burdens on already overtaxed national health budgets.

The Consultation provided an opportune moment for FAO and WHO to draw on the latest scientific evidence available and to update recommendations for action to governments, international agencies and concerned partners in the public and private sectors. The overall aim of these recommendations is to implement more effective and sustainable policies and strategies to deal with the increasing public health challenges related to diet and health.

Languages: English

http://whqlibdoc.who.int/trs/WHO_TRS_916.pdf

**WFP Food and Nutrition Handbook. Rome, World Food Programme, 2000.**

This handbook *pages* is aimed at staff at all levels who are involved with the delivery of food assistance to beneficiaries in order to provide them with:

- A better understanding of food and nutrition issues as they relate to WFP.
- A practical tool to tackle a number of basic nutrition related tasks, relevant to situations in which they work.
- The ability to judge when specialised nutrition advice should be sought.

The handbook covers the following topics:

- Basic food and nutrition concepts
- The process of assessing and analysing types of nutritional problems and their causes
- Practical applications of nutrition interventions
- The range of nutrition related programmes supported by WFP
- Tools for planning an adequate ration
-Selective feeding modalities
- General food distribution
- Core principles of nutrition information, education and communication as complementary intervention strategies.

Languages: English, French and Spanish

Not available on-line
9.3 Nutrition - Requirements


This report provides:

- Updates on protein and amino acid requirements in health and disease for all age groups and pregnant and lactating mothers.
- Recommendations on protein requirements in health and disease, including their implications for developing countries.
- Recommendations on protein quality and labelling for worldwide use.

It is useful for nutrition professionals who need to:

- Assess the adequacy of population food intakes.
- Set national food and nutrition guidelines and regulations on the protein and amino acid content of industrially processed foods.
- Determine nutrient needs and evaluating the adequacy of rations for vulnerable groups.

Languages: English

To order a copy:
http://www.who.int/bookorders/anglais/detart1.jsp?sesslan=1&codlan=1&codcol=10&codcch=935


This report presents the outcome of a Joint FAO/WHO Expert Consultation held in Bangkok, 21–30 September 1998. The report also includes up-to-date evidence that has since become available to answer a number of issues which remained unclear or controversial at the time of the Consultation.

The consultation covered the full range of vitamin and mineral requirements - 19 micronutrients in all - including their role in normal human physiology and metabolism, and conditions of deficiency.

Languages: English

Table of contents: http://whqlibdoc.who.int/publications/2004/9241546123.pdf

To order a hard copy:
http://www.who.int/bookorders/anglais/detart1.jsp?sesslan=1&codlan=1&codcol=15&codcch=548
The specific objectives were to:

- Review the background documents on the state of the art of the scientific literature assembling the best evidence on the topic.
- Deliberate on and arrive at recommendations for energy requirements throughout the life cycle. Recommendations were expected to be reached by consensus, and where differences persisted the reasons for those differences were to be clearly outlined, with all sides presented and appropriately reflected in the report of the expert consultation.
- Examine the feasibility of arriving at minimum requirements that may be of use in estimating the numbers of individuals in populations who are unable to meet energy adequacy.
- Comment on the consequences of deficit and excess of energy, and to recommend ways by which the health, social and economic consequences of these can be minimized or avoided.
- Suggest areas where further research is needed, either to deal with gaps in the knowledge related to energy requirements in specific groups or situations, or to facilitate the collection of normative data that will aid the process of arriving at future recommendations for energy requirements.

**Target audience:** international agencies and their member countries/food and nutrition policy planners

**Languages:** English

[http://www.fao.org/docrep/007/y5686e/y5686e00.htm](http://www.fao.org/docrep/007/y5686e/y5686e00.htm)

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This WHO technical consultation on Nutrient Requirements for People Living with HIV/AIDS (PLWHA) was held to:

1. Review the relationship between nutrition and HIV/AIDS
2. Review the scientific evidence on the role of nutrition in HIV transmission, disease progression and morbidity
3. Review recommendations related to nutritional requirements for PLWHA
4. Identify research priorities to support improved policies and programmes.

The report *(31 pages)* presents the conclusions and recommendations of the consultation on the following:

- Macronutrients
- Energy
- Protein
- Fat
- Micronutrients
- Multiple micronutrient supplements
- Nutrition and antiretroviral therapy
- Knowledge gaps and research needs

**Languages:** English

[http://www.who.int/nutrition/publications/Content_nutrient_requirements.pdf](http://www.who.int/nutrition/publications/Content_nutrient_requirements.pdf)
9.4 Nutrition - WHO Child Growth Standards


This (36 pages) report provides information on the results of an informal consultation held in June 2008 to:

1. Examine the consequences of the use of the WHO child growth standards on the outcomes of malnourished children.
2. Provide an estimation of the changes in the assessment of the nutrition situation and in the number of malnourished children potentially eligible for therapeutic and supplementary feeding, with the introduction of the WHO standards.
3. Formulate recommendations for the use of the WFH index of the WHO standards in emergencies and identify knowledge gaps that should be addressed.

The relevance and importance of using the new WHO standards in emergency nutrition programmes was agreed upon. It was concluded that the new standards would identify children at higher risk for dying from severe acute malnutrition at an earlier stage, making them easier to treat at a lower individual cost. Participants agreed on guiding principles grouped under the following headings:

- Admission and discharge criteria to therapeutic and supplementary feeding programmes
- Estimating of prevalence of acute malnutrition in surveys
- Ensuring a smooth transition from NCHS reference to WHO standards, including resource implications
- Research gaps that need to be addressed

In follow-up of the meeting, participants agreed that normative and co-ordinating agencies will lead the process of transitioning from NCHS reference to the WHO standards. Further action will include the creation of a technical fact sheet, as well as an operational road map, to help guide agencies through the process of adoption.

Languages: English

Not yet available on-line.


This (6-pages) article provides algorithms for converting estimates of child malnutrition based on the NCHS reference into estimates based on the WHO standards. Sixty-eight surveys from the WHO Global Database on Child Growth and malnutrition were analyzed using the WHO standards to derive estimates of underweight, stunting, wasting and overweight. The prevalence figures based on the NCHS reference were taken directly from the database. National/regional estimates with a minimum sample size of 400 children were used to develop the algorithms. The resulting algorithms were validated using a different set of surveys, on the basis of which the point estimate and 95% confidence interval (CI) of the predicted WHO prevalence were compared to the observed prevalence.

In general, the predicted WHO estimates were found to be higher than the respective NCHS estimates for stunting, wasting and overweight, but that the reverse applied for underweight. The four algorithms had a high degree of predictability as demonstrated by the validation results. On average, the magnitude of the differences was very small. The authors concluded that in order to obtain comparable data concerning child malnutrition, individual survey data should be analyzed using the WHO standards. When the raw data are not available, the algorithms presented in the paper provide a highly accurate tool for converting existing NCHS estimates into WHO estimates.

Languages: English

http://www.who.int/childgrowth/publications/algorithms.pdf

Seal A and Kerac M. Operational implications of using 2006 World Health Organization growth

49
The study aimed at assessing the implications of adopting the WHO 2006 growth standards in combination with current diagnostic criteria in emergency and non-emergency child feeding programmes. The method consisted of secondary analysis of data from three standardised nutrition surveys (n=2555) for prevalence of acute malnutrition, using weight for height (WFH) z score (<-2 and <-3) and percentage of the median (<80% and <70%) cut-offs for moderate and severe acute malnutrition from the NCHS/WHO growth reference (NCHS reference) and the new WHO 2006 growth standards (WHO standards). The study was conducted in refugee camps in Algeria, Kenya, and Bangladesh and covered children aged 6-59 months.

Important differences were observed in the WFH cut-offs used for defining acute malnutrition obtained from the WHO standards and NCHS reference data. These varied according to a child's height and according to whether z score or percentage of the median cut-offs are used. If applied and used according to current practice in nutrition programmes, the WHO standards will result in a higher measured prevalence of severe acute malnutrition during surveys but, paradoxically, a decrease in the admission of children to emergency feeding programmes and earlier discharge of recovering patients. The expected impact on case fatality rates of applying the new standards in conjunction with current diagnostic criteria is unknown.

The authors recommend a full assessment of the appropriate use of the new WHO standards in the diagnosis of acute malnutrition before the standards are adopted by organizations that run nutrition programmes targeting acute malnutrition.

Languages: English  
http://www.bmj.com/cgi/content/full/334/7596/733


This article (6 pages) presents the results of a study undertaken to compare growth patterns and estimates of malnutrition based on the WHO Child Growth Standards (‘the WHO standards’) and the NCHS/WHO international growth reference (‘the NCHS reference’), and discuss implications for child health programmes.

Secondary analysis of longitudinal data was performed to compare growth patterns (birth to 12 months), and data from two cross-sectional surveys were used to compare estimates of malnutrition among under-fives. Main results indicate that underweight rates increased during the first six months and thereafter decreased when based on the WHO standards. For all age groups stunting rates were higher according to the WHO standards. Wasting and severe wasting were substantially higher during the first half of infancy. Thereafter, the prevalence of severe wasting continued to be 1.5 to 2.5 times that of the NCHS reference. The increase in overweight rates based on the WHO standards varied by age group, with an overall relative increase of 34%.

The authors concluded that the WHO standards provide a better tool to monitor the rapid and changing rate of growth in early infancy. Their adoption will have important implications for child health with respect to the assessment of lactation performance and the adequacy of infant feeding. Population estimates of malnutrition will vary by age, growth indicator and the nutritional status of index populations.

Languages: English  
http://www.who.int/childgrowth/publications/Comparison_implications.pdf

WHO. Child Growth Standards - Training Course on Child Growth Assessment Modules. Geneva,
The training course includes the following modules (booklets):

A: Introduction (includes a glossary with definitions of terms)
B: Measuring a Child's Growth
C: Interpreting Growth Indicators
D: Counselling on Growth and Feeding
E: Photo Booklet

Modules B–D are instructional units that contain exercises, while modules A and E contain information and photos to accompany the instruction. The modules are intended to be completed in sequence for about 3 1/2 days. It teaches how to measure weight, length and height, how to interpret growth indicators, investigate causes of growth problems and counsel caregivers.

**Target audience:** primarily health care providers who measure and assess the growth of children or who supervise these activities.

**Languages:** English

http://www.who.int/childgrowth/training/en/


This report (336 pages) presents the first set of WHO Child Growth Standards (i.e. length/height-for-age, weight-for-age, weight-for-length, weight-for-height and body mass index (BMI)-for-age) and describes the methodical process followed in their development. The first step in this process was a consultative expert review of some 30 growth curve construction methods, including types of distributions and smoothing techniques to identify the best approach to constructing the standards. Next was the selection of a software package flexible enough to allow the comparative testing of the alternative methods used to generate the growth curves. Then the selected approach was applied systematically to search for the best models to fit the data for each indicator.

The growth standards presented in this report depict normal early childhood growth under optimal environmental conditions and can be used to assess children everywhere, regardless of ethnicity, socioeconomic status and type of feeding.

The report also compares the new standards with the NCHS/WHO growth reference and the 2000 CDC growth charts. Electronic copies of the WHO growth charts and tables together with tools developed to facilitate their use are available on the Web: www.who.int/childgrowth/en.

**Languages:** English


De Onis M, Garza C, Victora CG, Bhan MK and Norum KR. The WHO Multicentre Growth...
9.4 Nutrition - WHO Child Growth Standards


This supplement of the Food and Nutrition Bulletin (89 pages) consists of the following papers which describe the rationale and methodology of the WHO MGRS:

- Rationale
- Planning, study design and methodology
- Measurement and standardization protocols
- Assessment of gross motor development
- Managing data for a multicountry longitudinal study
- Implementation of the WHO Multicentre Growth Reference Study in Brazil
- Implementation of the WHO Multicentre Growth Reference Study in Ghana
- Implementation of the WHO Multicentre Growth Reference Study in India
- Implementation of the WHO Multicentre Growth Reference Study in Norway
- Implementation of the WHO Multicentre Growth Reference Study in Oman
- Implementation of the WHO Multicentre Growth Reference Study in United States

Languages: English

10. NUTRITION IN EMERGENCIES

10.1 Nutrition in Emergencies - Assessment


The manual (231 pages) aims at:
1. Providing guidance on issues relating to nutrition and mortality surveys.
2. Standardizing survey methodology used by WFP staff, consultants and implementing partners as a means of ensuring quality.

It includes six chapters:
1. Defining and measuring malnutrition
2. Defining and measuring mortality
3. Designing a survey
4. Using and interpreting results for decision making
5. Ethical Issues
6. The end point: example of a good survey report.

Target audience:
- WFP staff involved in nutrition-related data collection and/or nutrition interventions.
- WFP staff involved in nutrition intervention decision-making.
- WFP consultants and partners involved in nutrition surveys and interventions.

Languages: English

http://www.unhcr.org/publ/PUBL/45f6abc92.pdf


This briefing note (12 pages) aims at clarifying some issues often raised when a survey is undertaken. It provides straightforward guidance on the following key questions:
- When should I conduct a nutrition survey?
- With what frequency should I conduct nutrition surveys?
- What other key issues should I consider?
- Who is the target population?
- Where should I conduct the nutrition survey?
- What indicators should I measure?
- Where can I find the most important manuals on nutrition survey design and analysis?
- Where can I find software available for analysing nutrition surveys?
- Is it possible to generate overall prevalence from camp-based surveys?
- How many staff do I need to conduct the survey?
- How can headquarters support me with the nutrition survey?
- How should I disseminate the results of the nutrition survey?

Target audience: UNHCR health, HIV and nutrition coordinators and implementing partners

Languages: English

http://www.unhcr.org/protect/PROTECTION/47b40c912.pdf
10.1 Nutrition in Emergencies - Assessment


The Standardized Monitoring and Assessment of Relief and Transitions (SMART) is a voluntary, collaborative network of organizations and humanitarian practitioners that includes donors, policymakers, and leading experts in emergency epidemiology and nutrition, food security, early warning systems, and demography. It includes all humanitarian organizations: donors, international and UN agencies, NGOs, universities, research institutes and governments. SMART addresses issues of common interest to many organizations:

- The need to standardize methodologies for determining comparative needs based on nutritional status, mortality rate, and food security.
- The need to establish comprehensive, collaborative systems to ensure reliable data is used for decision making and reporting.

The SMART Methodology Version 1 (129 pages) provides a basic, integrated method for assessing nutritional status and mortality rate in emergency situations. It provides the basis for understanding the magnitude and severity of a humanitarian crisis. The optional food security component provides the context for nutrition and mortality data analysis. The SMART Methodology Version 1 draws from core elements of several existing methods and current best practices. The manual covers the following topics: (1) the steps in undertaking a survey; (2) nutrition and mortality survey; (3) using Nutrisurvey software, step-by-step; and (4) food security (optional component). This manual is designed to be used in conjunction with the accompanying software which can be downloaded free from either www.smartindicators.org or from www.nutrisurvey.de/ena/ena.html.

**Target audience:** host-government partners and humanitarian organizations

**Languages:** English


This handbook (486 pages) is intended for use in any emergency situation or protracted humanitarian crisis, whether due to a sudden natural disaster, drought, disease or economic collapse (a slow-onset crisis) or conflict, and to address the needs of both resident and internally displaced persons. It aims to provide sufficient guidance for programme staff who have some experience and relevant training to: (i) plan and organize an ‘initial investigation’ or a ‘rapid’ assessment, and (ii) draw up the terms of reference for and commission an ‘in-depth’ assessment.

The handbook comprises five parts and annexes:

1. Part I: chapters 1 and 2 summarize different phases and core principles of emergency food security assessments (EFSA)
2. Part II: Chapters 3 to 7 provide information on EFSA analysis framework and assessment methods
3. Part III: Chapter 8 initial investigation
4. Part IV: Chapters 9 to 14 step-by-step guidance on how to plan and undertake rapid assessment and how to decide on response options
5. Part V: Chapter 15 how to organise in-depth assessment

Un updated version is in progress and is expected to be finalized in 2008.

**Target audience:** primarily WFP staff, but also partners with whom WFP collaborates.

**Languages:** English, French and Spanish

http://www.wfp.org/english/?n=7332andRepType=GuidelinesandShowResults=false

10.1 Nutrition in Emergencies - Assessment


Research by HelpAge International into the situation of older people in disasters and humanitarian crises found that older people are seen as a low priority by most humanitarian agencies and very few organisations develop programmes that consider their specific needs. This (48 pages) publication seeks to provide an overview of the main nutritional issues facing older people in emergencies and that give recommendations for ways in which these can be addressed. Specifically, it aims at:

- Providing a summary of the nutritional requirements for older people. It highlights significant changes in the requirements in comparison with younger adults and examines the requirements in the light of current emergency food and nutrition interventions.
- Providing a framework, for piloting, reviewing and designing nutrition interventions for older people in emergencies.
- Assisting organisations to more effectively address the nutritional needs of older people in emergencies.

It is organized into the following sections:

- Older People in Emergencies – Key Issues
- Risk Factors Affecting the Nutritional Status of Older People in Emergencies
- Nutritional Requirements for Older People
- Guiding Principles for Nutrition Programmes Targeting Older People in Emergencies
- Programme Design Framework for Emergency Nutrition Interventions for Older People

**Languages: French**

http://www.helpage.org/Resources/Manuals


This article (28 pages) describes simple techniques suitable for the assessment of the nutritional status of adults aged 20-60 years in emergency-affected populations.

The authors examine BMI (Body Mass Index), MUAC (Mid-upper Arm Circumference), and clinical models for their usefulness in determining the prevalence of chronic under nutrition in adults at the population level, and also for screening severely undernourished adults for entrance to feeding clinics. They argue that BMI is inappropriate as it is affected by oedema and body shape and is therefore difficult to measure. They recommend that MUAC in combination with clinical signs used to screen adult entrance into feeding centres:

- Making only preliminary recommendations, the report argues for more research to reach a consensus on a definitive method to assess adult under nutrition has been reached.

**Languages: English**

10.2 Nutrition in Emergencies – Management


The book (249 pages) covers the concepts, principles, and precise measures needed to ensure adequate nutrition in the relief, rehabilitation and development phases. Details range from a list of the equipment needed for a weight-for-height survey, through a diagram illustrating arrangements for ration distribution in camp situations, to instructions for preparing feeding mixtures for the treatment of specific deficiency diseases.

The book consists of the following chapters:

1. Nutritional requirements: recommendations for mean daily per capita intakes of energy and protein and for micronutrients and other specific nutrients.
2. Major nutritional deficiency diseases.
3. Methodology for measuring malnutrition, including precise instructions for conducting rapid nutritional surveys, individual screening, and nutritional surveillance.
4. Detailed guide to the planning, organization, and delivery of general feeding programmes aimed at the affected population as a whole.
5. Guidelines for selective feeding programmes: both the supplementary feeding of vulnerable groups and the therapeutic feeding of individuals suffering from deficiency diseases.
6. Advice on the organization of services to ensure priority immunizations and to monitor and treat each of twelve infectious diseases commonly seen in developing countries.

Target audience: health and nutrition professionals and other intersectoral personnel involved in the management of major emergencies with a nutrition component.

Languages: English

10.4 Nutrition in Emergencies - Training


The toolkit outlines the key basic interventions for nutritional support to individuals and groups during an emergency situation. It provides the what, why, when, and how for 12 different interventions:

1. Infant and Young Child Feeding in Emergencies
2. Treatment of diarrhoea with ORT/Zinc
3. Prevention and Treatment of Vitamin A Deficiency
4. Prevention and Treatment of Micronutrient Deficiencies
5. Management of Moderate Acute Malnutrition
6. Management of Severe Acute Malnutrition
7. Nutrition, HIV and AIDS
8. The Psychosocial Components of Nutrition
9. Nutritional care for Groups with Special Needs
10. The Use and Role of Food Assistance
11. Food Handling, Storage and Preparation
12. Household Food Security and Livelihoods

Target audience: nutritionists and humanitarian workers.

Languages: English


The Harmonized Training Materials Package (HTP) consists of 21 training modules grouped into 4 parts:

1. Introduction and concepts (Introduction to nutrition in emergencies; Agency mandates and coordination mechanisms; Understanding malnutrition; Micronutrient malnutrition; Causes of malnutrition)

2. Nutrition needs assessment and analysis (Measuring malnutrition: individual assessment; Measuring malnutrition: population assessment; Health assessment and the link with nutrition; Food security assessment and the link with nutrition; Nutrition information and surveillance systems)

3. Interventions to prevent and treat malnutrition (General food distribution; Supplementary feeding; Therapeutic care; Micronutrient interventions; Health interventions; Livelihood interventions; Infant and young child feeding; HIV and AIDS nutrition; Nutrition information, education and communication).

4. Monitoring, evaluation and accountability (Monitoring and evaluation; Standards and accountability)

Each module comprises four sections:

1. Briefing paper for senior decision makers
2. Technical notes for practitioners
3. Trainers' guide
4. Reference material/sources.

Languages: English

11. SELECTIVE FEEDING PROGRAMMES


This retrospective study (69 pages) of field programmes implemented between 2002 and 2005 was designed “to determine the overall effectiveness of emergency SFPs as well as the relative cost-efficiency of this type of feeding programme compared to other types of intervention with similar objectives, and to examine the context specific effectiveness of emergency SFPs”.

The study database comprised 82 programmes implemented by 15 organizations in 22 countries. Only 67 of these included in the study supplied statistical information on the outcomes of the programme.

The study identified a series of problems:

- **Programme reporting and analysis**: found to be grossly inadequate in many programmes with information gaps, inaccuracies, statistical errors and other inappropriate uses of information. A key finding of the study is the need to establish minimum reporting standards that must be adhered to by implementing emergency SFP.

- **Impact**: while a large number of children have significantly benefited from implementation of the programmes reviewed it is unlikely that the programmes have had a significant impact on levels of wasting at population level due to low levels of coverage and recovery.

Languages: English

http://www.ennonline.net/pool/files/research/Retrospective_Study_of_Emergency_Supplementary_Feeding_Programmes_June%202007.pdf


These guidelines (20 pages) are now superseded by the revised version “Selective Feeding Guidelines for the Management of Malnutrition in Emergencies” (2008). They describe the basic principles and design elements concerning food and nutrition related aspects of Selective Feeding Programmes in Emergency and Relief situations. The nutrition strategies addressed in these guidelines are to enable an effective response and nutrition rehabilitation. They are organised as follows:

I. Purpose
II. Basic Principles
III. Feeding Programme Strategy
IV. Supplementary Feeding Programmes
V. Therapeutic Feeding Programmes
VI. Monitoring and Evaluation
VII. Food Commodities
VIII. Management Issues

Medical and other care approaches are not dealt with in these guidelines.

Target audience: WFP and UNHCR and other relief staff in the design, implementation and monitoring of Selective Feeding Programmes in both emergencies and protracted relief situations.

Languages: English

http://www.who.int/nutrition/publications/en/selective_feeding_e
This document provides guidance on the design of food targeting systems in rapid and slow onset emergencies in order to: a) reach those in greatest need, b) avoid harm (e.g., disruption of markets), and c) ensure efficient and effective use of resources.

The document provides guidance on the following six topics:
- Assessing and defining food needs
- Setting objectives
- Determining eligibility
- Distributing food
- Monitoring the targeting system
- Resourcing targeting

Languages: English

http://www.ennonline.net/fex/22/supplement22.pdf
13. UN/GLOBAL NUTRITION CLUSTER - ROLE AND MANDATE IN FOOD AND NUTRITION IN EMERGENCIES

13.1 Collaboration between Agencies - Memorandum of Understanding


This (14 pages) Memorandum of Understanding (MOU) signed between UNHCR and WFP in 2002 supersedes previous versions, the first one having been signed in 1985. It sets out the principles regarding the following main topics:

- Objectives and scope of collaboration
- Division of responsibility and arrangements as regards:
  - Planning and needs assessment:
  - Resource mobilization
  - Logistics
  - Appeals
  - Monitoring and evaluation
  - Nutritional surveillance
  - Reporting and coordination.

The last section describes the general conditions governing the MOU.

Languages: English

English http://www.unhcr.org/publ/PUBL/45fa6a8b2.pdf
13.2 Global Nutrition Cluster


This (2 pages) briefing note provides basic information on the Global Nutrition Cluster, namely:

- Partners at the global level.
- Main partners at the field level
- Concrete tools and support provided by global lead to the field-based Nutrition Cluster:
- Links to other clusters/sectors in the field
- Overview of sector goals and priorities:
  ✓ Coordination:
  ✓ Capacity Building
  ✓ Emergency Preparedness and Response
  ✓ Assessment, Monitoring and Surveillance
  ✓ Supply:

Languages: English

This guide (174 pages) aims at strengthening programme planners’ capacity to protect and promote good nutrition in crisis situations. It is structured as follows.

1. **Part I: Issues and concepts for protecting and promoting good nutrition in crisis situations** outlines the relationships between nutrition and sustainable livelihoods.

2. **Part II: Approaches for protecting and promoting good nutrition in crisis situations** examines possible approaches to protecting and promoting good nutrition.

3. **Part III: Household food security and nutrition situation assessment and analysis in crisis situations** discusses the requirements for assessing and analysing households’ food security and nutrition situation.

4. **Part IV: Planning and targeting household food security and nutrition actions** examines issues related to the planning and selection of actions in crisis situations that aim to ensure positive and sustainable nutritional outcomes.

5. **Part V: Nutrition actions in crisis situations** presents different types of interventions organised under 10 themes: [http://www.fao.org/docrep/008/y5815e/y5815e09.htm#bm9](http://www.fao.org/docrep/008/y5815e/y5815e09.htm#bm9)
   - Food production and diversification
   - Access to food
   - Household food utilization
   - Health, water and sanitation
   - Feeding and caring practices
   - Community-based growth monitoring and promotion
   - Food and nutrition education
   - Training and extension
   - Food aid
   - Information systems

6. **Part VI: Technical resources and sources for methodologies and practical tools** includes a number of technical briefs in on some of the subject areas discussed.

**Target audience:** planners and technicians in the fields of nutrition, food security, agriculture, and community and social development in relief and development modalities.

**Languages:** English

[http://www.fao.org/docrep/008/y5815e/y5815e00.htm](http://www.fao.org/docrep/008/y5815e/y5815e00.htm)
The first aim of the handbook is to provide a better understanding of OCHA’s role in coordinating the response to complex emergencies (that are primarily man-made, often with conflict as a major cause), and how it relates to the rest of the humanitarian community. It is a practical handbook offering information on a variety of issues from administrative matters to how to deal with policy issues in the field. Since the handbook is intended as an aid to orientation in the field, and not as an exhaustive field manual, it provides numerous reference points for further sources of detailed information.

The document provides information on the following:

1. Overview of OCHA:
   - Mission: “to mobilize and coordinate the collective efforts of the international community, in particular those of the UN system, to meet in a coherent and timely manner the needs of those exposed to human suffering and material destruction in disasters and emergencies. This involves reducing vulnerability, promoting solutions to root causes and facilitating the smooth transition from relief to rehabilitation and development”.
   - Core functions
   - Consolidated appeal process

2. Humanitarian coordination at the country level
3. Humanitarian coordination at the international level
4. Funding and the consolidated appeal process
5. Services and tools available to support the field in its coordination functions
6. Policy and advocacy issues in the context of field work
7. Public information and the media
8. Administrative matters.

Languages: English

http://www.reliefweb.int/library/documents/ocha_orientation_handbook_on_.htm
13.5 UNHCR


This publication (32 pages) describes the mandate of UNHCR. It provides the following useful information:

- Definitions of refugees, asylum seekers, migrants, economic migrants, internally displaced people and stateless persons.
- The 1951 Refugee Convention.
- The history and evolving role of UNHCR.
- UNHCR structure, finance and partnerships.

Languages: English, French and Spanish


This paper presents UNHCR’s strategy for ensuring adequate nutrition for refugee children and refugee women. It outlines the main challenges UNHCR faces in addressing nutrition issues and provides an update on current efforts to ensure adequate levels of nutrition for refugees and other persons of concern to UNHCR, using a specific set of performance indicators (both nutrition and public health related). The paper also highlights UNHCR’s partnerships with sister agencies in order to jointly address the nutrition situation. Finally, it provides some specific recommendations for follow-up.

Languages: English and French
What to expect from UNICEF during humanitarian crises in terms of the rights of children to health, nutrition, water, sanitation, protection, education and HIV/AIDS prevention is outlined in this booklet. It is a useful pocket guide for programme officers, emergency planners, protection staff and all those involved in emergencies.

Languages: English, French and Spanish

http://www.unicef.org/publications/index_21835.html
This WFP policy document (32 pages) was submitted to WFP’s Executive Board session regular session in 2007. The document provides an update on WFP policies grouped under the following topics:

1. Development:
2. Emergencies: definition, emergency response criteria, exiting emergencies, programming principles, targeting in emergencies, special needs.
3. Linking relief and development: programming principles, special needs.
5. Resourcing

The document summarizes WFP’s experience with nutrition, and its views on the role of food aid in supporting the achievement of positive nutritional outcomes through a variety of programmatic approaches which are outlined in three papers presented at the Board's Annual Session in 2004:

- “Food for Nutrition: Mainstreaming Nutrition in WFP” (WFP/EB.A/2004/5-A/1)
- “Micronutrient Fortification: WFP Experiences and Ways Forward” (WFP/EB.A/2004/5-A/2)
- “Nutrition in Emergencies: WFP Experiences and Challenges” (WFP/EB.A/2004/5-A/3)

Languages: Arabic, English, French and Spanish

Arabic: [Link](http://www.wfp.org/eb/docs/2007/wfp137487~2.pdf)
English: [Link](http://www.wfp.org/eb/docs/2007/wfp137486~2.pdf)
French: [Link](http://www.wfp.org/eb/docs/2007/wfp137488~2.pdf)
Spanish: [Link](http://www.wfp.org/eb/docs/2007/wfp137489~2.pdf)

This paper (12 pages) reviews the WFP definition as well as definitions of emergencies used by other humanitarian agencies and donors. WFP’s existing definition of emergencies dates from 1970 and was last reviewed in 1986. The purpose of this paper is to determine the continuing appropriateness of the definition in the light of WFP’s operational experience and in the light of evolving international thinking on the nature of emergencies.

WFP Executive Board endorsed the following definition:

For purposes of WFP emergency projects, emergencies are defined as urgent situations in which there is clear evidence that an event or series of events has occurred which causes human suffering or imminently threatens human lives or livelihoods and which the government concerned has not the means to remedy; and it is a demonstrably abnormal event or series of events which produces dislocation in the life of a community on an exceptional scale.

Languages: Arabic, English, French and Spanish

Arabic: [Link](http://www.wfp.org/eb/docs/2005/wfp043677~2.pdf)
English: [Link](http://www.wfp.org/eb/docs/2005/wfp043676~2.pdf)
French: [Link](http://www.wfp.org/eb/docs/2005/wfp043677~2.pdf)
Spanish: [Link](http://www.wfp.org/eb/docs/2005/wfp043678~2.pdf)
This policy paper (17 pages) summarizes the main challenges and actions required to improve WFP’s nutrition-related interventions in emergencies, namely:

- Better collection and analysis of information on the nutritional situation
- Ensuring timely and full delivery of all the elements of a nutritionally appropriate food basket
- Developing improved guidelines on supplementary feeding under diverse emergency settings.

Languages: Arabic, English, French and Spanish


The handbook (137 pages) is structured in three parts. Part I (chapters 1 and 2) outlines the framework for WHO emergency response. All staff and consultants involved in an emergency operation must be familiar with the basics summarized in Part I.

Part II (chapters 3 to 11) provides guidance on planning and managing the WHO response. In Part II, the chapters provide specific management guidance on what to do, when and why. The annexes (numbered 1, 2, etc.) in Part III provide additional information. Supplementary annexes (numbered A1, A2, B1, etc.) providing more detail, cross-cutting material, and selected tools are included on the CD-ROM that accompanies the Handbook together with other documents that are cross-referenced, including the standard operating procedures (SOPs) for WHO humanitarian action.

Target audience: WHO Representatives, Country Office staff and consultants in assessing and managing the response to health needs during humanitarian crises.

Languages: English


Provides concise information on the role of Nutrition for Health and Development (NHD) Department of WHO in emergencies.

Languages: English

http://www.who.int/hac/events/Nutrition.pdf
II. FURTHER READING

EMERGENCY HUMANITARIAN ASSISTANCE

General Assembly Humanitarian-Related Resolutions from 1998 to present:

Emergency Humanitarian Assistance - Assessment


These guidelines (128 pages) provide advice on the organization of emergency assessments:

- Chapters 1 to 3 cover general concepts.
- Chapters 4 to 8 (Part 1) focus on the assessment process. The order of the chapters is roughly equivalent to the order in which tasks are carried out in a real assessment – planning, fieldwork, analysis and reporting. Part 1 has been slightly adapted from the International Federation’s Guidelines for emergency assessment (1st edition, October 2005).
- Chapters 9 and 10 provide guidance on the elements to look at in order to gain a better understanding of an emergency situation.

Languages: English


In emergency situations, WFP is responsible for determining whether external assistance is required to meet immediate food needs and whether food aid is the appropriate form of assistance. WFP and its partners also assess what other interventions are needed to promote food-security objectives. This document emphasizes WFP’s continuing commitment to improving its needs assessments. It describes the conduct of needs assessments in emergencies, reviews lessons learned and outlines measures to improve them. These include:

1. Refining needs assessment methodologies
2. Improving the integration of vulnerability analysis and mapping into emergency needs assessments
3. Enhancing market analysis capacity
4. Increasing staff training
5. Strengthening needs assessment partnerships
6. Improving transparency with respect to techniques and findings
7. Clarifying accountability for assessments within WFP.

Languages: Arabic, English, French and Spanish

The overall objective of this handbook (124 pages) is to offer real practical guidance on identifying and addressing the differing needs and situations of women, girls, boys and men, in order to improve the effectiveness of our humanitarian response. The Handbook is divided into two major parts:

- A: Fundamental Principles
- B: Areas of Work which provides sector- and cluster-specific guidance.

Noteworthy is the section entitled: “Gender and food security, food distribution and nutrition in emergencies” which covers the following main topics:

- Gender and Food Security in Emergencies
- Gender and Food Distribution in Emergencies
- Gender and Nutrition in Emergencies

Target audience: Field practitioners responding to humanitarian emergencies, in particular sector/cluster actors.

Languages: English (will also be available in Arabic, French, Portuguese, Russian and Spanish).

For more information on gender in Emergencies consult:

IASC. Inventory of Gender Resources - An annotated Bibliography of References as a Supplement to the IASC Gender Handbook in Humanitarian Action, April 2008

http://www.humanitarianreform.org/humanitarianreform/Portals/1/cluster%20approach%20page/clusters%20pages/Gender/Gender%20Toolkit/IASC_Inventory.pdf

http://www.humanitarianinfo.org/iasc/content/subsid/tf_gender/genderH.asp

A practical guide (280 pages) intended to provide all the necessary information to ensure an effective and efficient working partnership with UNHCR. It has six chapters:

1. UNHCR: The Mandate and the Organization
2. UNHCR's Operations
3. Planning
4. Project Management and Implementation
5. Monitoring, Reporting and Evaluation
6. Refugee Emergencies

Annexes provide very useful standard partnership agreement formats. **Annex B4** provides Standards and indicators for key sectors, including nutrition.

Languages: English and French


**Micronutrient Deficiencies**


This report (36 pages) of an Expert Consultation held in Luxembourg in 2007 discusses how to reconcile the policy of reducing salt consumption to prevent chronic diseases and the policy of universal salt iodization (USI) to eliminate iodine deficiency.

The specific objectives of the meeting were to review and discuss:

- Benefits and disadvantages of using salt as a vehicle for micronutrient fortification
- Public health significance of mild-to-moderate iodine deficiency
- Public health significance of cardiovascular disease
- Impact of the message «Use iodized salt» on the overall salt consumption of the population
- Best way to deliver to the public a message addressing both the reduction of salt consumption and the consumption of iodized salt.

Languages: English

http://whqlibdoc.who.int/publications/2008/9789241596787_eng.pdf


The main purpose of these guidelines (376 pages) is to assist countries in the design and implementation of appropriate food fortification programmes, particularly in developing countries. They are intended to be a resource for governments and agencies that are currently implementing, or considering food fortification, and a source of information for scientists, technologists and the food industry. The document is organized into four complementary sections:

- Part I introduces the concept of food fortification as a potential strategy for the control of micronutrient malnutrition; and summarizes the prevalence, risk factors and health consequences of micronutrient deficiencies.

- Part II summarizes the prevalence, causes and consequences of micronutrient deficiencies, and the public health benefits of micronutrient malnutrition control. It lays the groundwork for public health personnel to assess the magnitude of the problem, and the potential benefits of fortification, in their particular situation.

- Part III provides technical information on the various chemical forms of micronutrients that can be used to fortify foods, and reviews experience of their use in specific food vehicles.

- Part IV describes the key steps involved in designing, implementing and sustaining fortification programmes, starting with the determination of the amount of nutrients to be added to foods, followed by the implementation of monitoring and evaluating systems, including quality control/quality assurance procedures, before moving on to the estimation of cost-effectiveness and cost–benefit ratios.

**Target audience:** nutrition-related public health programme managers, but should also be useful to all those working to control micronutrient malnutrition, including industry.

Languages: English

http://www.who.int/nutrition/publications/guide_food_fortification_micronutrients.pdf
This paper outlines three approaches by WFP to fortifying cereals in Afghanistan, Angola, and Zambia. It examines the challenges faced and the outcomes achieved.

- In Afghanistan, attempts to mill and fortify wheat flour using small-scale mills were successful but much larger-scale efforts would be needed to promote demand and reach the level of consumption required to address serious iron deficiencies across the country.

- In Angola, maize has been fortified to combat the persistent occurrence of pellagra. By providing fortification equipment to a commercial mill at the port of Lobito and using a vitamin and mineral pre-mix provided by UNICEF, this project has overcome many of the difficulties common in countries emerging from conflict to provide monthly fortified maize rations to some 115,000 beneficiaries.

- In Zambia, iron deficiency anaemia was a serious problem among camp-restricted refugees. WFP and its partners imported, installed, and trained workers in the use of two containerized milling and fortification units, halved iron-deficiency anaemia, and reduced vitamin A deficiency among camp residents.

All projects were successful in their own right, but also required a considerable amount of staff time and supervision as well as external technical expertise, limiting the potential for scaling up within the WFP operational context. In order to expand and sustain the provision of fortified cereal flour to WFP beneficiaries and beyond, getting the private milling sector as well as governments on board would be crucial.

Languages: English, French and Spanish


**MI. Fortification Handbook - Vitamin and Mineral Fortification of Wheat Flour and Maize Meal. Ottawa, Micronutrient Initiative, 2004.**

This manual was prepared to serve as a guide in the development and implementation of fortification programmes of wheat flour and maize meal. It consists of 10 sections:

10. Introduction
11. Cereal Staples
12. Milling and Processing
13. Types and Levels of Micronutrients to Add
14. Properties of Minerals
15. Properties of Vitamins
16. Fortification Methods – Large mills
17. Fortification Methods – Small mills
18. Quality Assurance and Control

**Target audience** policy makers, millers and programme managers, particularly in the developing countries.

Languages: English

[www.micronutrient.org](http://www.micronutrient.org/resources/publications/Fort_handbook.pdf)
Micronutrient Deficiencies


This policy paper (16 pages) discusses the following:

1. Why WFP pays explicit attention to micronutrient deficiencies in its strategies and operations
2. WFP recent experiences with micronutrient-fortified foods and the fortification process
3. Recommendations on ways to expand such efforts at the policy level and through actions on the ground.

WFP Executive Board (EB) endorsed the policy paper and requested WFP Secretariat to add the following language to Consolidated Framework of WFP Policies: A Governance Tool. (WFP/EB.A/2002/5-A/1):

“WFP will increase its efforts to meet micronutrient deficiencies among beneficiaries through the distribution of appropriately fortified foods and support for national and international fortification initiatives and policies, paying particular attention to micronutrient needs in emergencies and meeting the special needs of people living with HIV/AIDS. Ensuring adherence to WFP’s procurement specifications and quality control procedures and documenting effectiveness and impact of fortification activities are central to these efforts. WFP will expand its local initiatives in the production of fortified blended foods and biscuits, and in the milling and fortification of cereals. Institutional and staff capacity to implement these activities will be enhanced as necessary.”

Languages: Arabic, English, French and Spanish


This paper (pages) outlines the role and position of FAO on the fortification of foods with micronutrients, and presents how the Organization can provide technical assistance to governments, in concert with international agencies, non-governmental organizations, public and private institutions and the food industry, to support planned and ongoing fortification programmes. FAO assists Governments in their efforts to eliminate or reduce micronutrient malnutrition through food fortification programmes.

Languages: English

Micronutrient Deficiencies


This report *(52 pages)* reviews the global and national efforts to eliminate IDD during the past two decades. It shows how governments, the salt industry and communities, with UNICEF support, have made great progress in eliminating iodine deficiency through universal salt iodization.

The report captures the lessons learned and best practices in the elimination of IDD in various countries and proposes an agenda against IDD as a vital step towards preventing adverse effects on international development and human potential, namely:

- Secure political commitment
- Form partnerships and coalitions
- Ensure availability of adequately iodized salt
- Strengthen monitoring systems
- Maintain education and communication

Languages: English


This 2-page flyer presents the main conclusions of a joint WHO/UNICEF meeting regarding:

- Categorization of country according to level of implementation of salt iodization programmes
- Guidelines for decision making on when and how to plan for additional iodine intake in pregnant and lactating women and children 7-24 months of age.
- Guidelines for decision making on when and how to plan for additional iodine intake in pregnant and lactating women and children 7-24 months of age in specific situations
- Recommended dosages of iodine supplement.

Languages: English

[http://www.who.int/nutrition/publications/WHOStatement__IDD_pregnancy.pdf](http://www.who.int/nutrition/publications/WHOStatement__IDD_pregnancy.pdf)

This revised guide *(92 pages)* provides information on the anthropometric impact indicators and the annual monitoring indicators for Maternal and Child Health/Child Survival (MCH/CS) and income related activities. The focus is on the collection and reporting of indicators to improve programme management and document progress towards the achievement of results. Chapters are included on:

- Anthropometric evaluation and annual monitoring indicators
- Collecting anthropometric data through surveys
- Weighing and measuring equipment
- Taking measurements
- Comparisons of anthropometric data to reference standards
- Data analysis
- Annual monitoring indicators

Languages: English and French


This manual *(356 pages)* published by Save the Children, provides step-by-step guidance, taking the practitioner from the theory through to the practice of conducting an assessment and producing a report.

A major part of the manual is devoted to assessing the causes of malnutrition and interpreting this information alongside mortality and malnutrition information. In addition, the steps involved in conducting an anthropometric survey are laid out clearly for the beginner. The manual draws on Save the Children’s experience, highlighted in numerous examples in the text, and is supported by a new set of tools to assist with survey design and analysis.

The recommendations in this manual are consistent with the Sphere Minimum Standards for Disaster Response and make close reference to the standard on food security and nutrition assessment and analysis.

**Target audience:** nutritionists and other field workers responsible for conducting assessments in emergency settings.

Languages: English and French

This discussion discusses describes techniques suitable for the assessment of the nutritional status of adolescents aged 10-19 years in emergency-affected populations.

Emphasizing practical issues of anthropometric assessment of nutritional status rather than general knowledge of adolescent growth and development, the paper also points out some of the deficiencies of the current recommendations regarding the nutritional assessment of adolescents, including those published by WHO.

Making only preliminary recommendations, the report argues for more research to reach a consensus on a definitive method to assess adolescent under-nutrition has been reached.
This report (35 pages) presents the results of a workshop involving a consortium of U.S. NGOs, the Academy for Educational Development’s (AED)/Food and Nutrition Technical Assistance (FANTA) Project, Concern Worldwide (Concern WW), Save the Children US (SC US) and Valid International (VALID) which was held in March 2005, in order to:

1. Identify issues and challenges in implementation, integration and scaling up of CTC programming

2. Discuss mechanisms to ensure quality control over CTC programming.

Sessions covered several challenging themes, namely:
- Implementing CTC in emergency and development contexts
- Issues and challenges in implementation: local capacity and community mobilisation
- Issues and challenges in replication and scaling up RUTFs
- CTC and HIV/AIDS.

Languages: English

This Emergency Health and Nutrition Toolkit is intended to better prepare technical staff for the health and nutrition issues related to emergency preparedness and response. Designed as a capacity building resource, the toolkit can be used for training on individual topics, full modules, or as a comprehensive 5-day course. Within the toolkit, you will find six modules: Introduction to the Emergency Context; Save the Children Emergency Preparedness and Response; Assessment Tools; Child Health; Infant and Child Nutrition; and Reproductive and Newborn Health. Contributing to each module, individual sessions are composed of each of the following:

**Overview and Facilitation Notes:** Provides an overview of what is presented in the training session and includes instructions for conducting the session, including timing, special instructions for group work, needs for visual aids and demonstrations, and recommended resources related to each topic.

**Issue Summary Sheet:** A one-page snapshot of each issue with basic facts, case definitions, and issue-specific information on preparedness, response, surveillance and working with the community.

**PowerPoint Presentation:** In-depth technical presentation on each issue with particular focus on differences between and special considerations of emergency and development settings. Each presentation includes slide-specific facilitation guidance in the notes section of the slides.

**Case Study:** In some sessions, a case study exercise is incorporated, enabling participants to take the skills they have learned during the presentation and apply them to a real-life simulation.

**The Infant and Child Nutrition Session** is particularly relevant and includes two modules, namely:

- Acute Malnutrition
- Infant and Young Child Feeding

**Languages:** English


For Infant and Young Child Feeding Power Point: [PowerPoint](http://www.savethechildren.org/publications/technical-resources/emergency-health-and-nutrition/ehn-facilitation-notes/nutrition.html)