



# Food Security and Nutrition

  
**Food Security and Nutrition**

Assessments	Management of malnutrition	Micro-nutrient deficiencies	Infant and young child feeding	Food security	Food assistance	Livelihoods
<b>STANDARD 1.1</b> Food security assessment	<b>STANDARD 2.1</b> Moderate acute malnutrition	<b>STANDARD 3</b> Micronutrient deficiencies	<b>STANDARD 4.1</b> Policy guidance and coordination	<b>STANDARD 5</b> General food security	<b>STANDARD 6.1</b> General nutrition requirements	<b>STANDARD 7.1</b> Primary production
<b>STANDARD 1.2</b> Nutrition assessment	<b>STANDARD 2.2</b> Severe acute malnutrition		<b>STANDARD 4.2</b> Multi-sectoral support to infant and young child feeding in emergencies		<b>STANDARD 6.2</b> Food quality, appropriateness and acceptability	<b>STANDARD 7.2</b> Income and employment
					<b>STANDARD 6.3</b> Targeting, distribution and delivery	
					<b>STANDARD 6.4</b> Food use	

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- APPENDIX 4** Measuring acute malnutrition
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# Essential concepts in food security and nutrition

## ***Everyone has the right to be free from hunger and to have adequate food***

The Sphere Minimum Standards for food security and nutrition are a practical expression of the right to adequate food in humanitarian contexts. The standards are grounded in the beliefs, principles, duties and rights declared in the Humanitarian Charter. These include the right to life with dignity, the right to protection and security, and the right to receive humanitarian assistance on the basis of need.

For a list of the key legal and policy documents that inform the Humanitarian Charter, with explanatory comments for humanitarian workers, ⊕ *see Annex 1*.

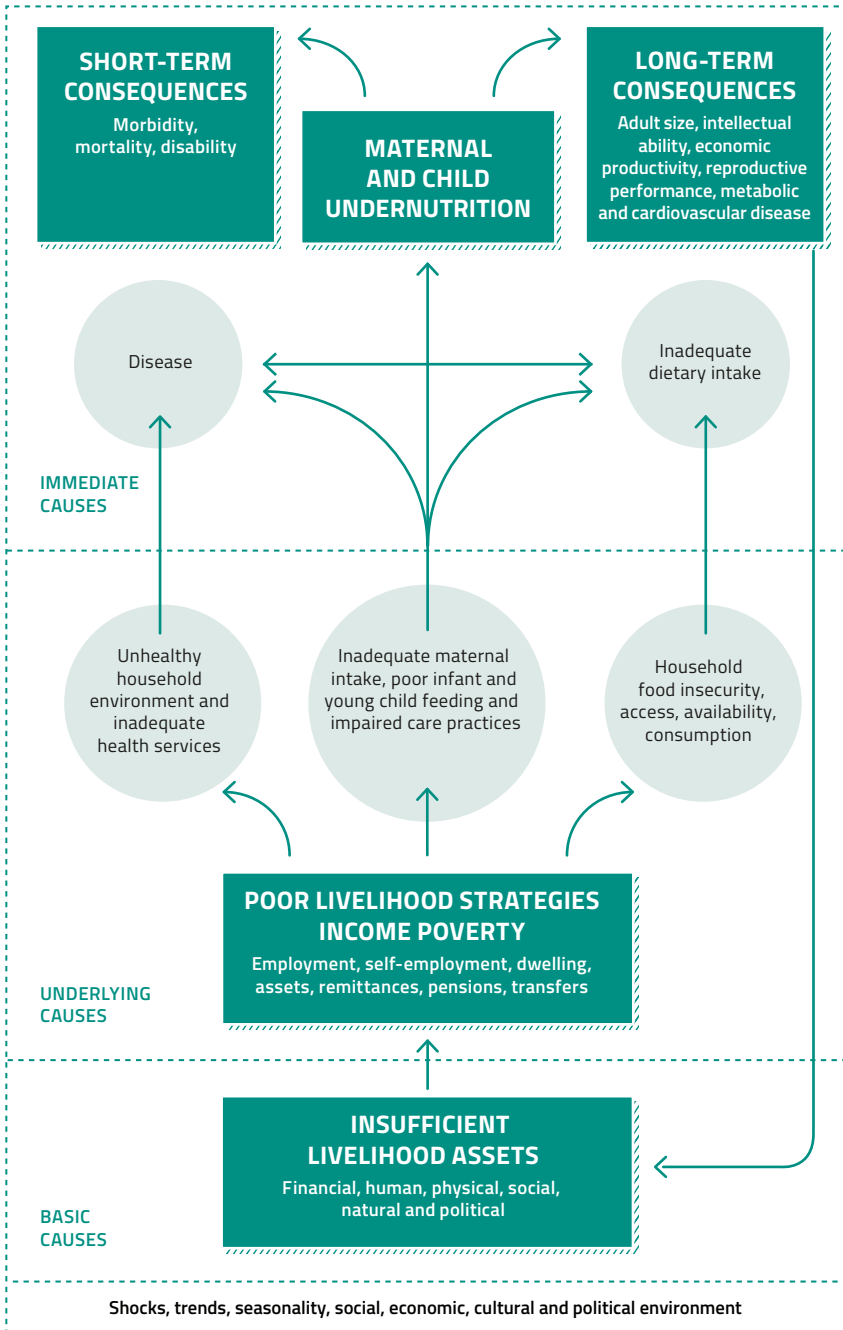
Undernutrition reduces people's ability to recover after a crisis. It impairs cognitive functions, reduces immunity to disease, increases susceptibility to chronic illness, limits livelihoods opportunities and reduces the ability to engage within the community. It undermines resilience and may increase dependence on ongoing support.

## ***The causes of undernutrition are complex***

The immediate causes of undernutrition are inadequate food intake and repeated disease ⊕ *see Figure 7*. The underlying causes are household food insecurity, poor feeding and care practices, unhealthy household environment and inadequate healthcare.

These underlying causes are inter-connected. So, although food insecurity is one cause of undernutrition, providing food assistance is unlikely to lead to a lasting solution unless other causes are addressed at the same time. Food and nutrition responses should work with WASH, shelter and settlement, and healthcare responses in a coordinated approach. For example, people require an adequate quantity and quality of water to prepare nutritious food and to adopt safe feeding practices. Having access to sanitation and hygiene facilities will reduce the risk of disease outbreaks. Having access to adequate shelter provides access to cooking facilities and protects people from extreme weather, which further reduces the risk of disease. When people have access to good healthcare, they are likely to have a higher nutritional status. This in turn increases their ability to pursue livelihood opportunities.

Control of the underlying causes will prevent and reduce undernutrition. Retaining people's livelihood assets is fundamental to this, because it increases their ability to manage other potential causes of undernutrition. Livelihoods assets include equipment and machinery, raw materials, land, knowledge and access to functioning markets. Food security and nutrition responses should contribute to protecting



Food security and nutrition: causes of undernutrition (Figure 7)

and developing these assets, and therefore supporting different livelihood strategies, whether there are high malnutrition rates or not.

Social, economic, cultural and political changes in the post-crisis environment will affect a household's coping strategies and access to livelihoods or livelihood assets. Stabilising those external factors will contribute to increased opportunities for income and ultimately reduce people's exposure to the causes of undernutrition.

***Working in urban areas brings specific challenges***

Increasing urbanisation is creating new challenges for the food security and nutrition sector. Urban environments potentially offer increased employment and income-generating opportunities. However, as urban populations increase, demand for housing and services in those areas also increases. In many cases, existing land use planning policies and strategies cannot meet the unanticipated demand. Overcrowding, air pollution, poor waste management and lack of sanitation facilities in slums increase the chance of contracting acute illnesses. This reduces people's ability to take advantage of livelihoods opportunities and often triggers the underlying causes of undernutrition.

***Some groups are particularly vulnerable to undernutrition***

Developing an appropriate food response requires a full understanding of the unique nutritional needs of pregnant and breastfeeding women, infants and children, older people and persons with disabilities. Improving food security at the household level also requires an understanding of different roles. Women, for instance, often play a greater role in the planning and preparation of food for their households.

It is important to disaggregate data by sex, age and disability at a minimum. This shows who needs what kind of food and who may be missing important nutritional elements. Disaggregate post-distribution monitoring in the same way, to confirm that programme interventions are providing equitable access to adequate and appropriate food and nutrition.

Preventing undernutrition is just as important as treating acute malnutrition. Food security and nutrition interventions may determine nutrition and health status in the short term, and survival and well-being in the long term.

***These Minimum Standards should not be applied in isolation***

The Minimum Standards in this chapter reflect the core content of the right to food and contribute to the progressive realisation of this right globally.

The right to adequate food is linked to the rights to water and sanitation, health, and shelter. Progress in achieving the Sphere Minimum Standards in one area influences progress in other areas. Therefore, an effective response requires close coordination and collaboration with other sectors, local authorities and other responding agencies. This helps ensure that needs are met, that efforts

are not duplicated and that the quality of food security and nutrition responses is optimised. Cross-references throughout the Handbook suggest potential linkages.

For example, if nutritional requirements are not being met, the need for WASH is greater, because people's vulnerability to disease increases. The same applies to populations where HIV is prevalent or where there is a large proportion of older people or persons with disabilities. In those circumstances, healthcare resources will also need to be adjusted. Decide priorities based on information shared between sectors, and review it as the situation evolves.

Where national standards are lower than the Sphere Minimum Standards, humanitarian organisations should work with the government to raise them progressively.

### ***International law specifically protects the right to adequate food***

The right to be free from hunger and to have adequate food is protected by international law. It requires physical and economic access to adequate food at all times. States are obliged to ensure this right when individuals or groups, including refugees and internally displaced persons, are unable to access adequate food, including in crises ⊕ *see Annex 1*.

States may request international assistance if their own resources are insufficient. In doing so they should:

- respect existing access to adequate food, and allow continued access;
- protect individuals' access to adequate food by ensuring that organisations or individuals do not deprive them of such access; and
- actively support people to ensure secure livelihoods and food security by providing them with the resources they need.

Withholding adequate food from civilians as a method of warfare is prohibited under the Geneva Conventions. It is also prohibited to attack, destroy, remove or render useless crops, livestock, foodstuffs, irrigation works, drinking water installations and supplies, and agricultural areas that produce foodstuffs.

In the case of occupation, international humanitarian law obliges an occupying power to ensure adequate food for the population, including importing supplies if those in the occupied territory are inadequate.

### ***Links to the Protection Principles and Core Humanitarian Standard***

Food and nutrition assistance has the potential to lead to serious rights violations if it is misused, particularly in exploitation or abuse of programme participants. Programmes must be designed with the affected population and implemented in ways that contribute to their safety, dignity and integrity. Proper management and strong oversight of staff and resources are required, along with strict adherence and enforcement of a code of conduct for all those involved in delivering assistance programmes. Establish clear feedback mechanisms with the affected population



and respond quickly to any concerns. Aid workers should be trained on child safeguarding and know how to use referral systems for suspected cases of violence, abuse or exploitation, including of children ⊕ see *Protection Principle 1* and *Core Humanitarian Standard Commitment 5*.

Civil-military cooperation and coordination, such as logistical support, should be carefully evaluated in all situations, and especially in conflict settings ⊕ see *What is Sphere* and *Protection Principles*.

In applying the Minimum Standards, all nine Commitments in the Core Humanitarian Standard should be respected as a foundation for providing an accountable food security and nutrition programme.



# 1. Food security and nutrition assessments

Food security and nutrition assessments are required throughout a crisis. They show how the context evolves and enable responses to be adjusted appropriately. Ideally food security and nutrition assessments should overlap, as they identify the barriers to adequate nutrition and to the availability, access to and use of food. Joint food security and nutrition assessments can increase cost-effectiveness and link nutrition to food security programming.

Assessments should adhere to widely accepted principles, use internationally accepted methods, and be impartial, representative and well-coordinated between humanitarian organisations and governments. Assessments must be complementary, consistent and comparable. Stakeholders must agree on a suitable methodology. It should include a cross-section of the affected population, with attention given to at-risk groups. Multi-sectoral assessments can help in assessing large-scale crises and wide geographical areas.

The objective of food security and nutrition assessments can be to:

- understand the situation, current needs and how to meet those needs;
- estimate how many people need assistance;
- identify groups at highest risk; and/or
- provide a baseline to monitor the impact of a humanitarian response.

The assessments can be conducted at various stages of a crisis. For example:

- an initial assessment within the first two to three days to start immediate distribution of food assistance;
- a rapid assessment within two to three weeks, relying on assumptions and estimates to provide a basis for designing programmes;
- a detailed assessment within 3 to 12 months if the situation seems to be deteriorating or more information is required to develop recovery programmes.

Detailed **food security assessments** identify livelihood strategies, assets and coping strategies. They consider how these have changed as a result of the crisis, and the consequences for household food security. A detailed assessment should identify how best to protect and/or promote these livelihood strategies in order to achieve food security.

Detailed **nutrition assessments** involve collecting and analysing representative data to establish prevalence rates of acute malnutrition, infant and young child feeding, and other care practices. This data, combined with analysis of the other underlying causes of malnutrition, and assessments of health and food security,



presents a nutrition causal analysis. This is useful in planning, implementing and monitoring nutrition programmes.

Markets play a crucial role in food security and nutrition in both urban and rural environments. All assessments should include an analysis of markets that meets the Minimum Standard for Market Analysis (MISMA) and/or the Minimum Economic Recovery Standard (MERS) Assessment and Analysis standards ⊕ see *Delivering assistance through markets*.

The following food security and nutrition assessment standards build on Core Humanitarian Standard Commitment 1 to design appropriate food security and nutrition responses for the affected people ⊕ see *Appendices 1, 2 and 3* and the *LEGS Handbook* for assessment checklists.

## Food security and nutrition assessments standard 1.1: Food security assessment

Where people are at risk of food insecurity, assessments are conducted to determine the degree and extent of food insecurity, identify those most affected and define the most appropriate response.

### Key actions

- 1 Collect and analyse information on food security at the initial stage and during the crisis.
  - Include analysis of critical issues linked to food security, such as environmental degradation, security and market access.
- 2 Analyse the impact of food security on the nutritional status of the affected population.
  - Include a review of the underlying causes of undernutrition, including inadequate care, unhealthy household environments, lack of healthcare or access to social protection systems.
  - Collect data more frequently in urban contexts, where the situation can change more rapidly and be more difficult to observe than in rural contexts.
- 3 Identify possible responses that can help to save lives and protect and promote livelihoods.
  - Include market assessments and capacities of government and other actors to respond to needs.
- 4 Analyse available cooking resources and methods, including the type of stove and fuel and availability of pots and utensils.
  - Analyse how people got and stored food and cooking fuel before the crisis, their pre-crisis income, and how they cope now.

- Pay attention to the rights and protection needs of women and girls, who are most commonly responsible for fuel collection and food preparation.

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## Key indicators

**Standardised protocols are used to analyse food security, livelihoods and coping strategies**

**Percentage of analytical reports that synthesise findings, including assessment methodology and constraints encountered**

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## Guidance notes

**Pre-crisis data** combined with geographical information systems data can provide an overview of the potential impact of a crisis. However, it is unlikely to be disaggregated sufficiently to give a clear picture in an urban situation.

**Assessment sources, tools and information systems:** Information sources include crop assessments, satellite images, household assessments, focus group discussions and interviews with key informants. Useful tools include the Food Consumption Score, Household Dietary Diversity Score and Reduced Coping Strategies Index for rapid measurement of household food security. There are many local and regional food security information systems, including famine early warning systems. Use the Integrated Food Security Phase Classification where available and use standardised protocols to classify the severity and causes of acute food insecurity in the areas of concern. The design of food security programmes should be based on a clear response analysis using the findings of assessments.

**Environmental degradation** can cause food insecurity, and food insecurity can lead to environmental degradation. For example, collecting firewood and producing traditional charcoal make it possible to cook food and generate income from its sale. However, it can also result in deforestation. Responses should protect and support food security while limiting negative environmental impact.

**At-risk groups:** Disaggregate data by sex, age, disability, wealth group and other relevant factors. Women and men may have different complementary roles in securing household nutritional well-being. Consult with both, separately if necessary, about practices related to food security, food preparation and household resources. Be aware that older people and people with disabilities may be excluded in intra-household distribution of food assistance.

Include girls and boys, especially child-headed households, separated or unaccompanied children, children with disabilities and children living in alternative care. Be mindful of children in different crisis contexts. During infectious disease outbreaks, for example, include children in observation, interim care and treatment centres. In conflict settings, include children in demobilisation centres.



**Coping strategies:** Consider the different types of coping strategy, their effectiveness and any negative effects. Some coping strategies, such as the sale of land, migration of whole families or deforestation, may permanently undermine future food security. Some coping strategies used by, or forced on, women, girls and boys may impact their health, psychological well-being and social integration. These coping strategies include transactional or “survival” sex, marrying daughters for bride price, women and girls eating last and least, child labour, risky migration, and sale and trafficking of children.

**Proxy measures:** Food consumption reflects the energy and nutrient intake of individuals in households. It is not practical to measure actual energy and nutrient intake during initial assessments, so use proxy indicators. For example the number of food groups consumed by an individual or household and the frequency of consumption over a given period reflect dietary diversity. Changes in the daily number of meals consumed and dietary diversity are good proxy measures of food security, especially when correlated with a household’s socio-economic status.

Tools for measuring food consumption patterns include the Household Dietary Diversity Score, the Household Food Insecurity Access Scale and the Food Consumption Score. The Household Hunger Scale is another good proxy indicator of food insecurity. Some commonly used indicators such as the Food Consumption Score may not adequately reflect food insecurity in an urban context. Triangulate selected measures with coping strategy measures to understand different constraints in accessing food.

The Food Expenditure Share and its established thresholds may be too complex to implement in urban households. This is because several people may be in charge of the food basket, household members consume food sourced outside of the house, and many people may contribute to household income.

**Market analysis and cost of diet:** Capture information about access to markets, financial capital, livelihoods and economic vulnerability. These elements are linked to commodity prices, income-earning opportunities and wage rates, which affect food security. Market systems, both formal and informal, can protect livelihoods by supplying productive items such as seeds and tools ⊕ *see Food security and nutrition – livelihoods standards 7.1 and 7.2.*

Include a market analysis as part of initial and subsequent context assessments. Market analyses should assess whether local markets can support nutritional needs and establish the minimum cost and affordability of foods that meet the nutrient needs of a typical household ⊕ *see Delivering assistance through markets.*

Increasingly in rural areas, and regularly in urban areas, responses are market-based. They use vendors, market spaces, local food products and transportation services to address the needs of affected people. It is therefore important to understand market access for at-risk groups ⊕ *see MISMA Handbook.*

## Food security and nutrition assessments standard 1.2: Nutrition assessment

Nutrition assessments use accepted methods to identify the type, degree and extent of undernutrition, those most at risk and the appropriate response.

### Key actions

- 1 Compile pre-crisis information and conduct initial assessments to establish the nature and severity of the nutrition situation.
  - Assess national and local capacity to lead or support a response, as well as other nutrition actors.
- 2 Conduct rapid mid upper arm circumference (MUAC) screening and infant and young child feeding in emergencies (IYCF-E) assessments to assess the nutritional situation at the onset of the crisis.
- 3 Identify groups that have the greatest need for nutritional support.
  - Gather information on the causes of undernutrition from primary or secondary sources, including the community's perceptions and opinions.
  - Engage with communities to identify at-risk groups, paying attention to age, sex, disability, chronic illness or other factors.
- 4 Determine an appropriate response based on an understanding of the context and the emergency.
  - Determine whether the situation is stable or declining, reviewing trends in nutritional status over time rather than the prevalence of malnutrition at a specific time.
  - Consider both prevention and treatment options.

### Key indicators

**Standardised protocols are used to assess malnutrition and identify causes**

**Percentage of assessment reports that include the assessment methodology and constraints encountered**



### Guidance notes

**Contextual information:** Information on the causes of undernutrition can be gathered from primary and secondary sources, including health and nutrition profiles, research reports, early warning information, health facility records, food security reports and other sources. Examples include:

- demographic health surveys;
- multi-indicator cluster surveys;
- national nutrition information databases;

- other national health and nutrition surveys;
- national nutrition surveillance systems;
- admission rates and coverage in existing programmes for managing malnutrition; and
- HIV prevalence, incidence and mortality data, including groups at higher risk or with higher burden ⊕ *see Essential healthcare – sexual and reproductive health standard 2.3.3: HIV.*

Local institutions and communities themselves should actively contribute to assessment, interpreting findings and planning responses wherever possible.

**Rapid response:** In the first phase of a crisis, decisions on general food distributions or immediate treatment of malnutrition should be based on a rapid assessment, initial findings and the existing capacity to respond. An in-depth analysis should be conducted at a later stage but should not delay response in the acute phase.

**Scope of analysis:** In-depth assessments should be conducted where information gaps are identified and if additional information is needed for programme design, to measure programme outcomes or for advocacy. Determine whether population-wide qualitative or quantitative assessments are needed to understand anthropometric status, micronutrient status, infant and young child feeding, maternal care practices and associated potential determinants of undernutrition. Coordinate with health, WASH and food security sectors to design and prepare for the assessments.

**Anthropometric surveys:** These are used to examine physical proportions of the body and provide an estimate of the rates of chronic and acute malnutrition. They can be based on random sampling or specific screening. Surveys should report weight-for-height Z scores according to World Health Organization (WHO) standards. Use weight-for-height Z scores reported against the National Center for Health Statistics (NCHS) reference to compare with past surveys. Include wasting and severe wasting measured by MUAC data. The most widely accepted practice is to assess malnutrition levels in children aged 6–59 months as a proxy for the entire population. However, where there are other groups that face greater nutritional risks, consider including them in the assessment as well ⊕ *see Appendix 4: Measuring acute malnutrition.*

Establish the rates of nutrition oedema and record them separately. Report confidence intervals for the rates of malnutrition and demonstrate survey quality assurance. Use existing tools such as the Standardised Monitoring and Assessment of Relief and Transitions (SMART) methodology manual, Standardised Expanded Nutrition Survey (SENS) for Refugee Populations, Emergency Nutrition Assessment software, or Epi Info software.

**Infant and young child feeding assessments:** Assess the needs and priorities for IYCF-E and monitor the impact of humanitarian action and inaction on infant and young child feeding practices. Pre-crisis data can be used to inform early decision-

making. Work with other sectors to include IYCF-E questions in other sectoral assessments and draw on available multi-sectoral data to inform the assessment ⊕ *see Appendix 3: Nutrition assessment checklist.*

Include the number of available breastfeeding counsellors, trained health workers and other support services and their capacity. For more in-depth assessment, conduct random sampling, systematic sampling or cluster sampling. This may be through a stand-alone IYCF-E survey or an integrated survey. However, an integrated survey may result in limited sample size, which may reduce the representativeness of the survey.

**Other indicators:** Additional information can be carefully considered to inform the overall assessment of nutritional status. This includes immunisation and nutrition programme coverage rates, especially measles, vitamin A, iodine or other micronutrient deficiencies, disease morbidity and health-seeking behaviour. Crude infant and under-5 mortality rates, with cause of death, can also be considered where available.

**Interpreting levels of undernutrition:** Detailed analysis of the reference population size and density, as well as mortality and morbidity rates, is needed to decide whether levels of undernutrition require intervention. Information is also needed on health status, seasonal fluctuations, IYCF-E indicators, pre-crisis levels of undernutrition, the proportion of severe acute malnutrition in relation to global acute malnutrition, and levels of micronutrient deficiencies ⊕ *see Essential health-care standard 2.2.2: Management of newborn and childhood illness and Appendix 5: Measures of the public health significance of micronutrient deficiencies.*

A combination of complementary information systems may be the most cost-effective way to monitor trends. Decision-making models and approaches that consider several variables, such as food security, livelihoods, and health and nutrition may be appropriate ⊕ *see Food security and nutrition assessments standard 1.1: Food security assessment.*



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## 2. Management of malnutrition

The prevention and treatment of malnutrition are both important considerations in humanitarian crises. Chronic malnutrition can be prevented, but there is limited evidence that it can be reversed or treated. On the other hand, acute malnutrition – which may be triggered during a crisis – can be prevented and treated with the right nutrition responses.

Nutrition responses are key in reducing morbidity and mortality in affected populations. However, they require an understanding of the complex underlying causes of malnutrition. A multi-sectoral approach is essential to addressing all the causes and their interactions.

**Management of moderate acute malnutrition:** In crises, supplementary feeding is often the primary strategy for preventing and treating moderate acute malnutrition.

Two types of supplementary feeding programmes are common: blanket supplementary feeding programmes for prevention, and targeted supplementary feeding programmes for treatment of moderate acute malnutrition and prevention of severe acute malnutrition. The use of each depends on the levels of acute malnutrition, vulnerable population groups and the risk of an increase in acute malnutrition.

Blanket supplementary feeding programmes are recommended where food insecurity is high and there is a need to expand interventions beyond only moderate acute malnutrition cases. They should be accompanied by general food distributions targeting affected households. There are no defined impact indicators for blanket supplementary feeding programmes, but it is important to monitor coverage, adherence, acceptability and rations provided. The indicators for managing moderate acute malnutrition primarily refer to targeted supplementary feeding.

The main aim of a targeted supplementary feeding programme is to prevent the moderately malnourished becoming severely malnourished and to rehabilitate them. These types of programmes usually provide a food supplement to the general ration for moderately malnourished individuals, pregnant and nursing mothers, and other at-risk individuals.

**Management of severe acute malnutrition:** A variety of approaches are used for therapeutic care. Community-based management of acute malnutrition is the preferred approach where conditions allow. This includes:

- inpatient care for people with medical complications who present with severe acute malnutrition;
- inpatient care for all infants under six months old who present with severe acute malnutrition;
- outpatient care for people with severe acute malnutrition but without medical complications;



- community outreach; and
- other context-specific services or programmes for individuals with moderate acute malnutrition.

Programmes addressing severe acute malnutrition should be supported by supplementary feeding programmes and community mobilisation to support outreach, active case-finding, referral and follow-up.

## Management of malnutrition standard 2.1: Moderate acute malnutrition

Moderate acute malnutrition is prevented and managed.

### Key actions

- 1 Establish clearly defined and agreed strategies, objectives and criteria for set-up and closure of interventions from the outset of the programme.
- 2 Maximise access to coverage of moderate acute malnutrition interventions through community engagement and involvement from the beginning.
  - Work with community stakeholders to identify vulnerable individuals and households.
- 3 Establish admission and discharge protocols, based on nationally and internationally accepted anthropometric criteria.
  - Specify the discharge criteria when reporting performance indicators.
  - Investigate and act on causes of default and non-response, or an increase in deaths.
- 4 Link the management of moderate acute malnutrition to the management of severe acute malnutrition and to existing health services.
- 5 Provide take-home dry or suitable ready-to-use supplementary food rations unless there is a clear rationale for on-site feeding.
  - Provide rations on a weekly or every two weeks basis. Consider household composition and size, household food security, and the likelihood of sharing when setting the size and composition of the ration.
  - Provide clear information on how to hygienically prepare and store supplementary food, and how and when to consume it.
- 6 Emphasise protecting, supporting and promoting breastfeeding, complementary feeding and hygiene.
  - Provide clear information on the importance of exclusive breastfeeding in children up to six months, and continued breastfeeding for children from 6 to 24 months, for both the physical and psychological health of mother and child.



- Admit breastfeeding mothers of acutely malnourished infants under six months to supplementary feeding programmes, independent of maternal nutrition status.

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## Key indicators

### Percentage of target population that can access dry ration supplementary feeding sites within one day's return walk (including time for treatment)

- >90 per cent

### Percentage of target population that can access on-site programmes within one hour

- >90 per cent

### Percentage of moderate acute malnutrition (MAM) cases with access to treatment services (coverage)

- >50 per cent in rural areas
- >70 per cent in urban areas
- >90 per cent in formal camps

### The proportion of discharges from targeted supplementary feeding programmes who have died, recovered or defaulted

- Died: <3 per cent
- Recovered: >75 per cent
- Defaulted: <15 per cent

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## Guidance notes

**Programme design:** Design programmes that build on and support existing health system capacity and consider access to health facilities, the geographical spread of the population and security. Maintain links to inpatient and outpatient therapeutic care, ante-natal care, malaria prevention, childhood illness and screening, HIV and tuberculosis care, and food security programmes including food, cash or voucher transfers.

Supplementary feeding programmes are not meant to replace the diet but to complement it. It is key to design programmes as part of a multi-sectoral approach with complementary services such as WASH, health, IYCF and general food distribution. Assess availability of supplementary foods on national or international markets and factor potential pipeline constraints into programme planning [⊕](#) see *Delivering assistance through markets*.

**Prevention or treatment:** Adopt a blanket approach to prevent malnutrition, or a targeted approach to treat it. The decision will depend on:

- levels of acute malnutrition and numbers of affected people;
- risk of increased morbidity;

- risk of decreased food security;
- population displacement and density;
- capacity to screen and monitor the affected population using anthropometric criteria; and
- available resources and access to the affected people.

Targeted supplementary feeding generally requires more time and effort to screen and monitor individuals with acute malnutrition, but it also requires fewer specialised food resources. A blanket approach generally requires less staff expertise but more specialised food resources.

**Effective community mobilisation:** Community mobilisation and involvement will improve people's understanding of the programme and its likely effectiveness. Work with the target population in deciding where to locate programme sites. Consider at-risk groups who may face difficulties in accessing sites. Share clear and comprehensive information on the available support in accessible languages using multiple information-sharing channels, including audio, visual and written forms.

**Coverage** refers to the number of individuals receiving treatment as a proportion of the number of people who need treatment. Coverage can be affected by the:

- acceptability of the programme, including location and accessibility of programme sites;
- security situation;
- frequency of distributions;
- waiting time;
- extent of mobilisation, home visits and screening;
- availability of male and female nutrition staff;
- alignment of admission criteria and coverage; and
- caregivers' ability to identify signs of malnutrition.

Coverage assessment methodologies are costly and require specially trained staff. If coverage surveys are not feasible, consult national guidance when deciding on alternative methods. Use routine programme data such as screening, referrals and admissions to estimate coverage.

There may be no need to conduct regular coverage assessments unless there have been significant changes in the programme area, such as population movements or a new treatment product or protocol.

**Admission criteria** should be consistent with national and international guidance. Admission criteria for infants below six months and for groups whose anthropometric status is difficult to determine should include clinical and breastfeeding status  
 ⊕ see *Appendix 4: Measuring acute malnutrition* and *References and further reading*.

Individuals who are (or are suspected to be) HIV-positive or who have tuberculosis or another chronic illness should not be discriminated against and should have equal access to care if they meet the admission criteria. Some individuals who do not meet anthropometric criteria for acute malnutrition may benefit from



supplementary feeding. This may include, for example people living with HIV, tuberculosis or other chronic diseases, people discharged from care but requiring therapeutic support to avoid relapse, or persons with disabilities. Adjust monitoring and reporting systems if such individuals do not meet anthropometric criteria.

People living with HIV who do not meet admission criteria often require nutritional support. Such support is better offered outside the context of treatment for severe acute malnutrition in crises. Provide these individuals and their families with a range of services, including community and home-based care, tuberculosis treatment centres and prevention of mother-to-child-transmission programmes.

**Discharge criteria and monitoring:** The number of discharged individuals includes those who have recovered, died, defaulted or not recovered. Individuals referred for complementary services, such as healthcare, have not ended the treatment and will either continue treatment or return to the treatment later. Do not include individuals transferred to other sites or who have not ended the treatment.

If individuals join a nutrition programme after discharge from therapeutic care, report them as a separate category to avoid biased results. If an individual develops acute malnutrition symptoms as a result of other factors such as disability, cleft or surgical problems, include them in programme reporting. Investigate how the gender of the individual may influence access to treatment, treatment default, and recovery.

Calculate discharge statistics as follows:

- Percentage of discharges recovered = number of individuals recovered/total number of discharged x 100
- Percentage of discharges died = number of deaths/total number of discharged x 100
- Percentage of discharges defaulted = number of defaulters/total number of discharged x 100
- Percentage of discharges not recovered = number of individuals not recovered/total number of discharged x 100

In addition to the indicators outlined above, monitoring systems should include:

- the population's participation;
- acceptability of the programme (the default and coverage rate could be used as a proxy measure of this);
- the quantity and quality of food;
- coverage;
- reasons for transfers to other programmes (particularly of children whose nutritional status deteriorates to severe acute malnutrition); and
- number of individuals admitted and in treatment.

Consider external factors such as:

- morbidity patterns;
- levels of undernutrition in the population;
- level of food insecurity in households and in the population;
- complementary interventions available to the population (including general food assistance or equivalent programmes); and
- the capacity of existing systems for service delivery.

**Links to health and other sectors:** Both targeted and blanket supplementary feeding programmes can be used as a platform for delivering complementary services. In many situations, a blanket supplementary feeding programme for prevention can support crisis response. For example, it can provide access to the target population through a census registration, community screening and referral for severe acute malnutrition and moderate acute malnutrition management. It can also allow for child survival interventions such as:

- anthelmintics;
- vitamin A supplementation;
- iron and folic acid combined with malaria screening and treatment;
- zinc for treatment of diarrhoea; and
- immunisations.

⊕ See *Essential healthcare – communicable diseases standards 2.1.1 to 2.1.4* and *Essential healthcare – child health standards 2.2.1 and 2.2.2*.

Populations with high levels of vulnerability, such as high HIV prevalence and people with difficulties moving or feeding, may require programme adaptations to meet their needs. This could include adjusting the quality and quantity of the supplementary food ration ⊕ see *Infant and young child feeding standard 4.1*.

## Management of malnutrition standard 2.2: Severe acute malnutrition

Severe acute malnutrition is treated.



### Key actions

- 1 Establish clearly defined and agreed strategies, objectives and criteria for set-up and closure of interventions from the outset of the programme.
  - Include adequate staffing and relevant capacity, expertise and skills.
- 2 Include inpatient care, outpatient care, referral and community mobilisation components in the management of severe acute malnutrition.
- 3 Provide nutrition and healthcare according to nationally and internationally recognised guidelines for the management of severe acute malnutrition.

- 4 Establish discharge criteria that include anthropometric and other indices.
- 5 Investigate and act on causes of default and non-response, or an increase in deaths.
- 6 Protect, support and promote breastfeeding, complementary feeding, hygiene promotion, and good mother and child interaction.
  - Provide clear information on the importance of exclusive breastfeeding in children up to six months, and continued breastfeeding for children from 6 to 24 months, for both the physical and psychological health of mother and child.

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## Key indicators

### Percentage of the target population less than a one day's return walk (including time for treatment) to the programme site

- >90 per cent of the target population

### Percentage of severe acute malnutrition (SAM) cases with access to treatment services (coverage)

- >50 per cent in rural areas
- >70 per cent in urban areas
- >90 per cent in a camp

### Proportion of discharges from therapeutic care who have died, recovered or defaulted

- Died: <10 per cent
- Recovered: >75 per cent
- Defaulted: <15 per cent

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## Guidance notes

**Programme components:** Inpatient care may be provided directly or through referral. Programmes should provide decentralised outpatient care for children with no medical complications. Outpatient programme sites should be close to the targeted population, to reduce the risks and costs associated with travelling with young children, and the risk of further displacement. ⊕ See *Child health standard 2.2.2: Management of newborn and childhood illness*.

Link programmes with other relevant services, such as:

- supplementary feeding;
- HIV and tuberculosis networks;
- rehabilitation;
- primary health services; and
- food security programmes including food or cash-based assistance.

**Coverage** assessment methodologies are similar in severe acute malnutrition and moderate acute malnutrition programmes ⊕ *see Management of malnutrition standard 2.1: Moderate acute malnutrition.*

**Admission criteria** should be consistent with national and international guidance. Admission criteria for infants below six months and for groups whose anthropometric status is difficult to determine, should include clinical and breastfeeding status ⊕ *see Appendix 4: Measuring acute malnutrition and References and further reading.*

Individuals who are (or are suspected to be) HIV-positive or who have tuberculosis or another chronic illness should not be discriminated against and should have equal access to care if they meet the admission criteria. Some individuals who do not meet anthropometric criteria for acute malnutrition may benefit from supplementary feeding. For example people living with HIV, tuberculosis or other chronic diseases, people discharged from care but requiring therapeutic support to avoid relapse, or persons with disabilities. Adjust monitoring and reporting systems if such individuals do not meet anthropometric criteria.

People living with HIV who do not meet admission criteria often require nutritional support. Such support is better offered outside the context of treatment for severe acute malnutrition in crises. Provide these individuals and their families with a range of services, including community and home-based care, tuberculosis treatment centres and prevention of mother-to-child-transmission programmes.

**Discharge criteria and recovery:** Discharged individuals must be free from medical complications. In addition, they should have regained their appetite and have achieved and maintained appropriate weight gain without nutrition-related oedema (for example, for two consecutive weighings). Calculate mean weight gain separately for individuals with and without nutritional oedema. Breastfeeding is especially important for infants under six months, as well as for children aged 6 to 24 months. Non-breastfed infants will need close follow-up. Adhere to discharge criteria in order to avoid the risks associated with premature discharge.

Guidelines for community management of acute malnutrition specify the average length of stay for treatment and aim to shorten the recovery periods. Adhere to the existing national guidelines when calculating the average length of stay, as these depend on the context. HIV, tuberculosis and other chronic conditions may result in some malnourished individuals failing to respond to treatment. Work with health services and other social and community support services to identify longer-term treatment options for those people ⊕ *see Essential healthcare – sexual and reproductive health standard 2.3.3: HIV.*

**Performance indicators for managing severe acute malnutrition:** The population of discharged individuals for severe acute malnutrition is made up of those who have recovered, died, defaulted or not recovered ⊕ *see Guidance notes for Management of malnutrition standard 2.1: Moderate acute malnutrition.*



Performance indicators for managing severe acute malnutrition should combine inpatient and outpatient care outcomes without double-counting those that transfer from one to the other. If this is not possible, adjust the interpretation of outcome rates. For example, programmes should expect better performance when only providing outpatient care. When only providing inpatient care, programmes should aim for the results outlined for combined care.

Individuals who are referred to other services, such as health services, have not ended treatment. When assessing performance of outpatient treatment, report transfers to inpatient care in order to accurately represent programme performance.

Performance indicators do not factor in HIV clinical complexity. HIV clinical complexity will affect mortality rates. In these situations, interpretation of programme performance must take this into consideration.

In addition to discharge indicators, review disaggregated data of new admissions (sex, age, disability), number of children in treatment and coverage rates when monitoring performance. Investigate and document the proportion and causes of readmission, deterioration of clinical status, defaulting and failure to respond on an ongoing basis. Adapt the definition of these to guidelines in use.

**Health inputs:** All severe acute malnutrition programmes should include systematic treatments according to national or international guidance. It is essential that they include effective referral mechanisms for managing underlying illnesses such as tuberculosis and HIV. In areas of high HIV prevalence, malnutrition programmes should consider interventions that seek to avoid HIV transmission and that support maternal and child survival. In settings where HIV infection is common (HIV prevalence more than 1 per cent), test children with malnutrition to establish their HIV status and to determine their need for anti-retroviral drug treatment.

**Breastfeeding support:** Mothers of infant inpatients need skilled breastfeeding support as part of nutritional rehabilitation and recovery. This is particularly important for children below six months and for mothers with disabilities. Provide sufficient time and resources, such as a designated private breastfeeding area, to target skilled support and enable peer support. Breastfeeding mothers of severely malnourished infants under six months should receive a supplementary food ration regardless of their nutritional status. If those mothers meet the anthropometric criteria for severe acute malnutrition, admit them for treatment.

**Psychosocial support:** Emotional and physical stimulation through play is important during the rehabilitation period for children with severe acute malnutrition. It promotes attachment and positive maternal mood. Caregivers of such children often require social and psychosocial support to bring their children for treatment. Some mothers may also need to be supported to access mental health care services for perinatal depression. This may be achieved through mobilisation programmes. Programmes should emphasise the importance of stimulation and interaction in treating and preventing future disability and cognitive impairment in



children. Enable all caregivers of severely malnourished children to feed and care for their children during treatment; provide them with advice, demonstrations and health and nutrition information. Pay attention to the impact of treatment on the caregivers and siblings to ensure adequate childcare arrangements, avoid family separation, minimise psychosocial distress and maximise the potential treatment adherence.

**Linkage with other actors:** Coordinate with child protection and gender-based violence partners to establish referral pathways and information sharing protocols. Train nutrition staff in how to provide supportive and confidential referrals for caregivers of children exposed to physical, sexual or emotional violence, exploitation or abuse.



## 3. Micronutrient deficiencies

Micronutrient deficiencies are a constraint to socio-economic development in many countries. They have a great impact on people's health, learning ability and productivity. These deficiencies contribute to a vicious cycle of malnutrition, underdevelopment and poverty, affecting already underprivileged groups.

Micronutrient deficiencies are difficult to identify in many contexts. While clinical signs of severe deficiencies may be easy to diagnose, the greater burden on the health and survival of populations may be subclinical deficiencies. Assume that a crisis will worsen any existing micronutrient deficiencies in a population. Address these deficiencies using population-wide interventions and individual treatment.

There are three approaches to controlling micronutrient deficiencies:

- **Supplementation:** Providing micronutrients in highly absorbable form normally results in the fastest control of the micronutrient status of individuals or targeted populations. Examples include supplementation programmes targeting anaemia through iron supplementation, folic acid supplementation in pregnant women and vitamin A supplementation in children younger than five years.
- **Fortification:** Fortifying food products with micronutrients can be an effective strategy for controlling micronutrient deficiencies. Examples of this include iodised salt, micronutrient powders or vitamin A fortified vegetable oil.
- **Food-based approaches:** The vitamins and minerals needed to prevent micronutrient deficiencies are present in a variety of foods. Policies and programmes should ensure improved year-round consumption of an adequate variety, quantity and quality of safe, micronutrient-rich foods.

While all three approaches are used in crises, the most common and widely used is supplementation.

### Micronutrient deficiencies standard 3: Micronutrient deficiencies

Micronutrient deficiencies are corrected.

#### Key actions

- 1 Collect information on the pre-crisis situation to determine the most common micronutrient deficiencies.
- 2 Train health staff in identifying and treating micronutrient deficiencies.
- 3 Establish procedures to respond to micronutrient deficiency risks.

- 4 Link micronutrient responses with public health responses to reduce diseases commonly associated with crises, such as vitamin A to manage measles and zinc to manage diarrhoea.

## Key indicators

### There are no cases of scurvy, pellagra, beriberi or riboflavin deficiency

- ⊕ See *Appendix 5: Measures of the public health significance of micronutrient deficiencies* for a definition of public health significance by age group and whole population.
- Use national or context-specific indicators where they exist.

### Rates of xerophthalmia, anaemia and iodine deficiency are not of public health significance

- ⊕ See *Appendix 5: Measures of the public health significance of micronutrient deficiencies* for a definition of public health significance by age group and whole population.
- Use national or context-specific indicators where they exist.

## Guidance notes

**Diagnosing clinical micronutrient deficiencies:** Clinical micronutrient deficiencies should always be diagnosed by qualified medical staff. When clinical indicators of these deficiencies are incorporated into health or nutritional surveillance systems, train staff to conduct the basic assessment and refer accordingly. Case definitions are problematic; in crises, determine them through the response to supplementation.

**Subclinical micronutrient deficiencies** are those that are not severe enough to present readily identifiable symptoms. However, they can have adverse health outcomes. Identification requires specialised biochemical examination. An exception is anaemia, for which a basic test is available and easily undertaken in the field.

Indirect indicators can be used to assess the risk of micronutrient deficiencies and determine when supplements or an improved dietary intake may be required. Indirect assessment involves estimating nutrient intakes at the population level and extrapolating deficiency risk. To do this, review available data on food access, availability and utilisation, and assess food ration adequacy.

**Prevention:** Strategies for micronutrient deficiency prevention are addressed in section 6 below (⊕ see *Food assistance standard 6.1: General nutrition requirements*). Disease control is critical in preventing micronutrient deficiencies. Acute respiratory infection, measles, parasitic infections such as malaria, and diarrhoea are examples of diseases that deplete micronutrient stores. Preparedness for treatment will involve developing case definitions and guidelines for treatment, and systems for active case-finding ⊕ see *Essential healthcare – child health standards 2.2.1 and 2.2.2*.



**Treatment of micronutrient deficiencies:** Case-finding and treatment should occur within the health system and within feeding programmes. Where micronutrient deficiency rates exceed public health thresholds, blanket treatment of the population with supplements may be appropriate. Scurvy (vitamin C deficiency), pellagra (niacin deficiency), beriberi (thiamine deficiency) and ariboflavinosis (riboflavin deficiency) are the most commonly observed illnesses resulting from micronutrient deficiencies ⊕ *see Appendix 5: Measures of the public health significance of micronutrient deficiencies.*

Public health measures to control micronutrient deficiencies include:

- providing vitamin A supplementation with vaccination for children aged 6–59 months;
- de-worming all children aged 12–59 months;
- adding iodised salt and other fortified commodities such as vitamin A and D fortified vegetable oil in the food basket and providing micronutrient powders or iodised oil supplements;
- providing iron-containing multiple micronutrient products for children aged 6–59 months;
- providing daily iron-containing multiple micronutrient supplements, including folic acid, for pregnant and lactating women.

If multiple micronutrient products containing iron are not available, provide daily iron and folic acid supplements to pregnant women and those who have given birth in the past 45 days.

Use sex-disaggregated indirect indicators to assess the risk of micronutrient deficiencies in the affected population and determine the need for improved dietary intake or the use of supplements. For example, indirect indicators for vitamin A deficiency can include low birth weight, wasting or stunting. Assess the risk of micronutrient deficiencies in affected people and determine the need for improved dietary intake or the use of supplements ⊕ *see Food Security and Nutrition assessment standard 1.2: Nutrition assessment.*

## 4. Infant and young child feeding

Appropriate and timely support of infant and young child feeding in emergencies (IYCF-E) saves lives and protects children's nutrition, health and development. Inappropriate infant and young child feeding practices increase vulnerability to undernutrition, disease and death, and undermine maternal health. Crises increase those risks. Some infants and young children are particularly vulnerable, including:

- low birth-weight infants;
- separated and unaccompanied children;
- infants and children of depressed mothers;
- children under two years not breastfeeding;
- those from populations with medium or high HIV prevalence;
- children with disabilities, particularly those with feeding difficulties; and
- infants and young children with acute malnutrition, stunting or micronutrient deficiencies.

IYCF-E addresses actions and interventions to protect and support the nutritional needs of both breastfed and non-breastfed infants and young children aged 0–23 months. Priority interventions include:

- breastfeeding protection and support;
- appropriate and safe complementary feeding; and
- management of artificial feeding for infants with no possibility to breastfeed.

Support of pregnant and breastfeeding women is central to the well-being of their children. “Exclusive breastfeeding” means an infant receives no liquids other than breastmilk, and no solids except for necessary micronutrient supplements or medicines. It guarantees food and fluid security in infants for the first six months and provides active immune protection. Breastfeeding ensures optimal brain development and continues to protect the health of older infants and children, especially in contexts where WASH conditions are lacking. Breastfeeding also protects maternal health by delaying menstruation and protecting against breast cancer. It promotes psychological well-being by enhancing attachment and responsiveness.

The key actions in this section reflect the Operational Guidance on Infant and Young Child Feeding in Emergencies (Operational Guidance). The Operational Guidance is a product of an interagency working group whose aim is to provide concise, practical guidance on how to ensure appropriate IYCF-E and on the International Code of Marketing of Breastmilk Substitutes (“the Code”).



## Infant and young child feeding standard 4.1: Policy guidance and coordination

Policy guidance and coordination ensure safe, timely and appropriate infant and young child feeding.

### Key actions

- 1 Establish an IYCF-E coordination authority within the crisis coordination mechanism, and ensure collaboration across sectors.
  - Assume the government is the coordination authority, wherever possible.
- 2 Include the specifications of the Operational Guidance in relevant national and humanitarian organisation policy guidance on preparedness.
  - Develop guidance and a joint statement with national authorities in situations where there is no policy.
  - Strengthen relevant national policies wherever possible.
- 3 Support strong, harmonised, timely communication on IYCF-E at all response levels.
  - Inform humanitarian organisations, donors and media as soon as possible about any IYCF-E policies and practices that are in place.
  - Communicate with affected people about available services, IYCF-E practices and feedback mechanisms.
- 4 Avoid accepting or soliciting donations of breastmilk substitutes, other liquid milk products, feeding bottles and teats.
  - Donations that do arrive should be managed by the designated authority, in accordance with the Operational Guidance and the Code.
  - Ensure strict targeting and use, procurement, management and distribution of breastmilk substitutes. This must be based on needs and risk assessment, data analysis and technical guidance.

### Key indicators

**Percentage of adopted IYCF policies in emergencies that reflect the specifications of the Operational Guidance**

**No Code violations reported**

**Percentage of Code violations donations of breastmilk substitutes (BMS), liquid milk products, bottles and teats dealt with in a timely manner**

### Guidance notes

**Communication with the affected people, responders and media:** Communicating about available services and healthy infant and young child feeding practices will

require adapted messages for different groups providing assistance and for the public. Consider the need to support caregivers who are grandparents, single parents, child-headed households or siblings as well as caregivers with disabilities, and people living with HIV when generating messages.

**International Code of Marketing of Breastmilk Substitutes:** The Code protects artificially fed babies by ensuring safe use of breastmilk substitutes. It is based on impartial, accurate information and applies in all contexts. It should be included in legislation during the preparedness phase and enforced during the crisis response. In the absence of national legislation, implement the Code provisions at a minimum.

The Code does not restrict the availability or prohibit the use of breastmilk substitutes, feeding bottles or teats. It only restricts their marketing, procurement and distribution. Common Code violations in crises derive from labelling issues and untargeted distribution. During crises, monitor and report Code violations to UNICEF, WHO and local authorities.

Use standard indicators where they exist and develop context-specific indicators where they do not. Define IYCF-E benchmarks to determine progress and achievement, considering intervention time frames. Encourage consistent IYCF-E indicator use across implementing partners and in surveys. Repeat assessments or parts of a baseline assessment as part of monitoring IYCF-E interventions. Use annual surveys to determine the impact of these interventions.

**Artificial feeding:** All breastmilk substitutes must comply with Codex Alimentarius and the Code. Access to adequate WASH services is essential to minimise the risks of artificial feeding in emergencies. The distribution system for breastmilk substitutes will depend on the context, including the scale of intervention. Do not include infant formula and other breastmilk substitutes in general or blanket food distributions. Do not distribute dried liquid milk products and liquid milk as a single commodity. Indications for and management of artificial feeding should be in accordance with the Operational Guidance and the Code, under the guidance of the designated IYCF-E coordinating authority.

## Infant and young child feeding standard 4.2: Multi-sectoral support to infant and young child feeding in emergencies

Mothers and caregivers of infants and young children have access to timely and appropriate feeding support that minimises risks, is culturally sensitive and optimises nutrition, health and survival outcomes.



### Key actions

- 1 Prioritise pregnant and breastfeeding women for access to food, cash or voucher transfers and other supportive interventions.

- 2 Provide access to skilled breastfeeding counselling for pregnant and breast-feeding mothers.
- 3 Target mothers of all newborns with support for early initiation of exclusive breastfeeding.
  - Provide simple guidance for exclusive breastfeeding in maternity services.
  - Protect, promote and support exclusive breastfeeding in infants aged 0–5 months, and continued breastfeeding in children aged six months to two years.
  - Where mixed feeding is practised in infants aged 0–5 months, support transitioning to exclusive breastfeeding.
- 4 Provide appropriate breastmilk substitutes, feeding equipment and associated support to mothers and caregivers whose infants require artificial feeding.
  - Explore the safety and viability of relactation and wet nursing where infants are not breastfed by their mother. Consider the cultural context and service availability in such situations.
  - If breastmilk substitutes are the only acceptable options, include an essential package of support with cooking and feeding equipment, WASH support and access to healthcare services.
- 5 Support timely, safe, adequate and appropriate complementary food support.
  - Assess household foods to assess whether they are suitable as complementary foods for children and provide context-specific advice and support on complementary feeding.
  - Ensure access to feeding equipment and cooking supplies, with considerations for children with feeding difficulties.
- 6 Provide feeding support to particularly vulnerable infants and young children.
  - Support infant stimulation activities and early child development care practices within nutrition programmes.
- 7 Provide micronutrient supplements as necessary.
  - Provide daily supplements to pregnant and breastfeeding women, including one daily requirement of multiple micronutrients to protect maternal stores and breastmilk content, whether the women receive fortified rations or not.
  - Continue iron and folic acid supplements when already provided.

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## Key indicators

**Percentage of breastfeeding mothers who have access to skilled counselling**

**Percentage of caregivers who have access to Code-compliant supplies of appropriate breastmilk substitutes (BMS) and associated support for infants who require artificial feeding**



## Percentage of caregivers who have access to timely, appropriate, nutritionally adequate and safe complementary foods for children aged 6 to 23 months

### Guidance notes

**IYCF-E assessment and monitoring:** Assess the needs and priorities for IYCF-E response and monitor the impact of IYCF-E interventions ⊕ see *Food security and nutrition assessments standard 1.2: Nutrition assessment*.

**Multi-sectoral collaboration:** Sectoral entry points to identify and support IYCF-E include:

- ante-natal and post-natal care;
- immunisation points;
- growth monitoring;
- early childhood development;
- HIV treatment services (including prevention of mother-to-child transmission);
- acute malnutrition treatment;
- community health, mental health and psychosocial support;
- WASH services;
- places of employment; and
- agricultural extension work.

**Target groups:** All assessment and programme data for children under five years should be disaggregated by sex and by age 0–5 months, 6–11 months, 12–23 months, and 24–59 months. Disaggregation by disability is recommended from 24 months.

Identify and establish services to provide for the nutritional and care needs of children with disabilities, separated and unaccompanied infants and young children. Refer separated and unaccompanied children to child protection partners. Identify the proportion of pregnant and lactating women.

Consider populations with medium or high HIV prevalence, separated and unaccompanied children, low birth-weight infants, children with disabilities and with feeding difficulties, children under two years not breastfeeding, and those acutely malnourished. Be aware that children of mothers with depression tend to be at higher risk of malnutrition.

**Pregnant and breastfeeding women:** If the needs of pregnant and breastfeeding women are not met in food, or cash or voucher assistance programmes, target pregnant and breastfeeding women with fortified food. Give micronutrient supplements in accordance with WHO recommendations.

Organise psychosocial support for distressed mothers, including referral to mental health services as necessary. Arrange appropriate support for mothers with disabilities. Create safe places in camp and other collective settings for women to breastfeed, such as baby friendly spaces with exclusive breastfeeding areas.



**Breastfed infants:** Planning and resource allocation should allow for skilled breastfeeding support in difficult situations. This could include for acutely malnourished infants aged 0–6 months, populations where mixed feeding is common, and infant feeding in the context of HIV.

**Non-breastfed infants:** In all crises, protect infants and young children who are not breastfed and support them to meet their nutritional needs. The consequences of not breastfeeding vary by the age of the child. The youngest children are most vulnerable to infectious diseases. They depend on access to assured supplies of appropriate breastmilk substitutes, fuel, equipment and WASH conditions.

**Infant formula and other breastmilk substitutes:** Infant formula is the appropriate breastmilk substitute for infants aged 0–5 months. Give preference to ready-to-use infant formula in liquid form, since it does not require preparation and carries fewer safety risks than powdered infant formula.

Appropriate use, careful storage and hygiene of feeding utensils are essential for ready-to-use infant formula. Ready-to-use infant formula is bulky and therefore expensive to transport and store. In children over six months, use alternative liquid milks. Alternative milks include pasteurised full-cream milk from a cow, goat, sheep, camel or buffalo; ultra-high temperature liquid milk; fermented liquid milk; or yogurt.

Use of infant formula in children over six months will depend on pre-crisis practices, resources available, sources of alternative liquid milks, adequacy of complementary foods and humanitarian organisation policy. Indications for using breastmilk substitutes may be short or longer term. Follow-on, growing-up liquid milks and toddler liquid milks marketed to children over six months are not necessary.

A qualified health or nutrition worker can determine the need for infant formula through individual assessment, follow-up and support. Where individual assessment is not possible, consult with the coordinating authority and technical humanitarian organisations for advice on assessment and targeting criteria. Provide infant formula until the child is breastfeeding or at least six months. When providing breastmilk substitutes to children who need it, do not inadvertently encourage breastfeeding mothers to use it also.

Do not use feeding bottles; they are difficult to clean. Encourage and support cup feeding.

Maintain surveillance of morbidity at individual and population levels, with a focus on diarrhoea.

**Complementary feeding** is the process that starts when breastmilk alone is no longer sufficient to meet the nutritional requirements of infants and other foods and liquids are needed along with breast milk. Complementary foods and liquids, whether industrially produced or locally prepared, should be provided to children aged 6–23 months.

Pre-existing and existing nutrient gaps are key in determining complementary food support options. Other considerations include the affordability and availability of a nutritious diet, seasonality of food supply and access to locally available complementary foods of good quality. Complementary food response options include:

- cash-based assistance to purchase locally available fortified and nutrient-rich foods;
- distributing nutrient-rich household foods or fortified foods;
- provision of multiple-micronutrient fortified foods to children aged 6–23 months;
- home fortification with micronutrient supplements such as micronutrient powders or other supplements;
- livelihood programmes; and
- safety net programmes.

Consider training or messaging alongside cash-based assistance, to ensure affected people understand the optimal use of cash for nutritional outcomes.

***Micronutrient supplementation:*** Children aged 6–59 months not receiving fortified foods may require multiple micronutrient supplements to meet nutrition requirements. Vitamin A supplements are recommended. In malaria-endemic areas, provide iron in any form, including micronutrient powders, and always in conjunction with malaria diagnosis, prevention and treatment strategies. Examples of malaria prevention strategies are provision of insecticide-treated bed nets and vector-control programmes, prompt diagnosis of malaria illness, and treatment with effective anti-malarial drug therapy. Do not provide iron to children who do not have access to malaria-prevention strategies. Provide iron and folic acid, or multiple micronutrient supplements, to pregnant and lactating women, in accordance with the latest guidance.

***HIV and infant feeding:*** Mothers living with HIV should be supported to breastfeed for at least 12 months and up to 24 months or longer while receiving anti-retroviral therapy. If anti-retroviral drugs are not available, choose the strategy that gives infants the greatest chance of HIV-free survival. This means balancing risks of HIV transmission versus non-HIV causes of child death. Support mothers and caregivers accordingly. Prioritise accelerated access to anti-retroviral drugs ⊕ see *Essential healthcare – sexual and reproductive health standard 2.3.3: HIV*.



Counsel breastfeeding HIV-uninfected mothers and wet nurses, and those whose HIV status is unknown, to breastfeed exclusively for the first six months of the baby's life. After that, introduce complementary foods while continuing breastfeeding until the child is 24 months or more. Infants already established on replacement feeding require urgent identification and support.

Consult existing national and sub-national policies and assess whether they are in line with the latest WHO recommendations. Determine whether they are appropriate for the new crisis context, considering the change in risk exposure

to non-HIV infectious disease, the likely duration of the emergency, whether replacement feeding is possible and the availability of anti-retroviral drugs. Updated interim guidance may need to be issued and communicated to mothers and caregivers.

***Gender-based violence, child protection and nutrition:*** Gender-based violence, gender inequality and nutrition are often inter-related. Domestic violence can pose a threat to the health and well-being of women and their children. Nutrition staff should provide supportive and confidential referral for caregivers or children exposed to gender-based violence or child abuse. Other elements to integrate include counselling, working to establish women- and child-friendly treatment sites, and regular monitoring of default rates and failure to respond to treatment. Consider including specialised gender-based violence and child protection case-workers as part of nutrition staff ⊕ *see Protection Principles 3 and 4.*

***Public health emergencies:*** In public health crises, take steps to prevent any interruptions in access to health and feeding support services, to ensure continued household food security and livelihoods, and to minimise disease transmission risks via breastfeeding, as well as to minimise maternal illness and death. Refer to WHO guidance where needed for cholera, Ebola and Zika virus guidance.

## 5. Food security

Food security exists when all people have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life.

Food security is influenced by macro-economic, socio-political and environmental factors. National and international policies, processes or institutions can impact affected people's access to nutritionally adequate food. The degradation of the local environment and the increasingly variable and extreme weather caused by climate change also affect food security.

In a humanitarian crisis, food security responses should aim to meet short-term needs and reduce the need for the affected population to adopt potentially damaging coping strategies. Over time, responses should protect and restore livelihoods, stabilise or create employment opportunities and contribute to restoring longer-term food security. They should not have a negative impact on natural resources and the environment.

Household food insecurity is one of four underlying causes of undernutrition, along with poor feeding and care practices, an unhealthy household environment and inadequate healthcare.

The standards in this section consider the resources to meet the food needs of both the general population and people at increased nutritional risk, such as children under five years of age, people living with HIV or AIDS, older people, people with chronic illnesses and people with disabilities.

Responses aimed at treating malnutrition will have a limited impact if the food needs of the general population are not met. People who recover from malnutrition but who cannot maintain an adequate food intake will deteriorate again.

The choice of the most effective and efficient crisis response options requires a thorough analysis of sex-disaggregated needs, household preferences, cost efficiency and effectiveness, protection risks and seasonal changes. It should also identify the specific type and quantity of food required and the optimal way of distributing it.

Food is the major expenditure for vulnerable households. Cash-based assistance can enable people receiving assistance to better manage their overall resources, although this depends on the transfer value provided. Collaborative analysis and programme objectives will guide the targeting, transfer value and any potential conditions placed on the transfer.

Food security responses should progressively aim to work through or support local markets. Decisions on local, national or regional procurement should be based on an understanding of markets, including market and financial service providers.



Market-based programming, such as grants to traders for restocking, can also support markets ⊕ see *Delivering assistance through markets* and *MERS Handbook*.

## Food security standard 5: General food security

People receive food assistance that ensures their survival, upholds their dignity, prevents the erosion of their assets and builds resilience.

### Key actions

- 1 Based on food security assessment data, design the response to meet immediate needs, and consider measures to support, protect, promote and restore food security.
  - Consider both in-kind and cash-based options for the food basket.
- 2 Develop transition and exit strategies for all food security programmes as early as possible.
  - Integrate programmes with responses from other sectors.
- 3 Ensure that people receiving assistance have access to the necessary knowledge, skills and services to cope and support their livelihoods.
- 4 Protect, preserve and restore the natural environment from further degradation.
  - Consider the impact of cooking fuel on the environment.
  - Consider livelihoods strategies that do not contribute to deforestation or soil erosion.
- 5 Monitor the level of acceptance of and access to humanitarian food security interventions by different groups and individuals.
- 6 Ensure that people receiving food assistance are consulted on the design of the response and are treated with respect and dignity.
  - Establish a mechanism for providing feedback.

### Key indicators

#### Percentage of targeted households with acceptable Food Consumption Score

- >35 per cent; if oil and sugar are provided, >42 per cent

#### Percentage of targeted households with acceptable Dietary Diversity Score

- >5 main food groups regularly consumed

#### Percentage of targeted households with acceptable Coping Strategy Index

## Percentage of people receiving assistance that report complaints or negative feedback related to their treatment with dignity

- All complaints are regularly monitored and quickly responded to.

### Guidance notes

**Context:** Monitor the wider food security situation to assess the continued relevance of a response. Determine when to phase out activities and when to introduce modifications or new projects, and identify any need for advocacy.

In urban settings, take steps to contextualise household food expenditure indicators, particularly in dense low-income settlements. For example, the Food Expenditure Share and its established thresholds may be less accurate in urban contexts, because non-food expenses, such as rent and heating, are relatively higher.

**Exit and transition strategies:** Start developing exit and transition strategies from the outset of the programme. Before closing a programme or making a transition, there should be evidence of improvement or that another actor can take responsibility. In the case of food assistance, it may mean understanding the existing or planned social protection or long-term safety-net systems.

Food assistance programmes can coordinate with social protection systems or lay the foundation for such a future system. Humanitarian organisations can also advocate for systems that address chronic food insecurity, informed by a chronic food insecurity analysis where available [⊕ see MERS Handbook](#).

**At-risk groups:** Use community-based risk assessments and other participatory monitoring to counter any patterns that endanger particular groups or individuals. For example, distributing fuel and/or fuel-efficient stoves may reduce the risks of physical and sexual assault for women and girls. Supplemental cash transfers, especially to vulnerable households or individuals, such as women- and child-headed households or households with people with disabilities, can reduce the risk of sexual exploitation and child labour.

**Community support structures:** Design community support structures together with users, so that they are appropriate and adequately maintained and are more likely to remain after the programme ends. Consider the needs of vulnerable individuals during the design. For example, separated or unaccompanied girls and boys may miss out on the information and skills development that takes place within a family [⊕ see Core Humanitarian Standard Commitment 4](#).

**Livelihoods support:** [⊕ See Food security and nutrition – livelihoods standards 7.1 and 7.2, MERS Handbook and LEGS Handbook](#).

**Environmental impact:** People living in camps require cooking fuel, which may accelerate local deforestation. Consider options such as fuel distribution, efficient stoves and alternative energy. Take account of the potential environmental



benefits of making vouchers more specific to environmentally sustainable goods and services. Look for opportunities to change previous food and cooking customs that may have caused environmental degradation. Consider climate change trends. Prioritise activities that provide relief in the short term and reduce crisis risk in the medium and long term. For example, destocking may locally reduce pressure on pasture during a drought ⊕ see *Shelter and settlement standard 7: Environmental sustainability*.

**Access and acceptability:** People are more likely to participate in a programme that is easy to access and with acceptable activities. Use participatory design with all members of the affected population to ensure overall coverage without discrimination. While some food security responses target the economically active, responses should be accessible to all people. To overcome constraints for at-risk groups, actively work with them to design activities and set up appropriate support structures.



## 6. Food assistance

Food assistance is required when the quality and quantity of available food or access to food is not sufficient to prevent excessive mortality, morbidity or malnutrition. It includes humanitarian responses that improve food availability and access, nutrition awareness and feeding practices. Such responses should also protect and strengthen the livelihoods of affected people. Response options include in-kind food, cash-based assistance, support for production and market support. While meeting immediate needs is a priority in the initial stages of a crisis, responses should preserve and protect assets, help to recover assets lost through crises and increase resilience to future threats.

Food assistance may also be used to prevent people adopting negative coping mechanisms such as the sale of productive assets, over-exploitation or destruction of natural resources or the accumulation of debt.


A wide range of tools can be used in food assistance programmes, including:

- general food distributions (provision of in-kind food, cash-based assistance for purchase of food);
- blanket supplementary feeding programmes;
- targeted supplementary feeding programmes; and
- providing relevant services and inputs, including transferring skills or knowledge.

General food distributions provide support to those who need the food most. Discontinue these distributions when the people receiving assistance can produce or access their food through other means. Transitional arrangements may be needed, including conditional cash-based assistance or livelihood support.

People with specific nutrient needs may require supplementary food in addition to any general ration. This includes children aged 6–59 months, older people, persons with disabilities, people living with HIV, and pregnant or breastfeeding women. In many situations, supplementary feeding saves lives. On-site feeding is undertaken only when people do not have the means to cook for themselves. This can be necessary immediately after a crisis, during population movements or where insecurity would put recipients of take-home rations at risk. It can also be used for emergency school feeding, although take-home rations may be distributed through schools. Consider that children not attending school will not access these distributions; plan outreach mechanisms for these children.

Food assistance requires good supply chain management and logistics capabilities to manage commodities effectively.

Management of any cash delivery system needs to be robust and accountable, with systematic monitoring  see *Delivering assistance through markets*.



## Food assistance standard 6.1: General nutrition requirements

The basic nutritional needs of the affected people, including the most vulnerable, are met.

### Key actions

- 1 Measure the levels of access to adequate quantity and the quality of food.
  - Assess the level of access on a frequent basis to see whether it is stable or likely to decline.
  - Assess affected people's access to markets.
- 2 Design food and cash-based assistance to meet the standard initial planning requirements for energy, protein, fat and micronutrients.
  - Plan rations to make up the difference between the nutritional requirements and what people can provide for themselves.
- 3 Protect, promote and support affected people's access to nutritious foods and nutritional support.
  - Ensure that children aged 6–24 months have access to complementary foods and that pregnant and breastfeeding women have access to additional nutritional support.
  - Ensure households with chronically ill members, people living with HIV and tuberculosis, older people and people with disabilities have appropriate nutritious food and adequate nutritional support.

### Key indicators

#### **Prevalence of malnutrition among children <5 years disaggregated by sex, and disaggregated by disability from 24 months**

- Use WHO classification system (MAD, MDD-W).
- For disaggregation by disability, use the UNICEF/Washington Group module on Child Functioning.

#### **Percentage of targeted households with acceptable Food Consumption Score**

- >35 per cent; if oil and sugar are provided, >42 per cent

#### **Percentage of targeted households with acceptable Dietary Diversity Score**

- >5 main food groups regularly consumed

#### **Percentage of targeted households that receive the minimum food energy requirements (2,100kCal per person per day) and recommended daily micronutrient intake**

## Guidance notes

**Monitoring access to food:** Consider variables including levels of food security, access to markets, livelihoods, health and nutrition. This will help determine whether the situation is stable or declining, and whether food interventions are necessary. Use proxy indicators such as the Food Consumption Score or dietary diversity tools.

**Forms of assistance:** Use appropriate forms of assistance (cash, vouchers or in-kind) or a combination to ensure food security. Where cash-based assistance is used, consider complementary food distributions or supplementary food distributions to meet the needs of specific groups. Consider the adequacy of markets to serve particular nutritional needs and use specific methodologies including ‘the minimum cost of a healthy diet’ assessment tool.

**Design of food rations and nutritional quality:** A number of ration planning tools are available, for example NutVal. To plan general rations ⊕ *see Appendix 6: Nutritional requirements*. If a ration is designed to provide all the energy content of the diet, then it must contain adequate amounts of all nutrients. If a ration provides only part of the energy requirement of the diet, then design it using one of two approaches:

- If the nutrient content of the other foods available to the population is unknown, design the ration to provide a balanced nutrient content that is proportional to the energy content of the ration.
- If the nutrient content of the other foods available to the population is known, design the ration to complement these foods by filling nutrient gaps.

The following estimates for a population’s minimum nutritional requirements should be used for planning general rations and adjusted to context.

- 2,100 kCal per person per day with 10–12 per cent of total energy provided by protein and 17 per cent provided by fat ⊕ *see Appendix 4: Nutritional requirements* for further details.

Ensuring adequate nutrient content of food rations may be challenging where there are limited food types available. Consider access to iodised salt, niacin, thiamine and riboflavin. Options for improving the nutritional quality of the ration include fortifying staple commodities, including fortified blended foods, and encouraging the purchase of locally produced fresh foods using vouchers. Consider using supplementation products such as lipid-based, nutrient-dense, ready-to-use foods, or multiple micronutrient tablets or powders. Provide IYCF-E messages to ensure that optimal breastfeeding and complementary feeding practices are promoted ⊕ *see Infant and young child feeding standards 4.1 and 4.2*.

When planning rations, consult with the community to take account of local and cultural preferences. Choose foods that do not require long cooking if fuel is sparse. Whenever there are changes in rations, share information with entire communities as early as possible to minimise resentment and limit the risk of household



violence against women, who may be blamed for reduced rations. Clearly communicate the exit plan from the onset to manage expectations, reduce anxiety and enable households to make relevant decisions.

**Link with health programmes:** Food assistance can prevent the deterioration of the nutrition status of the affected population, especially when combined with public health measures to prevent diseases such as measles, malaria and parasitic infection ⊕ see *Health systems standard 1.1: Health service delivery* and *Essential healthcare – communicable diseases standard 2.1: Prevention*.

**Monitoring food use:** Key indicators for food assistance measure access to food but do not quantify food use. Direct measurement of nutrient intake is not realistic. Indirect measurement is a good alternative, using information from various sources including food availability and use at the household level, and assessing food prices, food availability and cooking fuel in local markets. Other options include examining food assistance distribution plans and records, assessing any contribution of wild foods and conducting food security assessments.

**At-risk groups:** When setting eligibility criteria for food assistance, consult with different groups to identify any particular needs that might otherwise be overlooked. Include adequate and acceptable food such as fortified blended food for young children (aged 6–59 months) in the general ration. Specific population groups that may need attention include older people, people living with HIV, persons with disabilities, and caregivers.

**Older people:** Chronic disease and disability, isolation, large family size, cold weather and poverty can reduce access to food and increase nutrient requirements. Older people should be able to access food sources and food transfers easily. Foods should be easy to prepare and consume and should meet the additional protein and micronutrient requirements of older people.

**People living with HIV:** There is a high risk of malnutrition for people living with HIV. This is due to factors such as reduced food intake, poor absorption of nutrients, changes in metabolism, and chronic infections and illness. The energy requirements of people living with HIV vary with the stage of the infection. Milling and fortifying food, or providing fortified, blended or special food supplements are possible strategies for improving access to an adequate diet. In some situations it may be appropriate to increase the overall size of any food ration. Refer malnourished people living with HIV to targeted feeding programmes, when available.

**Persons with disabilities,** including people with psychosocial disabilities, may be at particular risk of separation from immediate family members and usual caregivers in a crisis. They also may face discrimination. Reduce these risks by ensuring physical access to food, access to energy-dense and nutrient-rich foods, and mechanisms for feeding support. This may include providing manual blenders, spoons and straws, or developing systems for home visiting or outreach. In addition,

consider that children with disabilities are less likely to be enrolled in schools, missing school-based food programmes.

**Caregivers:** It is important to support people caring for vulnerable individuals. Caregivers and those they are caring for may face specific nutritional barriers. For example, they may have less time to access food because they are ill or caring for the ill. They may have a greater need to maintain hygienic practices. They may have fewer assets to exchange for food, due to the costs of treatment or funerals. They may face social stigma and reduced access to community support mechanisms. Use existing social networks to train selected members of the population to support caregivers.

## Food assistance standard 6.2: Food quality, appropriateness and acceptability

The food items provided are of appropriate quality, are acceptable and can be used efficiently and effectively.

### Key actions

- 1 Select foods that conform to the national standards of the host government and other internationally accepted quality standards.
  - Perform random sample testing on food stocks.
  - Understand and respect national regulations concerning the receipt and use of genetically modified foods when planning to use imported food.
- 2 Choose appropriate food packaging.
  - Provide labels with the date of production, country of origin, expiration or “best before” date, nutritional analysis and cooking instructions in accessible formats and in the local language, especially for less familiar or less commonly used foods.
- 3 Assess access to water, fuel, stoves and food storage facilities.
  - Provide ready-to-eat foods when crises prevent access to cooking facilities.
- 4 Provide access to adequate milling and processing facilities when whole-grain cereal is provided.
  - Meet milling costs of recipients using cash or vouchers, or the less-preferred approach of providing additional grain or milling equipment.
- 5 Transport and store food in appropriate conditions.
  - Follow standards in storage management, with systematic checks on food quality.
  - Measure quantities in consistent units; and avoid changing the units and the measuring procedures during the project.



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## Key indicators

**Percentage of affected population that report that food provided is of appropriate quality and meets local preferences**

**Percentage of affected population that report the mechanism to receive food was appropriate**

**Percentage of households that report that received food items were easy to prepare and store**

**Percentage of people receiving assistance that report complaints or negative feedback related to food quality**

- All complaints are regularly monitored and quickly responded to.

**Percentage of food losses reported by the programme**

- Target <0.2 per cent of total tonnage.
- 

## Guidance notes

**Food quality:** Foods must conform to the food standards of the host country's government. Food must also conform to the Codex Alimentarius standards about quality, packaging, labelling and fitness for purpose. When food is not of the quality required for its intended use, it is unfit for the purpose. This is true even if it is fit for human consumption. An example is when the quality of flour may not enable baking at household level even if it is safe to consume. Phytosanitary certificates or other inspection certificates must accompany locally purchased and imported foods. Fumigation should use appropriate products and follow strict procedures. Ensure that independent quality surveyors inspect large-quantity consignments and use independent quality surveyors when there are doubts or disputes about quality.

Ensure that host governments remain involved as much as possible. Obtain information on the age and quality of food consignments from supplier certificates, quality control inspection reports, package labels and warehouse reports. Make a database for certificates of analysis (CoA) issued by a relevant authority to certify the quality and purity of a product.

Assess availability of food commodities on local, national or international markets. If food assistance is sourced locally, it should be sustainable and not further strain local natural resources or distort markets. Factor potential food supply constraints into programme planning.

**Food packaging:** Food losses can be reported at warehouses and final distribution points. Food losses can be due to poor packaging in the distribution cycle. Packaging should be sturdy and convenient for handling, storage and distribution. It should be accessible for older people, children and persons with

disabilities. If possible, packaging should allow direct distribution without requiring re-measuring or repacking.

Food packaging should not carry any messages that are politically or religiously motivated or divisive in nature.

Packaging should not be a hazard, and humanitarian organisations have a responsibility to prevent the environment becoming littered with packaging from items distributed, or bought with cash or vouchers. Use minimal packaging (biodegradable where possible) and locally appropriate materials, if possible by promoting a partnership with the local government and packaging material manufacturers. Provide food receptacles that can be reused, recycled or re-appropriated. Dispose of waste packaging in a way that prevents environmental degradation. Ready-to-use food packaging, such as foil wrappers, may require specific controls for safe disposal.

Where litter occurs, organise regular community clean-up campaigns. These campaigns should be part of community mobilisation and awareness-raising, rather than as cash-for-work ⊕ *see WASH solid waste management standards 5.1 to 5.3.*

**Food choice:** While nutritional value is the primary consideration in providing food assistance, the commodities should be familiar to the recipients. They should also be consistent with religious and cultural traditions, including any food taboos for pregnant or breastfeeding women. Consult women and girls on food choice, as in many settings they have the primary responsibility for food preparation. Support grandparents, men who are single heads of households, and youth in charge of their siblings without support, as their access to food could be at risk.

In urban contexts, households are likely to access a more diverse range of foods than in rural ones, but the quality of the diet may be limited, requiring different nutritional support.

**Infant feeding:** Donated or subsidised infant formula, powdered milk, liquid milk or liquid milk products should not be distributed as a separate commodity in a general food distribution. These items should also not be distributed in a take-home supplementary feeding programme ⊕ *see Infant and young child feeding standard 4.2.*

**Wholegrain cereal:** Where household grinding is traditional or there is access to local mills, distribute wholegrain cereals. Wholegrain cereal has a longer shelf life than its alternatives and may have a higher value to programme participants.

Provide facilities for low-extraction commercial milling that removes germ, oil and enzymes that cause rancidity. Low-extraction commercial milling greatly increases shelf life, although it also reduces protein content. Milled whole maize has a shelf life of only six to eight weeks, so milling should occur shortly before consumption. Milled grain normally requires less cooking time. Milling requirements can sometimes expose women or adolescent girls to increased risk of exploitation. Work with women and girls to identify risks and solutions such as providing support for women-run mills.



**Food storage and preparation:** Household storage capacity should inform the choice of foods offered. Ensure that people receiving assistance understand how to avoid public health risks associated with food preparation. Provide fuel-efficient stoves or alternative fuels to minimise environmental degradation.

Storage areas should be dry and hygienic, adequately protected from weather and free of chemical or other contamination. Secure storage areas against pests such as insects and rodents. Where appropriate, use Ministry of Health officers to certify the quality of food supplied by vendors and traders.

### Food assistance standard 6.3: Targeting, distribution and delivery

Food assistance targeting and distribution is responsive, timely, transparent and safe.

#### Key actions

- 1 Identify and target food assistance recipients based on need and consultations with appropriate stakeholders.
  - Provide clear, publicised details of targeting approaches that are accepted by both recipient and non-recipient populations, to avoid creating tensions and doing harm.
  - Initiate formal registration of households to receive food as soon as it is feasible, and update as necessary.
- 2 Design food distribution methods or direct cash/voucher delivery mechanisms that are efficient, equitable, secure, safe, accessible and effective.
  - Consult women and men, including adolescents and youth, and promote participation by potentially vulnerable or marginalised groups.
- 3 Locate distribution and delivery points where they are accessible, safe and most convenient for the recipients.
  - Minimise risks to people reaching distributions, regularly monitoring checkpoints or changes in the security situation.
- 4 Provide recipients with advance details of the distribution plan and schedule, the quality and quantity of the food ration or the cash or voucher value, and what it is intended to cover.
  - Schedule distributions in a way that respects people's travelling and working time and that prioritises at-risk groups as appropriate.
  - Define and establish feedback mechanisms with the community before distribution.



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## Key indicators

### Percentage of inclusion and exclusion targeting errors minimised

- Target <10 per cent

### Distance from dwellings to final distribution points or markets (in case of vouchers or cash)

- Target <5 kilometres

### Percentage of assisted people (disaggregated by sex, age and disability) who report experiencing safety problems travelling (to and from) and at programme sites

### Number of cases reported of sexual exploitation or abuse of power related to distribution or delivery practices

### Percentage of cases of sexual exploitation or abuse of power related to distribution or delivery practices that are followed up

- 100 per cent

### Percentage of targeted households that correctly cite their food assistance entitlement

- Target: >50 per cent of targeted households

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## Guidance notes

**Targeting:** Ensure that targeting tools and methods are adapted to context. Targeting should span the intervention, not just the initial phase. Finding the right balance between exclusion errors, which can be life-threatening, and inclusion errors, which are potentially disruptive or wasteful, is complex. In rapid onset crises, inclusion errors are more acceptable than exclusion errors. General food distributions may be appropriate in crises where households have suffered similar losses or where a detailed targeting assessment is not possible due to lack of access.

Children aged 6–59 months, pregnant and lactating women, people living with HIV and other vulnerable groups may be targeted for supplementary foods, or they may be linked to nutrition treatment and prevention strategies. For people living with HIV, this will increase their daily caloric intake and support adherence to anti-retroviral therapy.

Any targeted programme should carefully avoid creating stigma or discrimination. People living with HIV can be included as part of distributions for “people with chronic diseases”, for instance, and provided through the health centres where they receive care and treatment. Lists of people living with HIV should never be publicised or shared, and in most contexts community leaders should not be involved as targeting agents for people living with HIV.



**Targeting agents/committees:** Develop direct contact with affected people and groups in the community, while avoiding community gatekeepers as much as possible. Establish targeting committees that include representatives of the following populations:

- women and girls, men and boys, older people and persons with disabilities;
- locally elected committees, women's groups and humanitarian organisations;
- local and international NGOs;
- youth organisations; and
- local governmental institutions.

**The registration processes:** Registration can be challenging in camps, especially where displaced people do not have identification documents. Lists from local authorities and community-generated household lists may be useful if an independent assessment proves them accurate and impartial. Encourage the involvement of affected women in designing the registration processes. Include at-risk individuals on distribution lists, especially people with reduced mobility.

If registration is not possible in the initial stages of a crisis, complete it as soon as the situation has stabilised. Establish a feedback mechanism for the registration process that is accessible to all affected people, including women, girls, older people and persons with disabilities. Women have the right to be registered in their own names. Where possible, consult both men and women, separately if necessary, about who should physically collect assistance or receive cash-based assistance on behalf of the household. This consultation should be informed by a risk assessment.

Make special provision for single male- or female-headed households, as well as child- and youth-headed households and separated or unaccompanied children, so that they can safely collect assistance on behalf of their households. Establish childcare adjacent to distribution points to enable single-parent households and women with young children to collect assistance without leaving their children unattended. In contexts where there are polygamous households, treat each wife and her children as a separate household.

**Distribution of "dry" rations:** General food distributions normally only provide dry rations, which people then cook in their homes. Recipients might include an individual or a household ration-card holder, a representative of a group of households, traditional and women leaders, or leaders of a community-based targeted distribution. The frequency of distribution should consider the weight of the food ration and the recipients' means to carry it home safely. Specific support may be needed to ensure that older people, pregnant and breastfeeding women, separated and unaccompanied children, and persons with disabilities can collect and retain their entitlements. Consider having other community members assist them, or provide them with more frequent, smaller rations.

**Distribution of "wet" rations:** In exceptional circumstances, such as at the beginning of a rapid-onset crisis, cooked meals or ready-to-eat food may be used for general food distributions. These rations may be appropriate when people are on the move,

or when carrying food home would put people receiving assistance at risk of theft, violence, abuse or exploitation. Use school meals and food incentives for education personnel as a distribution mechanism in an emergency.

**Distribution points:** When locating distribution points, consider the terrain and try to provide reasonable access to other sources of support such as clean and safe water, toilets, health services, shade and shelter, and safe spaces for children and women. The presence of armed checkpoints and military activity must be considered to minimise any risk to civilians and establish safe access to aid. Roads to and from distribution points should be clearly marked, accessible and frequently used by other members of the community. Consider the practicalities and costs of transporting commodities ⊕ *see Protection Principle 2.*

Develop alternative means of distribution to reach those who are located further from the distribution point or who have functional difficulties. Access to distribution is a common source of anxiety for marginalised and excluded populations in a crisis. Provide direct distributions to populations in institutional settings.

**Scheduling distributions:** Schedule distributions at times that allow travel to distribution points and back home during daylight hours. Avoid creating a requirement for an overnight stay, which creates additional risks. Schedule distributions to minimise disruption to everyday activities. Consider establishing fast-track or prioritisation lines for at-risk groups, and a desk staffed with a social worker who can register any unaccompanied and separated children. Provide advance information on the schedule and distribution through a broad range of communications.

**Safety during food, voucher and cash distributions:** Take steps to minimise risks to those participating in the distribution. This includes proper crowd control, supervision of distributions by trained staff, and members of the affected population guarding distribution points themselves. If necessary, involve the local police. Inform police officials and officers of the objectives of the food transfers. Carefully plan the site layout at distribution points so that it is safe and accessible for older people, persons with disabilities and people with functional difficulties. Inform all food distribution teams about appropriate expected conduct, including penalties for sexual exploitation and abuse. Include female guardians to oversee off-loading, registration, distribution and post-distribution monitoring of food ⊕ *see Core Humanitarian Standard Commitment 7.*

**Providing information:** Display ration information prominently at distribution points, in languages and formats accessible to people who cannot read or who have communication difficulties. Inform people through printed, audio, SMS and voice messages about:

- the ration plan, specifying the quantity and type of food rations, or the cash/voucher value and what it is intended to cover;
- reasons for any changes from earlier plans (timing, quantity, items, other);
- the distribution plan;
- the nutritional quality of the food and, if needed, any special attention required by recipients to protect its nutritional value;



- the requirements for the safe handling and use of the foods;
- specific information for optimum use of food for children; and
- options for obtaining more information or providing feedback.

For cash-based assistance, transfer value should be included in ration information. Information could be provided at the distribution point, displayed at the cash out point or where vouchers can be redeemed, or in a leaflet in the local language.

**Changes to the food provided:** Changes in rations or the transfer value for cash-based assistance may happen due to a lack of available food, lack of funding or other reasons. When this occurs, convey these changes to the recipients through distribution committees, community leaders and representative organisations. Develop a joint course of action before distributions. The distribution committee should inform people of changes, the reasons behind the changes and the date and plan for resuming normal rations. Options include:

- reducing the rations to all recipients;
- giving a full ration to vulnerable individuals and a reduced ration to the general population; or
- postponing the distribution (as a last resort).

**Monitoring of distribution and delivery:** Monitor food regularly by randomly weighing rations collected by households to measure the accuracy and equity of distribution. Interview recipients and ensure that the interview sample includes an equal number of women and men, including adolescents and youth, persons with disabilities and older people. Random visits by an interview team made up of at least one male and one female can help determine the acceptability and usefulness of the ration. These visits can identify people who meet the selection criteria but are not receiving food assistance. Such visits can also identify food received from elsewhere, its source and its use. The visits can identify possible use of force to take possessions, forcible recruitments, or sexual or other exploitation ⊕ see *Delivering assistance through markets*.

## Food assistance standard 6.4:

### Food use

Storage, preparation and consumption of food is safe and appropriate at both household and community levels.

### Key actions

- 1 Protect people receiving assistance from inappropriate food handling or preparation.
  - Inform people of the importance of food hygiene and promote good hygiene practices in food handling.

- Where cooked rations are provided, train staff in safe storage, handling and preparation of food, and the potential health hazards of improper practices.
- 2 Consult with and advise people receiving assistance on storage, preparation, cooking and consumption of food.
  - 3 Ensure that households have safe access to appropriate cooking utensils, fuel, fuel-efficient stoves, clean water and hygiene materials.
  - 4 Ensure that individuals who cannot prepare food or feed themselves have access to caregivers who can support them where possible and appropriate.
  - 5 Monitor how food resources are used within the household.

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## Key indicators

**Number of cases reported of health hazards from food distributed**

**Percentage of households able to store and prepare food safely**

**Percentage of targeted households able to describe three or more hygiene awareness messages**

**Percentage of targeted households that report having access to appropriate cooking utensils, fuel, drinking water and hygiene materials**

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## Guidance notes

**Food hygiene:** Crises may disrupt people's normal hygiene practices. Promote food hygiene practices that are adapted to local conditions and disease patterns. Stress the importance of avoiding water contamination, controlling pests and always washing hands before handling food. Inform people receiving food about storing food safely at the household level ⊕ see *WASH hygiene promotion standards*.

**Food processing and storage:** Access to food-processing facilities, such as cereal-grinding mills, enables people to prepare food in the form of their choice and saves time for other productive activities. Where perishable food items are offered, consider appropriate facilities to store these, such as watertight containers, coolers and freezers. Heat, cold and moisture influence the storage of perishable foods.

Individuals who may require assistance with storage, cooking and feeding include young children, older people, people with disabilities and people living with HIV. Outreach programmes or additional support may be necessary for people who have difficulty providing food to their dependants, such as parents with disabilities.

**Intra-house food use monitoring:** Humanitarian organisations should monitor and assess intra-house use of food and its appropriateness and adequacy. At the household level, food commodities can either be consumed as intended or be traded or bartered. The goal of the barter could be to access other more-preferred



food items, non-food items or payment for services such as school fees or medical bills. Intra-household allocation assessment should also monitor food use by sex, age and disability.

***The use of cash and vouchers:*** It is important to manage the risk of panic buying when households receive cash or vouchers. Prepare traders and people receiving assistance before distribution, at distribution and after distribution. For example, consider whether food will be available throughout the month or whether it would be better to stagger distributions over the course of a month. Vouchers can be issued in small denominations redeemable on a weekly basis, where appropriate. The same principle should apply to cash that is redeemable through automatic teller machines or other forms of digital or manual payment.

## 7. Livelihoods

People's ability to protect their livelihoods is directly related to their vulnerability to crises. Understanding vulnerabilities before, during and after a crisis makes it easier to provide appropriate assistance, and to identify how communities can rehabilitate and improve their livelihoods.

Crises can disrupt many of the factors that people rely on to maintain their livelihoods. People affected by crises may lose their jobs or have to abandon their land or water sources. Assets may also be destroyed, contaminated or stolen during conflict or natural disasters. Markets may stop functioning.

In the initial stages of a crisis, meeting basic survival needs is the priority. However, over time, rehabilitation of the systems, skills and capacities that support livelihoods will also help people recover with dignity. Promoting livelihoods among refugees often presents unique challenges, such as encampment or restrictive legal and policy frameworks in countries of asylum.

Those who produce food need access to land, water, livestock, support services and markets that can support production. They should have the means to continue production without compromising other resources, people or systems [⊕ see LEGS Handbook](#).

In urban areas, the impact of a crisis on livelihoods is likely to be different from the impact in rural areas. Household composition, skills, disabilities and education will determine the degree to which people may participate in different economic activities. Generally, poorer urban people have a less diverse range of livelihoods coping strategies than their counterparts in rural areas. For example, in some countries, they cannot access land to grow food.

Bringing together those who have lost their livelihoods and those who influence how new opportunities might be created will help to set the priorities of a livelihoods response. This should reflect an analysis of labour, services and associated product markets. All livelihoods interventions should consider how to use and/or support local markets [⊕ see MERS Handbook](#).



### Livelihoods standard 7.1: Primary production

Primary production mechanisms receive protection and support.

#### Key actions

- 1 Provide access to production inputs and/or assets for farmers.
  - Prefer cash or vouchers where markets are functioning and can be supported to recover, to give farmers flexibility to select preferred inputs, seeds, fish stock or livestock species.

- Introduce new technologies after a crisis only if they have been tested in or adapted to similar contexts.
- 2 Deliver inputs that are locally acceptable, conform to appropriate quality norms and are on time for best seasonal use.
    - Favour locally appropriate livestock inputs and local crop varieties that are already in use and in demand for the upcoming season.
  - 3 Ensure inputs and services do not increase vulnerability for recipients or create conflict within the community.
    - Assess potential competition for scarce natural resources (such as land or water) as well as potential damage to existing social networks.
  - 4 Involve affected men and women equitably in planning, decision-making, implementing and monitoring of primary production responses.
  - 5 Train producers engaged in crop, fishery, aquaculture, forestry and livestock sectors in sustainable production and management practices.
  - 6 Assess the market and stimulate demand for locally produced crops, vegetables and other agricultural products.

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## Key indicators

**Percentage change in the targeted population's production (food or income source) compared with a normal year**

**Percentage of households reporting that they have access to adequate storage facilities for their produce**

**Percentage of targeted households with improved physical access to functioning markets due to programme interventions**

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## Guidance notes

**Production strategies:** Production strategies must have a reasonable chance of developing and succeeding in context. This can depend on many factors, including access to:

- sufficient natural resources, labour, farm inputs and financial capital;
- good quality seed varieties that are adapted to local conditions; and
- productive animals, which represent a crucial food security asset ⊕ *see LEGS Handbook.*

In addition, the strategy must consider existing livelihood skills, community preferences, the physical environment and potential for scalability.

Promote diverse livelihood activities within a local area, while preventing overuse of natural resources. Environmental damage not only increases the risk of a crisis,



but contributes to tensions between communities. Livelihoods interventions should promote adaptation to climate change where possible, such as selecting adapted seed varieties.

Prevent child labour associated with livelihoods initiatives. Be aware of the indirect impact of livelihoods programmes on children, such as missing school because they are required to support the household while a parent is working.

**Energy:** Consider energy needs for mechanised labour, food processing, communication, cold chains for food preservation and efficient burning devices.

**Improvements:** Consider introducing improved crop varieties, livestock or fish-stock species, new tools, fertilisers or innovative management practices. Strengthen food production based on the maintenance of pre-crisis patterns and/or links with national development plans.

**New technologies:** Producers and local consumers must understand and accept the implications of new technologies for local production systems, cultural practices and the natural environment before adopting them. When introducing new technologies, provide appropriate community consultations, information and training. Ensure access for groups at risk of discrimination (including women, older people, minorities and people with disabilities). If possible, coordinate with livelihood experts and government ministries. Ensure ongoing technological support, future accessibility to the technology, and assess its commercial viability.

**Cash-based assistance or credit:** This can be provided to use at seed and livestock fairs. Understand the potential consequences of a chosen approach on people's nutrition, considering whether it allows people to produce nutrient-rich food themselves or whether it provides cash to purchase food. Assess the feasibility of cash-based assistance for purchasing production inputs, considering availability of goods, access to markets and the existence of a safe, affordable and gender-sensitive cash transfer mechanism ⊕ [see MERS Handbook](#) and [LEGS Handbook](#).

**Seasonality and price fluctuations:** Provide agricultural inputs and veterinary services to coincide with the relevant agricultural and animal husbandry seasons. For example, provide seeds and tools before the planting season. Destocking of livestock during drought should take place before excess livestock mortality occurs. Restocking should start when the likelihood of recovery is high, for example following the next rainy season. When necessary, or provide food assistance to protect seeds and inputs. Ensure that inputs are sensitive to the different capacities, needs and risks of various groups, including women and persons with disabilities. Extreme seasonal price fluctuations adversely affect poor agricultural producers who sell their produce just after harvest, when prices are at their lowest. These fluctuations also have a negative impact on livestock owners who have to sell during drought. Conversely, consumers who have limited disposable income cannot afford to invest in food stocks. They depend on small but frequent purchases. As a result, they buy food



even when prices are high, such as during a drought. For livestock guidance [⊕ see LEGS Handbook](#).

**Seeds:** Farmers and local agricultural experts should approve specific varieties. Seeds should suit the local agro-ecology and farmers' own management conditions. They should also be disease-resistant and withstand potentially harsh weather conditions due to climate change. Test the quality of seeds originating from outside the region and check that they are appropriate for local conditions. Give farmers access to a range of crops and varieties in any seed-related intervention. This allows them to work out what is best for their particular farming system. For example, farmers growing maize may prefer hybrid seeds to local varieties. Comply with government policies regarding hybrid seeds. Do not distribute genetically modified seeds without the approval of local authorities. Inform farmers if they are provided with genetically modified seeds. When farmers use vouchers or seed fairs, encourage them to buy seeds from local formal suppliers. Farmers may prefer traditional varieties which are adapted to the local context. These will definitely be available at a lower price, meaning they get more seeds for the same voucher value.

**Community tensions and security risks:** Tensions between the displaced and local population or within the affected community can arise when production requires a change in access to the available natural resources. Competition over water or land can lead to restrictions in their use. Primary food production may not be viable if there is a shortage of vital natural resources over the long term. It is also not feasible if there is a lack of access for certain populations, such as landless people. Providing free inputs can also disrupt traditional social support, compromise redistribution mechanisms or affect private sector operators. This can create tensions and reduce future access to inputs [⊕ see Protection Principle 1](#).

**Supply chain:** Use existing local, verifiable supply chains to obtain inputs and services for food production, such as veterinary services and seeds. To support the local private sector, use mechanisms such as cash or vouchers that link primary producers directly to suppliers. When designing local purchasing systems, consider the availability of appropriate inputs and suppliers' capacity to increase supply. Assess the risk of inflation and the sustainability of the quality of inputs. Monitor and mitigate the negative effects of responses, including large localised food purchases and distribution, on market prices. Consider the effects of local food purchases and imports on local economies. When working with the private sector, identify and address gender inequalities and share any profits equitably [⊕ see MERS Handbook](#).

**Monitor** whether producers actually use the provided inputs as intended. Review the quality of the inputs in terms of their performance, their acceptability and producer preferences. Evaluate how the project has affected food availability at household level. For example, consider the quantity and quality of food that

is being stocked, consumed, traded or given away. Where the project aims to increase production of a specific food type (animal/fish products or protein-rich legumes), investigate the households' use of these products. Include an analysis of the benefit to different members of the household, such as women, children, older people and people with disabilities.

**Post-harvest storage:** A significant proportion of produce (estimated average of 30 per cent) is unusable after harvest, due to losses. Support affected people to minimise losses by managing handling, storage, processing, packaging, transportation, marketing and other post-harvest activities. Advise and enable them to store their harvest to avoid moisture and aflatoxins produced by fungi. Enable them to process their crops, especially cereals.

## Livelihoods standard 7.2: Income and employment

Women and men receive equal access to appropriate income-earning opportunities where income generation and employment are feasible livelihood strategies.

### Key actions

- 1 Base decisions regarding income-earning activities on a gender-sensitive market assessment.
  - Reduce the risk of undernutrition and other public health risks by ensuring that participation in income-earning opportunities does not undermine childcare or other caring responsibilities.
  - Understand labour rates for community members and the government minimum wage for unskilled and skilled work.
- 2 Choose types of payment (in-kind, cash, voucher, food or a combination) based on a participatory analysis.
  - Understand local capacities, safety and protection benefits, immediate needs, equitable access, existing market systems and the affected people's preferences.
- 3 Base the level of payment on the type of work, local rules, objectives for livelihoods restoration and prevailing approved levels of payment in the region.
  - Consider safety-net measures such as unconditional cash and food transfers for households that cannot participate in work programmes.
- 4 Adopt and maintain inclusive, safe and secure working environments.
  - Monitor the risk of sexual harassment, discrimination, exploitation and abuse in the workplace and respond quickly to complaints.



- 5 Promote partnerships with the private sector and other stakeholders to create sustainable employment opportunities.
  - Provide capital resources equitably to facilitate livelihood recovery.
- 6 Choose environmentally sensitive options for income generation whenever possible.

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## Key indicators

**Percentage of the target population who improve their net income during a defined period**

**Percentage of households with access to credit**

**Percentage of the target population who diversify their income-generating activities**

**Percentage of the target population employed (or self-employed) in sustainable livelihoods activities for a defined period of time (6–12 months)**

**Percentage of the affected population with physical and economic access to functioning markets and/or other livelihood support services (formal or informal)**

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## Guidance notes

**Analysis:** A gender-sensitive labour and market analysis is fundamental to justify and define activities, promote recovery and resilience, and sustain outcomes. Understanding the household roles and responsibilities is essential to address any opportunity costs, such as caring for children or older people, or accessing other services such as education or healthcare.

Use existing tools to understand markets and economic systems. Food security responses should be based on market functions before and after the crisis, and their potential for improving the living conditions for poor people. Discuss alternatives or adaptations for at-risk groups (such as youth, persons with disabilities, pregnant women or older people) within the targeted group. Analyse their skills, experience and capacities, and potential risks and mitigation strategies. Explore whether household members normally migrate for seasonal work. Understand how different groups of the affected population may have restricted access to markets and livelihoods opportunities, and support them in getting access.

**Safety-net measures:** Some women and men may not be able to participate in income-generating activities, such as an elderly couple. The crisis itself may make it impossible for others to participate in employment due to changes in responsibilities or health status. Short-term safety-net measures can support such cases, with links to existing national social protection systems. Recommend new safety nets where needed. Delivery of safety-net measures must support the

fair distribution of resources, ensuring that women and girls have direct access to resources where appropriate. At the same time, work with safety-net recipients to find ways for them to transition to safe and sustainable income-generating activities. Whenever possible, cash-based responses should be linked to existing safety-net programmes as part of sustainability and the social protection strategy.

**Payments:** Conduct a market analysis before implementing any paid work programme. Payment may be in cash or in food or a combination of these and should enable food-insecure households to meet their needs. Communicate project objectives, the humanitarian organisation's expectations of workers, the conditions under which people will be working and the payment amount and process.

Make payment an incentive for people to improve their own situation, rather than compensation for any work in the community. Consider people's purchasing needs and the impact of giving cash or food to create household income to meet basic needs such as school, healthcare and social obligations. Decide on the type and level of payment case by case. Monitor to ensure that all women and men are paid equally for agreed units of work and that there is no discrimination against specific groups.

Consider the impact of resale values on local markets where payment is in-kind and provided as an income transfer. New income-generating activities should enhance rather than replace the existing range of income sources. Payment should not have a negative impact on local labour markets, for example by causing wage inflation, diverting labour from other activities or undermining essential public services.

**Purchasing power:** Provision of cash may have positive multiplier effects in local economies, but can also cause local inflation for key goods. Food distribution can also affect the purchasing power of people receiving assistance. The purchasing power associated with a given food or combination of foods influences whether the recipient's household eats or sells that food. Some commodities (such as oil) are easier to sell for a good price than others (such as blended food). Establish an understanding of household food sales and purchases when assessing the wider impact of food distribution programmes.

**Safety at work:** Use practical procedures for minimising public health risk or treating injuries. For example, provide training, protective clothing and first-aid kits where necessary. Minimise the risk of exposure to communicable diseases and HIV. Establish safe access routes to work sites, providing workers with torches where the route is not well lit. Use bells, whistles and radios to warn of threats. Encourage travelling in groups and avoid travelling after dark. Ensure that all participants are aware of emergency procedures and can access early warning systems. Women and girls should be equally protected, and any discriminatory norms in the workplace should be addressed.

**Managing household and family duties:** Speak regularly with affected people, including women and men separately, to learn their preferences and priorities regarding income generation, cash-for-work opportunities, and other



household and family needs. Discuss workloads and any increased tensions in the home due to changes in traditional gender roles and women's increased control over assets.

Cash-for-work activity schedules should consider the physical condition and daily routines of men and women and be culturally appropriate. For example, they should consider prayer times and public holidays. Working hours should not place unreasonable competing demands on people's time. Programmes should not divert household resources away from existing productive activities, nor should they adversely affect access to other employment or education. Participation in income generation should respect national laws on the minimum employment age. This is usually not less than the age of completion of compulsory schooling. Childcare facilities with appropriate financial allocation are recommended at the work sites if caregivers with small children are participating in the programme.

**Environmental management:** Support people's engagement in environmental activities such as tree planting, camp clean-up and environmental rehabilitation through food and cash-for-work programmes. Though temporary, these activities will increase people's engagement in their surrounding environment.

Consider the accessibility and safety of the working environment. Ensure that any debris to be cleared does not contain hazardous materials. Cash-for-work programmes should not involve any clearance at industrial or waste management sites.

Promote the production of environmentally sustainable construction materials as an income-generating activity and provide associated vocational training. Train people and encourage composting of biodegradable waste for use as fertiliser.

**Private sector:** The private sector can play an important role in facilitating livelihood protection and recovery. Where possible, establish partnerships to create employment opportunities. These partnerships can also help to establish and grow micro, small and medium enterprises. Business and technology incubators can provide financial capital and opportunities for knowledge transfer ⊕ [see MERS Handbook](#).

# Appendix 1

## Food security and livelihoods assessment checklist

Food security assessments often broadly categorise the affected people into livelihood groupings according to their sources of, and strategies for, obtaining income or food. This may also include a breakdown of the population according to wealth groups or strata. It is important to compare the current situation with the history of food security before the crisis. Use “average normal years” as a baseline. Consider the specific roles and vulnerabilities of women and men, and the implications of these for household food security.

The following checklist questions cover the broad areas to consider in a food security assessment.

### **Food security of livelihood groups**

- Are there groups in the population who share the same livelihood strategies? How can these be categorised according to their main sources of food or income?

### **Food security before the crisis (baseline)**

- How did the different livelihood groups acquire food or income before the crisis? For an average year in the recent past, what were their sources of food and income?
- How did these different sources of food and income vary seasonally and geographically in a normal year? Constructing a seasonal calendar may be useful.
- Were all groups getting enough food of the right quality to be well nourished?
- Were all groups earning enough income by non-harmful ways to afford their basic needs? Consider food, education, healthcare, soap and other household items, clothing, and productive inputs such as seeds and tools. (The last two questions will indicate whether there were chronic problems. Existing problems may be worsened by a crisis. The appropriate response is influenced by whether the problem is chronic or acute.)
- Looking back over the past five or ten years, how has food security varied from year to year? Constructing a timeline or history of food security may be useful.
- What kind of assets, savings or other reserves do the different livelihood groups own? Examples include food stocks, cash savings, livestock holdings, investments, credit and unclaimed debt.
- Over a period of a week or a month, what do household expenditures include? What proportion is spent on each item?



- Who is responsible for the management of cash in the household and on what is cash spent?
- How accessible is the nearest market for obtaining basic goods? Consider factors such as distance, security, ease of mobility, availability and accessibility of market information, and transport.
- What is the availability and price of essential goods, including food?
- Before the crisis, what were the average terms of trade between basic needs (food, agricultural inputs, healthcare, etc) and income sources (cash crops, livestock, wages, etc)

### **Food security during crises**

- How has the crisis affected the different sources of food and income for each of the livelihood groups identified?
- How has it affected the usual seasonal patterns of food security for the different groups?
- How has it affected access to financial service providers, markets, market availability and prices of essential goods?
- For different livelihood groups, what are the different crisis coping strategies and what proportion of people are engaged in them? How has this changed compared with the situation before the crisis?
- Which group or population is most affected?
- What are the short- and medium-term effects of coping strategies on people's financial and other assets?
- For all livelihood groups, and all people at risk, what are the effects of coping strategies on their health, general well-being and dignity? Are there risks associated with coping strategies?



# Appendix 2

## Seed security assessment checklist

Below are sample questions for seed security assessments. Assessment of seed security should consider national legislation on hybrid and genetically modified varieties.

### Seed security before the crisis (baseline)

- What are farmers' most important crops? What do they use them for – consumption, income or both? Are these crops grown each season? What other crops might become important in times of stress?
- How do farmers usually get seed or other planting material for these crops? Consider all channels.
- What are the sowing parameters for each major crop? What is the average area planted? What are the seeding rates? What are the multiplication rates (ratios of seed or grain harvested to seed planted)?
- Are there important or preferred varieties of specific crops (local climate-adapted varieties)?
- Which production inputs are essential for particular crops or varieties?
- Who in the household is responsible for decision-making, managing crops and disposing of crop products at different stages of production and post-production?

### Seed security after a crisis

- Is a farming-related intervention feasible from the point of view of persons receiving assistance?
- Which crops have been affected most by the crisis? Should the focus be on these? Why or why not?
- Are farmers confident the situation is now stable and secure enough that they can successfully cultivate, harvest and sell or consume a crop?
- Do they have sufficient access to fields and other means of production (manure, implements, draught animals)?
- Are they prepared to re-engage in agriculture?

### Assessing seed supply and demand: home stocks

- Are adequate amounts of home-produced seed available for sowing? This includes both seed from a farmer's own harvest and seed potentially available through social networks (for example, neighbours).
- Is this a crop that farmers still want to plant? Is it adapted to local conditions? Is there still a demand for it?
- Are the varieties available through a farmer's own production still suitable for planting next season? Does the quality of the seed meet the farmer's normal standards?



**Assessing seed supply and demand: local markets**

- Are markets generally functioning despite the crisis (are market days being held, are farmers able to move, sell and buy freely)?
- Are current volumes of available seed or grain comparable to those under normal conditions at the same time during previous seasons?
- Are crops and varieties that farmers find suitable for growing found in the markets?
- Are current market prices of seed or grain comparable to the prices at the same time in previous seasons? If there is a price differential, is the magnitude likely to be a problem for farmers?

**Assessing seed supply and demand: formal sector**

- Are the crops and varieties on offer from the formal sector adapted to particular stress zones? Is there evidence farmers will use them?
- Can the available formal sector seed meet the demand triggered by the crisis? If not, what proportion of farmers' needs will they meet?

# Appendix 3

## Nutrition assessment checklist

Below are sample questions for assessments examining the underlying causes of undernutrition, the level of nutrition risk and the possibilities for response. The questions are based on the conceptual framework of the causes of undernutrition. ⊕ See *Figure 7 Food security and nutrition: causes of undernutrition*. The information is likely to be available from a variety of sources. Gathering it will require various assessment tools, including key informant interviews, observation and review of secondary data.

### Pre-emergency situation

What information already exists on the nature, scale and causes of undernutrition among the affected people? ⊕ See *Food security and nutrition assessments standard 1.1*.

### The current risk of undernutrition

#### What is the risk of undernutrition related to reduced food access?

⊕ See Appendix 1: Food security and livelihoods assessment checklist.

#### What is the risk of undernutrition related to infant and young child feeding and care practices?

- Is there a change in work and social patterns (due to factors such as migration, displacement or armed conflict) affecting the roles and responsibilities in the household?
- Is there a change in the normal composition of households? Are there large numbers of separated children?
- Has the normal care environment been disrupted (for example, through displacement), affecting access to secondary caregivers, access to foods or access to water?
- Are any infants not breastfed? Are there infants who are artificially fed?
- Has there been any evidence or suspicion of a decline in infant feeding practices in the crisis? In particular, has there been a decrease in breastfeeding initiation or exclusive breastfeeding rates? Has there been an increase in artificial feeding rates and/or any increase in the proportion of infants not breastfed?
- Are age-appropriate, nutritionally adequate, safe complementary foods, and the means to prepare them, hygienically accessible?
- Is there any evidence or suspicion of general distribution of breastmilk substitutes such as infant formula, other milk products, bottles and teats, either donated or purchased?



- In pastoral communities, have the herds been away from young children for long? Has access to milk changed from normal?
- Has HIV affected caring practices at household level?
- Has the general food ration been adapted to the needs of older people and people with difficulties feeding? Evaluate its energy composition and micro-nutrient content. Assess the acceptability of the food products (palatability, chewability and digestibility).

### **What is the risk of undernutrition related to poor public health?**

- Are there any reports of disease outbreaks that may affect nutritional status, such as measles or acute diarrhoeal disease? Is there a risk that these outbreaks will occur? ⊕ *See Essential healthcare – communicable diseases standard 2.1.*
- What is the estimated measles vaccination coverage of the affected people? ⊕ *See Essential healthcare – child health standard 2.2.1.*
- Is vitamin A routinely given with measles vaccination? What is the estimated vitamin A supplementation coverage?
- Are there any estimates of mortality rates (either crude or under-five)? What are the estimates and what method has been used to make them? ⊕ *See Essential concepts in health.*
- Is there, or will there be, a significant decline in ambient temperature that is likely to affect the prevalence of acute respiratory infection or the energy requirements of the affected people?
- Is there a high prevalence of HIV?
- Are people already vulnerable to undernutrition due to poverty or ill health?
- Is there overcrowding or a risk of or high prevalence of tuberculosis?
- Are there reported cases of non-communicable diseases such as diabetes, arthritis, cardiovascular diseases and anaemia?
- Is there a high incidence of malaria?
- Have people been in water or in wet clothes or exposed to other harsh environmental conditions for long periods of time?

### **What formal and informal local structures are currently in place through which potential interventions could be channelled?**

- What is the capacity of the Ministry of Health, religious organisations, community support groups, breastfeeding support groups or NGOs with a long- or short-term presence in the area?
- What nutrition interventions or community-based support were already in place and organised by local communities, individuals, NGOs, government organisations, UN agencies or religious organisations? What are the nutrition policies (past, ongoing and lapsed), the planned long-term nutrition responses, and programmes that are being implemented or planned in response to the current situation?

# Appendix 4

## Measuring acute malnutrition

In major nutritional emergencies, it may be necessary to include infants under six months, pregnant and breastfeeding women, older children, adolescents, adults and older people in nutrition assessments or nutritional programmes.

### Infants under six months

While research is ongoing for this age group, there is a limited evidence base for assessment and management. Most guidelines recommend the same anthropometric case definitions of acute infant malnutrition as for older children aged 6–59 months (except for mid upper arm circumference (MUAC), which is not presently recommended for infants under six months). Admission criteria focus on current size rather than an assessment of growth.

The switch from National Center for Health Statistics (NCHS) growth references to WHO 2006 growth standards results in more cases of infants under six months being recorded as wasted. This can result in more infants presenting to feeding programmes, or caregivers becoming concerned about the adequacy of exclusive breastfeeding. It is important to assess and consider the following:

- The infant’s longitudinal growth – is the growth rate good, despite body size being small (some infants may be “catching up” following low birth weight)?
- Infant feeding practices – is the infant exclusively breastfeeding?
- Clinical status – does the infant have any medical complications or conditions that are treatable or that make him or her high risk?
- Maternal factors – for example, does the mother lack family support or is she depressed? Inpatient admission to therapeutic feeding programmes should be a priority for high-risk infants.

### Children aged 6–59 months

The table below shows the commonly used cut-offs for acute malnutrition among children aged 6–59 months. Calculate weight-for-height (WFH) indices using the WHO 2006 child growth standards. The WFH Z score (according to WHO standards) is the preferred indicator for reporting anthropometric survey results. MUAC is an independent criterion for acute malnutrition and is one of the best predictors of mortality. The prevalence of low MUAC is also used to predict caseloads for supplementary feeding and therapeutic care programmes. The cut-offs commonly used are <11.5 centimetres for severe acute malnutrition and 11.5–12.5 centimetres for moderate acute malnutrition. MUAC is also often used, with a higher cut-off, as part of a two-stage screening process. It should not be used alone in anthropometric surveys, although it can be used as the sole admission criterion for feeding programmes.



	<b>Global acute malnutrition</b>	<b>Moderate acute malnutrition</b>	<b>Severe acute malnutrition</b>
<b>Children 6–59 months</b>	WFH < -2 Z score and/or MUAC < 12.5cm and/or nutritional oedema	WFH -3 to -2 Z score and/or MUAC 11.5–12.5cm	WFH < -3 Z score and/or MUAC < 11.5cm and/or nutritional oedema
<b>Older people</b>	MUAC 21cm	MUAC 18.5–21.0cm	MUAC 18.5cm
<b>Pregnant and lactating women</b>	MUAC < 23cm (may be < 210mm in certain contexts)	MUAC 18.5–22.9cm	MUAC < 18.5cm
<b>Adults (including people living with HIV or tuberculosis)</b>	BMI < 18.5	BMI 16–18.5	BMI < 16

## Children aged 5–19 years

Use the WHO 2007 growth standards to determine nutrition status in children aged 5–19 years. These growth reference data curves align closely with the WHO child growth standards for children aged 6–59 months and the recommended cut-offs for adults. Consider using MUAC in older children and adolescents, particularly in the context of HIV. As this is a developing technical area, it is important to refer to the latest guidance and technical updates.

## Adults (20–59 years)

There is no agreed definition of acute malnutrition in adults, but evidence suggests that the cut-off for severe acute malnutrition could be a body mass index (BMI) lower than 16, and for mild and moderate acute malnutrition lower than 18.5. Surveys of adult malnutrition should aim to gather data on weight, height and sitting height and MUAC measurements. This data can be used to calculate BMI. BMI should be adjusted for the Cormic index (the ratio of sitting height to standing height) only to make comparisons between populations. Such adjustment can substantially change the apparent prevalence of undernutrition in adults and may have important consequences for programming. MUAC measurements should always be taken. If immediate results are needed or resources are severely limited, surveys may be based on MUAC measurements alone.

The lack of validated functional outcome data and benchmarks complicates the interpretation of anthropometric results. Use detailed contextual information when interpreting them. For guidance on assessment [⊕ see References and further reading](#).

When screening individuals for nutritional care admission and discharge, use a combination of anthropometric indices, clinical signs (particularly weakness, recent weight loss) and social factors (such as access to food, presence of caregivers, shelter). Note that oedema in adults can be caused by factors other than malnutrition,

and clinicians should assess adult oedema to exclude other causes. Individual humanitarian organisations should decide on the indicator to determine eligibility for care, taking into account the known shortcomings of BMI, the lack of information on MUAC and the programme implications of the indicators' use. This is a developing technical area, so refer to the latest guidance and technical updates.

MUAC may be used as a screening tool for pregnant women, for example as a criterion for entry into a feeding programme. Given their additional nutritional needs, pregnant women may be at greater risk than other groups in the population. MUAC does not change significantly through pregnancy. A MUAC of less than 20.7 centimetres indicates a severe risk of foetal growth retardation, and less than 23 centimetres indicates a moderate risk. Suggested cut-off points for risk vary by country, but range from 21 to 23 centimetres. Consider less than 21 centimetres as an appropriate cut-off for selection of women at risk during emergencies.

## Older people

There is currently no agreed definition of malnutrition in older people, yet this group may be at risk of malnutrition in crises. WHO suggests that the BMI thresholds for adults may be appropriate for people aged over 60 years. However, accuracy of measurement is problematic because of spinal curvature (stooping) and compression of the vertebrae. Arm span or demi-span can be used instead of height, but the multiplication factor to calculate height varies according to the population. Visual assessment is necessary. MUAC may be a useful tool for measuring malnutrition in older people, but research on appropriate cut-offs is still in progress.

## Persons with disabilities

No guidelines currently exist for the measurement of individuals with physical disabilities. This lack of guidelines often excludes them from anthropometric surveys. Visual assessment is necessary. MUAC measurements may be misleading in cases where upper arm muscle might build up to aid mobility. There are alternatives to standard measures of height, including length, arm span or demi-span or lower leg length. It is necessary to consult the latest research to determine the most appropriate way of measuring persons with disabilities for whom standard weight, height and MUAC measurement is not appropriate.



# Appendix 5

## Measures of the public health significance of micronutrient deficiencies

Urgently treat clinical micronutrient deficiencies on an individual basis. Individual cases of clinical micronutrient deficiencies are also usually indicative of an underlying problem of micronutrient deficiency at the population level. Measuring and classifying micronutrient deficiencies at the population level is important for planning and monitoring interventions.

Biochemical tests provide an objective measure of micronutrient status. However, the collection of biological samples for testing often presents logistical, staff training, cold chain and sometimes acceptability challenges. Also, biochemical measurements are not always as sensitive and specific as required. As with acute malnutrition, there may be variations according to the time of day or season of the year when the sample is collected. Good quality control is essential and should always be considered when selecting a laboratory for sample testing.

When assessing micronutrient status, consider the possibility of excessive intakes as well as deficiency. This is of particular concern when multiple highly fortified products or supplements are used to deliver micronutrients.

Micronutrient deficiencies have severe consequences for older people's mental and physical health, their immune system and their functional abilities.

The table below shows classifications of the public health significance of selected micronutrient deficiencies using different indicators. For information about biochemical tests and public health thresholds, consult the latest literature or seek specialist advice.



Micronutrient deficiency indicator	Recommended age group for prevalence surveys	Definition of a public health problem	
		Severity	Prevalence (%)
<b>Vitamin A deficiency</b>			
Night blindness (XN)	24–71 months	Mild	0 ≤ 1
		Moderate	1 ≤ 5
		Severe	5
Bitot's spots (X1B)	6–71 months	Not specified	>0.5
Corneal xerosis/ulceration/keratomalacia (X2, X3A, X3B)	6–71 months	Not specified	>0.01
Corneal scars (XS)	6–71 months	Not specified	>0.05
Serum retinol (≤ 0.7 μmol/l)	6–71 months	Mild	2 ≤ 10
		Moderate	10 ≤ 20
		Severe	20
<b>Iodine deficiency</b>			
Goitre (visible and palpable)	School-age children	Mild	5.0–19.9
		Moderate	20.0–29.9
		Severe	30.0
Median urinary iodine concentration (mg/l)	School-age children	Excessive intake	>300
		Adequate intake	100–199
		Mild deficiency	50–99
		Moderate deficiency	20–49
		Severe deficiency	<20
<b>Iron deficiency</b>			
Anaemia (Non-pregnant women haemoglobin <12.0g/dl; children 6–59 months <11.0g/dl)	Women, children 6–59 months	Low	5–20
		Medium	20–40
		High	40
<b>Beriberi</b>			
Clinical signs	Whole population	Mild	1 case and <1%
		Moderate	1–4
		Severe	5



Micronutrient deficiency indicator	Recommended age group for prevalence surveys	Definition of a public health problem	
		Severity	Prevalence (%)
Dietary intake (<0.33mg/1,000kCal)	Whole population	Mild	5
		Moderate	5–19
		Severe	20–49
Infant mortality	Infants 2–5 months	Mild	No increase in rates
		Moderate	Slight peak in rates
		Severe	Marked peak in rates
<b>Pellagra</b>			
Clinical signs (dermatitis) in surveyed age group	Whole population or women >15 years	Mild	≥ 1 case and <1%
		Moderate	1–4
		Severe	5
Dietary intake of niacin equivalents <5mg/day	Whole population or women >15 years	Mild	5–19
		Moderate	20–49
		Severe	50
<b>Scurvy</b>			
Clinical signs	Whole population	Mild	1 case and <1%
		Moderate	1–4
		Severe	5

# Appendix 6

## Nutritional requirements

Use the following table for planning in the initial stage of a crisis. The minimum nutrient requirements given in the table should be used to assess general rations. They are not intended for assessing the adequacy of supplementary or therapeutic care rations or for assessing rations for particular groups of people such as individuals suffering from tuberculosis or people living with HIV.

Nutrient	Minimum population requirements
Energy	2,100kCal
Protein	53g (10% of total energy)
Fat	40g (17% of total energy)
Vitamin A	550µg retinol activity equivalents (RTE)
Vitamin D	6.1µg
Vitamin E	8.0mg alpha-tocopherol equivalents (alpha TE)
Vitamin K	48.2µg
Vitamin B1 (thiamine)	1.1mg
Vitamin B2 (riboflavin)	1.1mg
Vitamin B3 (niacin)	13.8mg niacin equivalents (NE)
Vitamin B6 (pyridoxine)	1.2mg
Vitamin B12 (cobalamin)	2.2µg
Folate	363µg dietary folate equivalents (DFE)
Pantothenate	4.6mg
Vitamin C	41.6mg
Iron	32mg
Iodine	138µg
Zinc	12.4mg
Copper	1.1mg
Selenium	27.6µg
Calcium	989mg
Magnesium	201mg

Source: RNI's from FAO/WHO (2004), Vitamin and Mineral Requirements in Human Nutrition, 2nd edition, were used for all vitamin and mineral requirement calculations except copper. Requirements for copper are taken from WHO (1996), Trace Elements in Human Nutrition and Health.

These average population minimum requirements incorporate the requirements of all age groups and both sexes. They are therefore not specific to any single age or sex group and should not be used as requirements for an individual. They are based on an assumed demographic profile, assumptions about the ambient temperature



and people's activity levels. They also take into account the additional needs of pregnant and breastfeeding women.

The requirements are expressed as reference nutrient intakes (RNI) for all nutrients except energy and copper.

Updates and further research on macro- and micronutrients are available on the Food and Agriculture Organization of the United Nations (FAO) and WHO websites.

Adjust the population energy requirements (up or down) for the following:

- the demographic structure of the population, in particular the percentage of those under five years, percentage of females and older people, adolescents;
- mean adult weights and actual, usual or desirable body weights;
- activity levels to maintain productive life (requirements will increase if activity levels exceed "light", or 1.6 x basal metabolic rate);
- average ambient temperature, and shelter and clothing capacities (requirements will increase if the mean ambient temperature is less than 20°C);
- the nutritional and health status of the population (requirements will increase if the population is malnourished and has extra requirements for catch-up growth. HIV prevalence may affect average population requirements. Adjust general rations to meet these needs, based on a context analysis and current international recommendations).

For guidance on calculating adjustments, ⊕ see UNHCR, UNICEF, WFP and WHO (2002), *Food and Nutrition Needs in Emergencies* and WFP (2001), *Food and Nutrition Handbook* for guidance on calculating adjustments.

If it is not possible to gain this kind of information from assessments, use the figures in the table above as the minimum requirements.

For understanding the population structure, broken down by sex, age and other criteria as needed, use national baseline data or refer to World Population Prospects: <https://esa.un.org/unpd/wpp/>

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For further reading suggestions please go to [www.spherestandards.org/handbook/online-resources](http://www.spherestandards.org/handbook/online-resources)



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