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## NUTRITION IN EMERGENCIES

February 2019

In a crisis situation, regular community practices, care for children and healthcare are disturbed. Even within healthy populations, being faced with nutrition insecurity during an emergency could result in acute malnutrition and threaten lives. If acute malnutrition prevalence exceeds certain established thresholds, the situation is considered as a **nutrition emergency**. Nutritional status can deteriorate within a matter of weeks. Therefore, it is important to understand what the pre-crisis nutrition situation was and to anticipate what could be the effects of the crisis. There is a combination of risks related to nutrition security such as access to water, sanitation, environmental health, food security and care practices, each of which can give indications as to a possible deterioration in a population's nutritional status.

**Nutrition interventions in emergencies entail:** diagnosis and analysis of the nutrition situation (surveillance, surveys), management of acute malnutrition (screening, treatment), prevention of malnutrition (promotion of behavior change, supplementary feeding). **Preventing** undernutrition is just as important as **treating** acute malnutrition.

In a context where the population is vulnerable to malnutrition, **evidence** might also suggest a causal link with sanitary conditions or household food security. In these cases, to prevent the deterioration of the nutri-

tional status of the population of concern Welthungerhilfe (WHH) will implement related **WASH** and/or **Food Security** interventions covered in separate WHH Humanitarian eBriefs. **These nutrition-sensitive interventions are an essential part of WHH's work towards nutrition security.**

### Definitions

- **Undernutrition** is the outcome of the insufficient quantity and quality of food intake associated with diseases and poor child care practices. It describes a range of conditions:
  - **Acute malnutrition** refers to being wasted due to a recent weight loss (too thin for one's height). Levels of acute malnutrition are defined by weight for height measurements. It increases the risk of mortality. However, it is both treatable and preventable.
    - Moderate acute malnutrition (**MAM**) might not be life threatening but must be treated to prevent a deterioration and eventual SAM.
    - Severe acute malnutrition (**SAM**) is life threatening.
    - Global acute malnutrition (**GAM**) is an indicator for acute malnutrition rates in children under-5. **GAM** equals **MAM** + **SAM**.

- **Chronic malnutrition** refers to being stunted (too short for one's age). Levels of chronic malnutrition are defined by height for age measurements. It is irreversible but preventable.
- **Micronutrient deficiencies**, also known as 'Hidden Hunger', are specific nutritional disorders occurring when the body does not receive sufficient amounts of essential vitamins or minerals (e.g. Iron, Zinc, Vitamin A and Iodine). This is due to either insufficient intake from the diet and/or insufficient absorption of micronutrients by the body, or a combination of these. Micronutrient deficiencies are difficult to identify in many contexts.
- **Nutrition security** exists when food security is combined with a sanitary environment, adequate health services and proper care and feeding practices, to ensure a healthy life for all household members. The nutritional status is dependent on a broad array of factors, each of which is a necessary condition to achieve nutrition security but none of which is sufficient alone. **Factors and pathways leading to undernutrition are diverse, complex and most often interconnected.** The immediate determinants are related to food and nutrient intake and to health. Underlying determinants include household food insecurity, inappropriate care practices and unsafe environment, including low access water, sanitation and hygiene, inadequate access to or availability of health services and education. The basic determinants of undernutrition are rooted in poverty and involve interactions between social, political, demographic, and societal conditions. [Refer to the UNICEF Causal Model of Malnutrition in WHH SFNS Framework, page 21.](#)
- The **1,000 days** between the start of the mother's pregnancy and a child's second birthday is a window of opportunity to effectively prevent undernutrition. Undernutrition during this key timeframe perpetuates itself in a vicious intergenerational cycle. Maternal undernutrition leads to poor fetal development and higher risks of complications in pregnancy. Undernourished girls are likely to become undernourished mothers and give birth to low birth weight babies, who are at higher risk of dying in the neonatal period or later. If they survive, they are unlikely to catch up on this lost growth and are more likely to be underweight or stunted. Pregnant women, lactating women and young children are most vulnerable to malnutrition because they have a relatively greater need for vitamins and minerals and are more sus-

ceptible to nutrient deficiencies.

## Standards

The aim of having standards is to improve the quality of WHH's actions during a humanitarian response and to be able to be held accountable for them. The [Humanitarian Charter](#) and [Protection Principles](#) provide the ethical and legal basis and the [SPHERE Standards](#) provide the technical standards against which WHH measures the quality of its interventions. The minimum standards for nutrition interventions in a humanitarian response are listed in [the 2018 SPHERE handbook](#) chapter 6 "Food Security and Nutrition". The 7 standards highlight the close integration of both Food Security and Nutrition interventions. The nutrition standards cover: assessments (read "[needs assessment](#)" below), management of acute malnutrition, micronutrient deficiencies, and Infant and Young Child Feeding in Emergencies.

- **Some groups are physiologically and socially more vulnerable to undernutrition.** It is important to ensure that the needs of children below two years of age, as well as the needs of pregnant and lactating women, the elderly and chronically ill, are covered. Read [targeting](#).
- **Feeding and care practices may be disrupted during emergencies** due to stress, trauma, displacements, sudden changes in living conditions. Mothers and caregivers of infants and young children should have **access to timely and appropriate feeding support** that minimizes risks, is culturally sensitive and optimizes nutrition, health and survival outcomes. See [Sphere handbook 2018](#). Optimal feeding practices that maximize survival and reduce morbidity in children under 24 months are: early initiation of exclusive breastfeeding, exclusive breastfeeding for 6 months, continued breastfeeding to 24 months or beyond, and the introduction of adequate, appropriate and safe complementary foods at 6 months. Breastfeeding protects the health of infants, especially in contexts where WASH conditions are poor. Priority interventions include supporting mothers and caregivers with breastfeeding, appropriate and safe complementary feeding and management of artificial feeding for infants with no possibility to breastfeed.
- **Protection and support of the nutritional, physical and mental health of pregnant and breastfeeding women** are central to the well-being of the mother and the child. The specific needs of other caregivers (grandparents, single fathers, siblings, etc.) must also be considered.

- **Supplementary feeding** through blanket or targeted assistance is often the primary strategy for prevention and treatment of moderate acute malnutrition, and prevention of severe acute malnutrition. It is opted for if there is high prevalence of malnutrition and/or a high risk of an increase in severe acute malnutrition. See [Sphere handbook 2018](#).
- Where conditions permit, **community-based management of acute malnutrition is the preferred approach in addressing severe acute malnutrition**. The **availability of ready-to-use therapeutic food (RUTF)** for the treatment of severely malnourished children should be assured. However, this nutrition-specific intervention is only a **short-term solution**. It should not replace locally used food items but be regarded as a medicine for treatment. See [Sphere handbook 2018](#).
- It should be assumed that **a crisis will worsen any existing micronutrient deficiencies** in a population. In emergencies, the prevention of micronutrient deficiencies can be addressed through food assistance. The treatment is addressed by the health system. Refer to [the 2018 Sphere handbook](#).

## Welthungerhilfe Focus

### Fields of Interventions

Welthungerhilfe launched the “Programming Towards Improved Nutrition” initiative 2018-2020 coordinated by the Sector Unit and supported by programme departments management team. The aim is to define a “Welthungerhilfe Nutrition framework”. Guidance for emergencies will be developed, which will feed in the below.

**WHH takes prevention of acute malnutrition as its main approach in nutrition emergencies.** This is done

through interventions targeting immediate and underlying causes of undernutrition. The following interventions can all be implemented in slow or sudden onset crises, complex or protracted crises, as well as early recovery interventions:

- **Supplementary feeding** - Children under 5, pregnant and nursing mothers, and other at-risk individuals receive **food supplements**. Other context-specific vulnerable groups may be included. Two types of supplementary feeding programmes are common: blanket, or targeted. The use of each depends on the levels of acute malnutrition, vulnerable population groups and the risk of an increase in acute malnutrition (see table 1).
- **Infant and Young Child Feeding in Emergencies (IYCF-E)** - Interventions aim at protecting and supporting the nutritional needs of both breastfed and non-breastfed children aged 0–23 months, optimizing care practices and nurturing the caregivers and family resources. Examples of interventions: creating [baby friendly spaces](#), safe spaces for breastfeeding in camps and collective settings, organizing psychosocial support for mothers and care givers, sensitization sessions, providing information on healthcare services, etc. Refer to [standards](#) above for details.
- **WHH seeks to establish relevant partnerships with specialist health agencies for all medical needs of the populan of concern**, before, during and after emergencies (rather than to intervene on these issues itself). Although WHH does not operate in the medical field, within a nutrition emergency its operations are designed to complement medical activities where there are gaps in the field. WHH seeks to contribute to acute malnutrition management interventions led by other health and nutrition actors or, seeks partnerships with health and nutrition actors

Targeted supplementary feeding programme for treatment of moderate acute malnutrition and prevention of severe acute malnutrition.

- Recommended to prevent the moderately malnourished of becoming severely malnourished and to rehabilitate them.
- Usually, a food supplement to the general food assistance ration is provided for moderately malnourished individuals, pregnant and nursing mothers, and other at-risk individuals.

Blanket supplementary feeding programmes (BSFP) for prevention of acute malnutrition (see Food Security eBrief).

- Recommended where food insecurity is high and there is a need to expand interventions beyond only moderate acute malnutrition cases. Usually, all households benefiting from food assistance receive supplements to the general food rations for children under-5, pregnant and nursing mothers, and other at-risk individuals.

Both can be used as a platform for delivering other services. E.g. blanket supplementary feeding can provide access to the target population for a community screening and referral for moderate and severe acute malnutrition management, or other health interventions.

Table 1: Types of supplementary feeding programmes.

to establish such programmes. Severe acute malnutrition management programmes should be supported by supplementary feeding programmes, community mobilization, support to outreach and active case-finding, screening campaigns, referral of the acute malnutrition cases to the most appropriate treatment program, and follow-up. WHH might consider these in nutrition emergencies, as well as actions to improve the access to the health system.

## Needs Assessments

- In an emergency it is important to understand the **pre-crisis nutrition situation of the affected population and its level of deterioration**. Initial and rapid assessments might not be able to capture immediate changes in the nutritional situation as it usually takes a couple of weeks to deteriorate (and to show in data). Nevertheless, secondary data and rapid assessments covering food security, WASH and health might give some indications on the **expected** nutritional situation.

According to WHO, a **Global Acute Malnutrition (GAM) prevalence of 5% and below is considered acceptable while a GAM prevalence of 15% and above is considered critical**. However, before drawing any conclusion, GAM figures in an emergency context should always be interpreted in conjunction with other indicators linked to immediate and underlying causes of undernutrition (Food Security, WASH, Health) as well as seasonality (e.g. situation is likely to deteriorate in lean season). **A combination of secondary data and collected primary data might give indications as to the risk of potential deterioration. It is necessary to continuously monitor the nutritional situation of the most vulnerable groups.**

- **Nutrition assessments** use accepted methods to identify the type, degree and extent of undernutrition, those most at risk and the appropriate response. These surveys involve collecting and analyzing 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 presents a nutrition causal analysis. Cf. [SPHERE 2018 Handbook](#) Appendix 3: Nutrition assessment checklist page 223
- Ideally **food security and nutrition assessments should overlap**, as they identify the barriers to adequate nutrition and to food security and contribute

to joint programming.

- **Nutrition indicators to assess the context** during an emergency include:
  - [Prevalence of undernutrition indicators](#), especially Global Acute Malnutrition (GAM) and including the prevalence of moderate and severe acute malnutrition.
  - [Health indicators](#): mortality rates, incidence rates for malaria, diarrhea, measles and acute respiratory infections, measles vaccination coverage.
  - [Infant and Young Child Feeding](#) practices and exclusive breastfeeding rates.
  - [Nutrition-sensitive food security indicators](#): [IDDS](#), [MDDW-S](#), [HDDS](#), [FCS](#), [MAD](#), etc.
  - [Water Sanitation and Hygiene indicators](#): prevalence of waterborne diseases, etc.
- **Possible sources of information**:
  - Standardized Monitoring and Assessment of Relief and Transition surveys ([SMART](#)): information on the nutritional status of under-5 and on mortality rates of a population.
  - Knowledge, Attitude and Practice surveys ([KAP](#)): information on care and feeding practices.
  - Studies like Semi Quantitative Evaluation of Access and Coverage ([SQUEAC](#)) or Nutrition Causal Analysis ([NCA](#)) might be available as well.
  - Integrated Food Security Phase Classification System ([IPC](#)), Nutritional Landscape Information System ([NLIS](#)), UNICEF Country Profiles, National Demographic and Health Surveys, and national policies, strategies and plans.

Refer to the “Assessments in Emergencies” eBrief for the general principles.

## Targeting

In an emergency, the most vulnerable to food insecurity and undernutrition must be prioritized in the targeting: pregnant and lactating women, children under 5 years old, older persons and persons with disabilities, HIV/AIDS infected persons, and context-specific vulnerable groups such as refugees and IDPs. Special attention must be given to children under-2 and pregnant and lactating women during the crucial “[1000 days](#)” period. Depending on the context, other groups (such as adolescents) might also need to be considered as at risk.

## Coordination & Networking

The [Nutrition Cluster](#) is the main coordination platform in the field whenever WHH is implementing nutrition activities (wherever the [Cluster system](#) is activated). In addition to the Food Security, WASH and Shelter Clus-

ters, it is advisable to follow the [Health Cluster](#) in case a linkage between the latter and the Nutrition Cluster is not officially established. Ministry of Health Departments working on nutrition, private or public nutrition treatment facilities, national bodies dedicated to nutrition issues are essential structures to coordinate with. Coordination with the Scaling Up Nutrition ([SUN](#)) platform is important in countries that are part of the initiative. The identification of potential partnerships for medical aspects the programming should be integrated within the Emergency Preparedness and Response Planning (EPRp) phase of WHH's humanitarian programming. WHH country offices are expected to actively engage in coordination bodies during emergencies as well as in the longer-term.

## Tools

### General/Definitions

ACF International, (2011). *Emergency Nutrition*. [online] <http://blog.actioncontrelafaim.org/wp-content/uploads/2013/06/2011-ACF-Nut-glossary-ENG.pdf>

ACF International, (2011). *Glossary of Terminology*. [online] <http://blog.actioncontrelafaim.org/wp-content/uploads/2013/06/2011-ACF-Nut-glossary-ENG.pdf>

Sphere, (2018). *The Sphere Handbook*. [online] <https://handbook.spherestandards.org/> » Food & Nutrition Security Chapter

UNICEF, (2017). *Committed to Nutrition. A Toolkit for Action*. [online] [https://www.unicef.org/nutrition/files/NIE\\_Toolkit\\_Book\\_Final.pdf](https://www.unicef.org/nutrition/files/NIE_Toolkit_Book_Final.pdf)

Welthungerhilfe, (2015). *Orientation Framework: Sustainable Food and Nutrition Security*. [online] <https://bit.ly/2sV11Jg>

### Needs Assessments

Sphere, (2018). *The Sphere Handbook*. [online] <https://handbook.spherestandards.org/> » Appendix 3: Nutrition assessment checklist

Infant and Young Child Feeding in Emergencies  
ACF International, (2015). *Infant and Young Child Feeding in Emergencies*. [online] <https://bit.ly/2S4bMfH>

Emergency Nutrition Network, (2018). *Infant and Young Child Feeding in Emergencies*. [online] <https://bit.ly/2Dxdv5s>

Save the Children, (2014). *IYCF-E Toolkit: Rapid start-up resources for emergency nutrition personnel*. [online] <https://bit.ly/2Dxdv5s>

### Care practices

ACF International, (2014). *Baby Friendly Spaces*. [online] <https://bit.ly/2FL5psf>

ACF International, (2014). *Manual to integrate child care practices and mental health to nutrition programmes*. [online] <https://bit.ly/2Hx1n8k>

### CMAM

CMAM Forum, (2016). *Key resources for the management of acute malnutrition*. [online] <https://bit.ly/2FXulvV>

CMAM Forum, (2016). *Management of Moderate Acute Malnutrition (MAM): current knowledge and practice*. [online] <https://bit.ly/2T7dGto>

Concern, (2016). *The CMAM Surge Approach*. [online] <https://www.concern.net/resources/cmam-surge-approach>

## Training & Learning

ENN, (n.d.). [online] <https://www.ennonline.net/>

Global Nutrition Cluster, (n.d.) [online] <http://nutritioncluster.net/trainings/>

SMART, (n.d.). *Standardized Monitoring and Assessment of Relief and Transitions*. [online] <https://smartmethodology.org/about-smart/>

USAid, (n.d.). *Food and Nutrition Technical Assistance*. [online] <https://www.fantaproject.org/>

## References & Further Reading

1,000 Days, (2018). *Why 1,000 Days*. [online] <http://thousanddays.org/the-issue/why-1000-days/>

ACF International, (2014). *Nutrition Security Policy*. [online] <https://bit.ly/2U73lh7>

ScalingUp Nutrition, (n.d.). [online] <http://scalingupnutrition.org/>

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