

# Acute Malnutrition Summary Sheet



## What do I need to know?

- Malnutrition contributes to between 35 and 55 percent of all childhood deaths. In acute emergency situations, malnutrition can account for even more.
- Malnutrition and infection are intimately related – a malnourished child is more susceptible to disease, and a sick child is more likely to become malnourished.
- While development programs focus on the prevention of underweight or stunting, emergency programs focus on prevention and treatment of acute malnutrition, as characterized by low weight for height when compared to a standard reference population, small mid-upper arm circumference, or nutritional edema.
- Lack of access to food is not the only cause of malnutrition. Poor feeding practices and infection, or a combination of the two, can also be major contributors.

## What is the case definition?

### Indices for children between 6 and 59 months of age

	Global Acute Malnutrition (GAM)	
	Moderate Malnutrition (MAM)	Severe Malnutrition (SAM)
Weight for height or length	Between -2 and -3 SD or 70th to 79th percentile	Less than -3 SD or below the 70 <sup>th</sup> percentile
Mid-upper Arm Circumference	Less than 12.5 cm	Less than 11cm
Nutritional Edema	N/A	Bilateral

**Marasmus:** Severe form of acute malnutrition characterized by wasting of body tissues – marasmic children are extremely thin.

**Kwashiorker:** Severe form of acute malnutrition characterized by bi-lateral edema and weight for height of greater than or equal to -2 SD.

**Marasmic-Kwashiorker:** Severe form of acute malnutrition characterized by bi-lateral edema and weight for height of less than -2 SD.

## When do I need to worry?

Assessing the severity of a malnutrition crisis, one should consider three criteria:

1. Prevalence of malnutrition in relation to internationally defined benchmarks and thresholds (below)
2. Trends in rates of malnutrition over time – pre-crisis including seasonality
3. The relationship between malnutrition and mortality

There are currently a number of classification systems related to nutrition related emergencies, most including reference to crude mortality rate (CMR), under-five mortality rate (U5MR), and levels of acute malnutrition. The WHO classification system below provides simple guidance using thresholds for rates of global acute malnutrition (GAM). These thresholds are a reasonable starting point in assessing the severity of a crisis.

### WHO Crisis Classification using rates of Global Acute Malnutrition (GAM)

Severity	Prevalence of GAM
Acceptable	< 5 %
Poor	5 – 9 %
Serious	10 – 14 %
Critical	> = 15 %

From WHO, 2003, “The Management of Nutrition in Major Emergencies”

## How do I prevent a nutrition emergency?

Most nutrition emergencies develop over time. Early warning systems tracking indicators such as crop production, local market prices, and health service statistics can often identify an evolving crisis before rates of malnutrition reach crisis levels. Intervening early can avert excess malnutrition and mortality. Interventions to consider during an evolving food crisis include:

- Market-based interventions to ensure food remains affordable;
- Cash transfers to ensure families have sufficient monies to purchase food;
- General food distribution where food is unavailable or un-affordable;
- Improved household level feeding practices and health care.

## How do I respond to a crisis?

When nutrition and mortality rates reach crisis levels, it is important to respond quickly. Children should be screened using MUAC, or MUAC followed by Weight for Height, and malnourished children should be referred to one of three primary services:

**Supplementary Feeding:** Moderately malnourished children or pregnant/lactating women should receive a take home ration consisting of a fortified blend, fortified oil, and where possible sugar. The ration should be designed to deliver between 1000 and 1200 Kcal, and approximately 40 grams of protein per day. Dry rations can be replaced with ready to use foods in some circumstances. High energy biscuits such as BP-5 should be used only until other resources become available, often in the first days of response.

**Outpatient Therapeutic Care:** Severely malnourished children with appetite and no complications should be enrolled in an outpatient therapeutic care program (OTP). Typically located in a front line health facility, children enrolled in the OTP should receive a simple medical evaluation, presumptive treatment for diarrhea, pneumonia, and malaria (where relevant), and Ready to Use Therapeutic Food (RUTF). After initial enrollment, children should return once each week for follow up and a new supply of RUTF.

**Inpatient Therapeutic Care:** Severely malnourished children with complications (or moderately malnourished children with complications) should be admitted to an inpatient facility for close monitoring until stabilized. Inpatient care should follow standard WHO protocols for the treatment of severe malnutrition. Typical length of stay is approximately 7 days. Once stabilized, the patient should be transferred into an OTP program within reasonable distance of their homestead.

## How do I work with the community?

- Inform the population about services available
- Promote good personal and community hygiene practices
- Promote adequate and hygienic food preparation and consumption

### ❖ Document adapted from the following sources:

- WHO, *Management of Severe Malnutrition*, 1999
- WHO, *Management of Malnutrition in Major Emergencies*, 2000
- HPN Network Paper 56, Helen Young and Susanne Jaspars, November 2006
- SPHERE humanitarian charter and minimum standards in disaster response 2004

