

# Fast Facts: Acute Malnutrition

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## Overview

The countries of the Horn of Africa – including Somalia, Kenya, Ethiopia and Djibouti – are experiencing increased rates of acute malnutrition caused by the convergent effects of the region's worst drought in decades, soaring food prices and armed conflict in Somalia.

## Levels of acute malnutrition

In children, acute malnutrition (also called 'wasting') is measured by low weight for a child's height, as compared to the median weight-for-height ratio of healthy children. In situations where weight and height cannot be easily measured, a child's middle-upper arm circumference (MUAC) can be used as a rough indicator of nutritional status.

**Severe acute malnutrition (SAM)** results from a dangerous deficiency of protein, minerals and vitamins, leading to loss of body fat and muscle tissue. SAM is defined by a 'minus three' deviation from the weight-for-height median, MUAC of less than 115 mm, and visible severe thinness.

**Moderate acute malnutrition (MAM)** is defined by a 'minus two' deviation from the weight-for-height median, and MUAC of less than 125 mm.

**Global acute malnutrition (GAM)** is the term for the combined rate of both SAM and MAM in a given country, region or district. When the prevalence of GAM is higher than 15 per cent among children under five years of age, the situation is considered 'critical' under World Health Organization standards. All countries in the Horn crisis have exceeded these levels.

## Management of SAM with therapeutic feeding

SAM is a life-threatening condition requiring immediate treatment, which consists of a package of medical and nutritional interventions. Children with medical complications are treated first in a stabilization centre (often within a health facility), with close supervision and medical attention. Children without medical complications can be treated successfully as out-patients.

F-75 and F-100 therapeutic milk are used to treat severely malnourished children who have medical complications. F-75 is the 'starter' formula used for two to seven days, until the child is stabilized. F-100 is a higher-calorie 'catch-up' formula that helps to rebuild wasted tissue.

After stabilization, or if severely malnourished children do not have medical complications, they receive ready-to-use therapeutic food (RUTF – one well-known brand is Plumpy'nut, but there are others) over a period of several weeks. RUTF includes all nutrient requirements, and the cure rate from its use is very high.

## Management of MAM with supplementary feeding

MAM is a serious condition that must be treated through supplementary feeding in order to ensure the health of the child and prevent progression to more severe malnutrition. MAM is treated with ready-to eat specialized foods such as high-protein pastes. All nutrient requirements are included in these foods.

Micronutrient interventions, including vitamin A supplementation, also boost immunity and reduce the risk of mortality for children between the ages of 6 and 59 months who are suffering from MAM.

## Nutrition interventions in emergencies

Besides therapeutic and supplementary feeding for treatment of SAM and MAM, other feeding interventions may be used to manage and prevent malnutrition in emergencies.

**Blanket supplementary feeding** boosts the energy, protein and micronutrient intake of the entire vulnerable population – specifically, children under five, and pregnant and lactating women – in situations where GAM is very high. Supplementary food often consists of corn soy blend (CSB) or other blends.

**‘Wet feeding’ programmes** provide ready-to-eat foods – or, as a short-term measure, cooked meals – in situations where cooking is impossible.

Both of these interventions have been deployed in response to the Horn of Africa crisis.

## Infant and young child feeding in emergencies

Support for optimal infant and young child feeding practices is another approach to managing malnutrition in crises. This support includes:

- Promotion of exclusive breastfeeding for the first 6 months of life, and continued breastfeeding to 24 months and beyond;
- Appropriate complementary feeding starting at six months of age;
- Establishment of safe areas for women to breastfeed and receive counselling;
- Where appropriate, provision of ready-to-use infant formula, under proper supervision and guidance, for infants and young children who have lost their mothers.

## Long-term impact of acute malnutrition

Children who have suffered from acute malnutrition, especially SAM, may rebound in terms of weight gain, but the impact is lasting. Mental development and growth are affected, and there is a heightened risk of disease and diminished productivity in later life. Preventing acute malnutrition before it strikes, where possible, is the best way to ensure child health and development in the long term.