Understanding the Difference Among MAM, SAM, and GAM and their Importance on a Population Basis

The weight and height of children under 59 months are used as proxy measures for the general health of the entire population. **Weight-for-height** (wasting) provides the clearest picture of **acute malnutrition** in a population at a specific point in time.

Moderate Acute Malnutrition (MAM) is identified by moderate wasting WFH < -2 z-score and ≥ -3 z-score for children 0-59 months (or for children 6-59 months, MUAC

<125 mm and \ge 115 mm).

Severe Acute Malnutrition (SAM) is identified by severe wasting

WFH < -3 z-score for children 0-59 months (or for children 6-59 months, MUAC <115 mm) or the presence of bilateral pitting edema.

Global Acute Malnutrition (GAM) is the presence of both MAM and SAM in a population.

A GAM value of more than 10 percent indicates an emergency. High prevalence rates outside of the *seasonal* norm are particular cause for concern. Commonly used thresholds for GAM are:

Prevalence of wasting	Severity of malnutrition
<5%	acceptable
5% to 9.9%	poor
10% to 14.9%	serious
>15%	critical

Source: WHO. 2000. The Management of Nutrition in Major Emergencies