Nutrition Terminology and Hunger Situation Analysis

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Under-nutrition

• Under nutrition is the result of undernourishment, poor absorption and/or poor biological use of nutrients consumed

• There are four forms of under nutrition:
  - Acute malnutrition or Wasting
  - Chronic Malnutrition or Stunting
  - Underweight and
  - Micronutrient deficiencies.

The 4 forms can appear isolated or in combination but most often they overlap in one child or in a population.
Acute Malnutrition

- **Wasting.** Low weight for height, generally the result of weight loss associated with a recent period of starvation

- **Severe acute malnutrition (SAM):** Defined by the presence of bilateral pitting oedema or Severe wasting, and other clinical signs such as poor appetite. A child with SAM is highly vulnerable and has a high risk of death.

  - MUAC <115 mm or 11.5 cm
  - Bilateral pitting nutritional oedema
  - WHZ score <-3

- **Moderate Acute malnutrition (MAM):** Defined by moderate wasting.

  - MUAC ≥ 115 mm to <125 mm
  - WHZ score ≥ -3 and < -2 z-score

- **Global Acute Malnutrition:** SAM and MAM combined
Stunting or Chronic malnutrition

• Stunting. Low Height for Age, reflecting a sustained past episode or episodes of under-nutrition:
  - Severe chronic malnutrition: $HAZ \text{ score} <-3$
  - Moderate chronic malnutrition: Defined by moderate stunting.
    $HAZ \text{ score} \geq -3 \text{ and } < -2 \text{ z-score}$

- Global chronic Malnutrition: Severe and moderate combined
Effects of stunting on brain development

Typical brain cells
Extensive branching

Impaired brain cells
Limited branching
Abnormal, shorter branches

Source: Cordero E et al, 1993 (Adapted from Figure 4)
Underweight

- Underweight. Low weight for Age in children, and BIM <18.5 in adults reflecting a current condition resulting from inadequate food intake, past episodes of under nutrition or poor health conditions.
Undernourishment/chronic hunger

• Undernourishment. Food intake that is insufficient to meet dietary energy requirements continuously. The word is used interchangeably with chronic hunger.
Overweight and obesity

• overweight and obesity. Body weight that is above normal as a result of an excessive accumulation of fat. It is usually considered as a manifestation of <<over-nutrition>>

• Overweight is defined as BMI>=25-30 and obesity as BMI>=30
State of food insecurity in the world improving but not in Sub-Saharan Africa
Changing in Diet Composition

Consumption of cereals and mainly tubers (dietary energy) fell as % of total....

...Consumption of fats and oils increased significantly and those of sugar doubled

... Animal-source Foods, fruits and vegetables remain constant or show slight increase
Key issues

- Improvement in hunger distribution in the world between 1990-92 and 2010-12 but not in sub-Saharan Africa
- Inadequate redistribution of food production and productivity
  - limited linkages between agriculture and social protection
  - Low access to diversified food and markets
- Changing in diet composition and differences between poor and rich people:
  - the consumption of fat and oils increased significantly and those of sugar doubled
  - Animal-source foods and fruits and vegetables show slight increase or remain constants
- Limited ownership of nutrition by agriculture sector
Key messages

• Agriculture, as well as health, offers nutrition-specific actions and solutions;

• Agriculture is an important determinant for nutrition (i.e., health is not the only determinant);

• Food Safety – A pre-requisite for Food Security

• Sustainability is key goal
  – Sustainable diversified production: nutrition-driven agriculture within environmental limits.
  – Consumers choices promoting Dietary diversity /diversified consumption
Note that the degradation of ecosystems and the loss of food biodiversity is contributing greatly to the increases in poverty and malnutrition in Africa; Recognize that returning to local crops and traditional food systems is a prerequisite for conservation and sustainable use of biodiversity for food and nutrition; Acknowledge that local foods are the basis for African sustainable diets.