1. What is nutrition?

Nutrition is the process of taking in food, breaking it down into small parts, and absorbing these parts for use or storage. Food is made up of nutrients grouped according to their function in the body: **carbohydrates and fats** provide energy; **protein** builds the body; and **vitamins and minerals** (also known as micronutrients) help fight diseases, among other things. The body needs items from all three of these food groups in the right amounts to grow well and stay healthy.

2. What is malnutrition?

Malnutrition is a condition that occurs when people do not eat enough food, eat the wrong types of food, or eat more food than the body requires. There are two forms of malnutrition: undernutrition and overnutrition.

Undernutrition occurs when the body does not get the right amount and type of nutrients it requires to maintain health. In children, undernutrition is manifested by a child being short compared to healthy children of the same age and sex (a condition known as stunting), low weight for his or her height (known as wasting), or low weight for his or her age (known as underweight). Severe wasting and kwashiorkor are two forms of undernutrition that can be lethal. Micronutrient deficiency is another form of undernutrition. The most common micronutrient deficiencies are iron, iodine, and vitamin A.

Overnutrition occurs when the body takes in more nutrients than it requires for normal growth. This leads to excess fat storage in the body and is unhealthy. Overnutrition includes overweight and obesity, which present as a person being too heavy for his or her height.

3. Why should malnutrition be of concern in Ghana?

Simply put, malnutrition in the form of either undernutrition or overnutrition leads to poor health and can be fatal.

One in every 13 Ghanaian children dies before his or her fifth birthday, with about half of these deaths associated with undernutrition. Children that suffer from undernutrition are more likely to die of common childhood illnesses, such as malaria, diarrhoea, pneumonia, and complications from HIV, compared to well-nourished children. Undernutrition also has long-term consequences, such as reduced intellectual capability and physical productivity. For instance, if no interventions are put in place, it is estimated that stunting alone will cost Ghana 5 billion cedis (US\$3.5 billion) in lost economic productivity by 2020.

Overnutrition is also on the increase and may cause other diet-related diseases, such as diabetes, stroke, hypertension, and heart disease.

4. Who is affected by undernutrition in Ghana?

Undernutrition affects mostly women and young children. The last large-scale survey conducted in Ghana (the Demographic and Health Survey [DHS] 2008) showed that:

- Three in 10 young children are short for their age (stunted) and about 1 in 7 has low weight for his or her age (underweight), which leads to reduced physical capacity and productivity.
- About 1 in 12 children is wasted and 2% suffer from severe forms of wasting, increasing their risk of illness and death.
- Almost 8 in 10 children under the age of 5 years are anaemic due to low levels of iron, which can cause poor learning ability, impaired mental development, and reduced productivity.
- About 7 in 10 pregnant women in Ghana have anaemia, resulting in low-birth-weight babies, complications during pregnancy and childbirth, and increased risk of death for women and children.

The mother's nutrition plays a vital role in a child's weight at birth and in the child's nutritional status and well-being during the first 2 years of life. One in 10 children in Ghana is born with low birth weight, resulting in a higher chance of the child dying and a higher risk of undernutrition during infancy and childhood. It is critical that a child receive adequate nutrition during the 1,000-day 'window of opportunity', from the time a child is conceived to his or her second birthday. Without adequate nutrition during this time, irreversible and long-term damage takes place on the child's growth and mental development.

5. What causes undernutrition?

Undernutrition results from not eating a variety of foods in enough quantities. Illness such as diarrhoeal diseases that do not allow food to be absorbed and used by the body can also cause undernutrition. Reasons for not eating enough food include families not being able to afford or food not being available.

In addition, how parents care for their children determines if children are well-nourished. This includes the types, amounts and how often the food is given to children and if children are exclusively breastfed for the first 6 months of life.

6. What is the difference between undernutrition and hunger?

Although undernutrition can be caused by prolonged spells of hunger, it is not the same as hunger. Hunger is a painful sensation or a signal that a person needs to consume food. Undernutrition is caused by an inadequate supply of nutrients to enable the body to work well and remain healthy. Just because a person feels 'full' does not mean that he or she is well nourished. People need to eat an appropriate variety of foods in adequate quantities regularly to stay nourished and healthy.

7. Which areas of Ghana have the highest rates of undernutrition?

Undernutrition is a substantial problem throughout Ghana, but is more common in rural areas. The problem of undernutrition tends to be greatest in the Central, Eastern, Northern, Upper East, and Upper West regions.

8. Why are there such high levels of undernutrition when Ghana produces so much food?

While Ghana produces a substantial amount of food, it is not equally available and accessible to everyone in the country. In some instances, people do not have enough food or enough variety of food to keep them healthy. There are many reasons for this situation, including crop failure caused by drought and flooding, post-harvest losses during harvesting and handling, storage, processing, packaging, and transportation of foods. Families may also lack money to buy food even when it is available in the market. The lack of an appropriate variety of food is not the only cause of undernutrition. Illness and poor hygiene, which affect food intake, can also cause undernutrition.

9. What is being done to address malnutrition in Ghana?

Examples of Proven, Effective Nutrition Solutions

- Promotion of optimal breastfeeding
- Promotion of appropriate complementary feeding
- Interventions to improve hygienic practices
- □ Vitamin A supplementation
- □ De-worming
- Iron-folate supplements for pregnant and lactating women

- □ Salt iodisation
- □ Fortification of staple food, such as flour and oil
- □ Multiple micronutrient powders
- □ Prevention of chronic undernutrition
- Treatment of severe acute malnutrition with special foods, such as ready-to-use therapeutic food
- Interventions to improve production, availability, and consumption of diversified food

10. Who is responsible for improving nutrition in Ghana?

All Ghanaians have a role to play. Good nutrition and prevention of malnutrition is a shared responsibility at every level: national, regional, district, community, and household. Food insecurity, poor health, and inadequate child care are all factors that lead to undernutrition. The multifaceted nature of nutrition requires that politicians, policy makers, civil society organisations/professional associations, researchers, the private sector, traditional/religious leaders, development partners, and the media make nutrition a priority issue.

Main data sources include 2011 Ghana PROFILES and Ghana DHS 2008. All calculations of cedis to US\$ are based on an exchange rate of 1.43 cedis to US\$1.

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