

# NUTRITION

This fact sheet outlines some of the basic information related to nutrition, with a focus on **infant and young child feeding** and **maternal nutrition**. There is a list of resources at the end where you can find more information.

## WHAT DO WE MEAN BY NUTRITION?

Nutrition is the process of taking in and using food so that the body can survive, thrive and grow. Nutrition refers to the quality and quantity of food people eat in relation to the body's needs. There are six types of nutrients (essential substances) that the human body needs to get from food: protein, carbohydrates, fat, fibres, vitamins and minerals, and water.

There are several terms related to poor nutrition that it is important to be familiar with:

- **Malnutrition** is most commonly used to refer to under-nutrition, or a lack of sufficient nutrients to meet the body's needs. But it can also refer to obesity or overweight.
- **Stunting** is a form of malnutrition that refers to low height for a child's age. Stunting usually occurs in the first five years of life and is permanent.

- **Wasting** is a form of malnutrition referring to low weight for a child's height. Wasting can result in death and it requires emergency intervention to save lives.

## WHY IS NUTRITION IMPORTANT?

Every living thing needs proper nutrition in order to survive. Poor nutrition can lead to reduced immunity to illness, increased susceptibility to disease, impaired physical and mental development and reduced productivity. The World Health Organization (WHO) estimates that poor nutrition contributes, directly or indirectly, to 45% of child deaths worldwide, often through weakened immune systems and increased susceptibility to other diseases such as malaria, diarrhoea and respiratory infections.

Malnutrition has a severe and life-long impact on health, productivity and cognitive ability. The effects of early damage caused by malnutrition on health, brain development, intelligence,

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OBSESITY CAN  
DAMAGE HEALTH



educability and productivity are largely irreversible and can occur before a child reaches its second birthday. Malnutrition often passes from one generation to the next because malnourished mothers often give birth to low birth-weight babies who themselves struggle to survive and grow.

Malnutrition also contributes to maternal mortality, since undernourished women are at greater risk during pregnancy. Anaemia, a condition associated with malnutrition, can increase the risk of haemorrhage and obstructed labour, which together account for one-third of maternal deaths.

In addition, girls who grow up undernourished are likely to have underdeveloped pelvises, leading to an increased risk of haemorrhage when they give birth themselves later in life.

## THE LINK BETWEEN NUTRITION, HYGIENE AND SANITATION

Poor nutrition isn't just about a lack of food. The WHO estimates that 50% of malnutrition worldwide is associated with repeated diarrhoea or intestinal worm infections as a result of unsafe water, inadequate sanitation or insufficient hygiene.

Repeated episodes of diarrhoea can result in decreased food intake and reduced nutrient absorption, leading in

turn to worse nutritional status. Worse nutritional status can additionally put children at higher risk of more severe and frequent episodes of diarrhoea. Therefore, improving hygiene and sanitation not only helps to prevent diarrhoea and worm infections, but also contributes to improved nutrition.

## WHO IS AFFECTED BY NUTRITION PROBLEMS?

Everyone!

However, good nutrition is especially important for infants, young children, pregnant women and women who are breastfeeding.

The first 1,000 days of a child's life (from conception to the child's second birthday) are particularly vital in relation to nutrition and childhood development. Lack of adequate nutrition during this period has irreversible consequences.

## ARE BOTH UNDERWEIGHT AND OVERWEIGHT PROBLEMS?

Yes. Overweight and obesity (excessive fat) can both damage health. And they are not just problems in high-income countries; they are now on the rise in low- and middle-income countries, particularly in urban areas.

It is not uncommon to find under-nutrition and obesity existing side by side. Many children are exposed to high-fat, high-sugar, high-salt diets that

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lack the essential nutrients. These diets tend to be lower in cost, but also lower in nutrient quality. This sort of diet, combined with a lack of exercise, often results in childhood obesity, even while under-nutrition issues remain unsolved.

Obese children experience breathing difficulties, increased risk of fractures, hypertension, early markers of cardiovascular disease and insulin resistance, and have a greater chance of premature death and disability in adulthood.

## HOW CAN NUTRITION-RELATED HEALTH PROBLEMS BE PREVENTED?

There are several proven strategies to help to improve nutrition. According to the WHO, 20% of deaths of children under the age of five could be avoided if the feeding guidelines around breastfeeding and complementary feeding were followed.

**Exclusive breastfeeding:** Breastfeeding is one of the most effective ways to ensure child health and survival. Early initiation of breastfeeding, within one hour of birth, protects the newborn from acquiring infections and reduces newborn mortality.

The first milk that mothers produce, called colostrum, is highly nutritious and boosts newborn immune systems.

Exclusive breastfeeding for infants under six months is sufficient to meet all nutritional requirements and prevents exposure to illnesses transmitted through unclean foods or fluids. Breast milk is also an important source of energy and nutrients in older infants, providing about half or more of a child's energy needs between the ages of 6 and 12 months, and one-third of energy needs between 12 and 24 months.

Breastfeeding also provides important health benefits to mothers. Breastfeeding immediately after birth helps to reduce postpartum blood loss in the mother. Breastfeeding also reduces the risk of breast and ovarian cancer and, if exclusive, can act as a natural method of birth control, providing 98% protection against pregnancy in the first six months after birth.

Infant formula does not contain the health-enhancing antibodies found in breast milk. Infant formula that is not properly prepared with clean water or sterilised equipment can cause diarrhoea, one of the leading causes of

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child mortality. Malnutrition can also result from over-diluting formula to stretch supplies.

**Complementary feeding:** Infant and young child feeding is a key area for improving child survival and promoting healthy growth. As mentioned earlier, the first two years of a child's life are particularly important.

At around 180 days (the age of six months), an infant's need for energy and nutrients starts to exceed what is provided by breast milk, and complementary foods are necessary to meet those needs. An infant of this age is also developmentally ready for other foods.

If complementary foods are not introduced when a child has reached six months, or if they aren't given in enough quantity and frequently enough (called "appropriate feeding"), an infant's growth may weaken. The way in which complementary feeding is approached is often called infant and young child feeding practices (IYCF).

Appropriate IYCF practices include the timely initiation of feeding semi-solid/solid food from the age of six months, providing a variety of foods to ensure sufficient nutritional content, increasing portions and frequency over time and continuing to breastfeed, ideally for the first two years of life. These practices

also include helping young children to eat, particularly infants who are fussy eaters.

Fruits and vegetables rich in vitamin A (such as carrots, mangoes and sweet potatoes) should be eaten daily with meat, poultry, fish and eggs, and eaten as often as possible. Fats should be eaten occasionally, in order to meet all the nutritional requirements of a fast-developing child.

## THINGS TO TAKE INTO CONSIDERATION WHEN WORKING ON NUTRITION ISSUES

Unlike many health-related topics, exclusive breastfeeding is not dependent on health supplies or service delivery, and is something that mothers can largely control through their own behaviour. It's also free! That said, there are many barriers to exclusive breastfeeding that will need to be addressed.

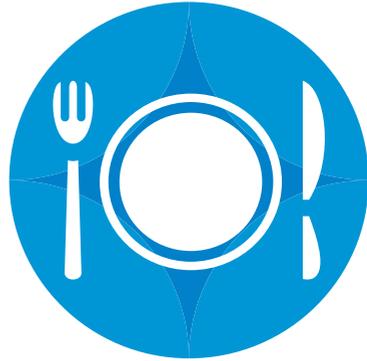
These may include the mother having to work away from the baby, concerns that her milk supply is inadequate, fears that a baby will be hungry unless it gets solid food sooner than six months, etc.

It is important to conduct research to understand the nutrition-related practices of the target population. Food is very culturally specific and most cultures have traditions that impact on nutrition, especially for infants and young children. For example, eating off shared plates may mean that a young child does not get

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enough food. It is important for young children to have their own utensils, such as a bowl, so that the quantity of food they eat can be monitored.

Nutrition is about more than just food. The nutritional status of a child is influenced by food, health and parental care. Adequate health services and a healthy environment are important to minimise the risk of infectious diseases, such as diarrhoea, which can exacerbate malnutrition. Safe water, sanitation and good hygiene play an important role in maintaining good nutrition.



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## FURTHER SOURCES OF INFORMATION

### WORLD HEALTH ORGANIZATION (WHO)

- On complementary feeding:  
<http://www.who.int/mediacentre/factsheets/fs342/en/>
- On breastfeeding:  
<http://www.who.int/features/factfiles/breastfeeding/facts/en/>
- On a healthy diet:  
<http://www.who.int/mediacentre/factsheets/fs394/en/>
- On obesity:  
<http://www.who.int/mediacentre/factsheets/fs311/en/>
- Global Strategy for Infant and Young Child Feeding, 2003:  
[http://www.who.int/nutrition/topics/global\\_strategy\\_iycf/en/](http://www.who.int/nutrition/topics/global_strategy_iycf/en/)

### UNICEF

- On complementary feeding:  
<http://data.unicef.org/nutrition/iycf>
- On breastfeeding:  
[http://www.unicef.org/nutrition/index\\_breastfeeding.html](http://www.unicef.org/nutrition/index_breastfeeding.html)
- Improving Child Nutrition: The Achievable Imperative for Global Progress, 2013:  
[http://www.unicef.org/nutrition/index\\_68661.html](http://www.unicef.org/nutrition/index_68661.html)

### THE LANCET

- Series on maternal and child malnutrition:  
<http://www.thelancet.com/series/maternal-and-child-undernutrition>

### WORLD BANK

- Repositioning Nutrition as Central to Development, 2006:  
<http://siteresources.worldbank.org/NUTRITION/Resources/281846-1131636806329/NutritionStrategy.pdf>