



The Importance of Food

Food is an essential part of everyone's lives. It gives us the energy and nutrients to grow and develop, be healthy and active, to move, work, play, think and learn.

The body needs a variety of the following 5 nutrients - protein, carbohydrate, fat, vitamins and minerals - from the food we eat to stay healthy and productive.

Protein - is needed to build, maintain and repair muscle, blood, skin and bones and other tissues and organs in the body.

Foods rich in protein include meat, eggs, dairy and fish.

Carbohydrate - provides the body with its main source of energy.

Carbohydrates can be classified into two kinds; starches and sugars. Food rich in starches include rice, maize, wheat and potatoes and food rich in sugars include fruit, honey, sweets and chocolate bars.

Fat - This is the body's secondary source of energy. Fat actually provides more energy/calories per gram than any other nutrient, but is more difficult to burn.

Food rich in fats are oils, butter, lard, milk, cheese and some meat.

Vitamins and Minerals - Vitamins and minerals are needed in very small amounts and are sometimes called micronutrients, but are essential for good health. They control many functions and processes in the body, and in the case of minerals also help build body tissue such as bones (calcium) and blood (iron). To learn more about specific vitamins and minerals see the Vitamins and Minerals information sheet below.

In addition to the above nutrients Fibre and Water are also essential for a good healthy diet.

A Balanced Diet

To stay healthy we not only need all of the above 5 nutrients in our diet but we also need them in the correct quantities - this is what we mean by a balanced diet.

The consequences of not having a balanced diet are numerous: if you do not eat enough protein, you will not be able to grow properly; if you do not eat enough energy containing foods (eg carbohydrates and fat), you will feel very tired; and if you eat too much energy containing foods you will become overweight.

Many people in the developed world eat too much of some types of food, for example a lot of saturated fats, and become overweight. Obesity is becoming a big problem in

the developed world. One third of all Americans are obese. Being obese has serious health implications including increasing your chances of heart disease, diabetes, high blood pressure, having a stroke or getting a number of forms of cancer.

In the developing world, on the other hand, many people suffer from:

Hunger, or under-nutrition, whereby they do not have enough food or Malnutrition, which means 'badly nourished' and is as much about what you eat as how much. Malnutrition is characterised by inadequate intake of protein, energy and/or micronutrients and by frequent infection and disease. FoodAid is a great opportunity for you all to learn more about these issues and to help the hungry and malnourished overseas.

Vitamins and Minerals

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The important vitamins are: vitamin A; the B vitamins including thiamine, niacin and folate; vitamin C and vitamin D.

Vitamin A helps to prevent infections, is essential to keeping the eyes healthy and helps children grow properly. Food rich in vitamin A include: orange and yellow fruit and vegetables including mangoes, carrots, sweet potatoes and pumpkins; dark green vegetables for example spinach; liver and eggs.

B Vitamins including Thiamine, Niacin and folate help the body burn nutrients to release energy and for building and repairing the body's tissues. Sources of B vitamins include: dark green vegetable; meat, poultry and fish; liver; milk and eggs.

Vitamin C helps the body to absorb iron and to use nutrients to build bones and blood vessels.

Most fruit, especially citrus fruit and many vegetables including potatoes are good sources of vitamin C.

Vitamin D helps the body absorb and use calcium to build healthy bones and teeth. Vitamin D is found in fish oils, eggs, milk, cheese and liver and is also produced by the body when the skin is exposed to sunlight.

The important minerals include iron, calcium, iodine and zinc.

Iron is needed to make red blood cells, which are essential for getting oxygen from the lungs to all the other parts of the body and also helps all of the body's cells working properly. The best sources of iron are meat, fish, liver and other organ meats and dark green leafy vegetables.

Calcium is needed for healthy bones and teeth. Milk and other dairy products are the best source of calcium.

Iodine is needed for proper growth and development of the brain and nervous system. Iodine comes from the soil, so the amount of iodine in food depends on how much iodine there is in the soil. Soils low in iodine are found mainly in upland, mountainous areas and in places where there are frequent floods. Fish and other foods from the sea (eg. sea salt) are usually rich in iodine, because they get iodine from the seawater.



What Is Hunger?

The world produces enough food for everyone. Yet every 5 seconds a child dies of hunger or malnutrition and over 800 million people still go to bed hungry.

Quick Hunger Facts

- The world produces enough food for everyone. Yet there are over 800 million hungry people in the world.
- Every 5 seconds a child dies of hunger or related causes.
- Chronic hunger takes the lives of 24,000 people each day.
- 10.9 million children under the age of 5 die in developing countries each year.
- Malnutrition and hunger-related diseases cause over 60% of these deaths.

What are Hunger, Malnutrition and Food Security?

Hunger is a condition in which people lack the basic food intake to provide them with the energy and nutrients for fully productive lives.

There are two main types of hunger: acute and chronic.



Acute hunger occurs suddenly and is life threatening if intense treatment is not administered immediately. It is often caused by emergency situations such as conflict or natural disasters and dramatic images of acute hunger are often highlighted on TV screens during these times. However acute hunger account for just eight percent of the world's hunger problem.

Chronic hunger can occur gradually and last generations or re-occur seasonally. It is a less visible form of hunger but affects many more people.

Chronic hunger is much more than living on significantly less than the recommended calorie intake for weeks or even months, being underweight and having an empty stomach. Lack of energy results in the body and mind slowing down, resulting in a hungry child experiencing:

- Lack of energy to do things, play and learn
- Apathy - whereby the child is less interested in the world around her
- Less resistance to disease as their immune system weakens

Acute or chronic hunger can lead to malnutrition.

Malnutrition means 'badly nourished' and is as much about what you eat as how much. Malnutrition is characterised by inadequate intake of protein, energy and/or micronutrients and by frequent infection and disease. To learn more about different forms of malnutrition see the 'What is Malnutrition' factsheet.

Food Security is when everyone has at all times access to and control over sufficient quantities of good quality food for an active healthy life. Improving food security for chronically hungry people overseas is central to a number of Concern's food related programmes overseas.

Where are the Hungry?

As you can see from the World Hunger Map hunger exists all over the world. However the majority of undernourished people live in the developing world and earn less than \$1 a day.

Over 314 million of the world's hungry live in South Asia - this is more than the population of Australia and the USA.

Sub-Saharan Africa also has a huge number of hungry people, with over 30% of the population being undernourished.

The majority of hungry people in these countries are children under the age of 5.

What causes Hunger?

There are many widely held myths regarding the cause of hunger which mislead people and keep us from collectively helping to end hunger.

Three Hunger Myths

Myth 1: There just isn't enough food produced in the world to feed everyone.

Reality: The world produces enough food for everyone. The problem is that many people do not have access to the resources to produce or purchase enough food. Access and not quantity is therefore the problem.

Myth 2: Hunger is caused by famine and natural disasters which cannot be controlled by people.

Reality: Hunger resulting from famine and natural disasters tends to be very well publicised but in fact only accounts for a small portion (8%) of the hunger problem in the world. Primarily, hunger results from chronic undernutrition - people lack access to enough food, lack the resources to purchase or grow their own food, or the food they eat lacks sufficient nutritional value.

Myth 3: There are too many people to feed.

Reality: Contrary to popular belief, overpopulation is not the root cause of hunger. It is usually the other way around: hunger is one of the real causes of overpopulation. The more children a poor family has, the more likely some will survive to work in the fields or in the city to add to the family's small income and, later, to care for the parents in their old age.

Principal Causes of Hunger

The real causes of hunger are many and varied and often relate to much larger

issues including poverty, conflict, the international economy and global politics. The principal causes of hunger include:

Poverty

Hunger is very closely linked to poverty. Currently more than 1.1 billion people live in households that earn no more than \$1 a day per person. Many of these poor people often can't get enough food, either because they lack resources (land, seeds and tools) to grow enough food or lack the money to buy it. Hunger and malnutrition in turn impair individuals' performance in school or at work, making it harder for them to break out of the poverty cycle.

War

War disrupts farming production and distribution of food products, as a result of people fighting rather than working in their fields or becoming refugees. Worse still some crops are stolen or destroyed intentionally. In some countries, even if fighting never occurs, the government spends a lot of money on weapons which could otherwise have been spent on food production, education, and health care. Global military spending is more than the total income of the poorest 45% of the world's population.

International Trade

The current world trade system does not give poor countries a fair deal as many trade rules favour rich companies and multinational companies. For example, poor countries often do not have access to selling their products in markets in the developed countries because of trade barriers, for example tariffs, quotas and agricultural subsidies. These barriers are put in place by governments to protect their own products and markets from external products but result in people in the developing world not being able to compete in world markets. Rapidly changing prices is also a major issue for farmers in the developing world as it makes it very difficult for people to secure food for their families and lift themselves out of poverty. See the FoodAid 'Trade Factsheet' for more information.

Debt

When developing countries have debt problems and ask the International Monetary Fund for help they are told to make economic reforms called Structural Adjustment Programmes (SAPs). SAPs usually require governments to make severe cutbacks in public spending. This has resulted in governments eliminating subsidies that were keeping local food prices down and reducing help they provide to farmers, such as providing them with seeds and fertilisers. These, amongst a number of other changes resulting from SAPs, are making it more and more difficult for poorer households to grow or afford enough food.

Gender Discrimination

Women of every age have higher rates of hunger and malnutrition than men. This is partly due to the women having special nutritional needs as a result of having children and breast-feeding them. However, gender discrimination, for example women lacking access to education, working longer hours than men and being paid less than men, also play a part. Malnutrition among mothers stunts the growth of children, and that keeps hunger, poverty, and ill-health spiralling down the generations.

Damaged Environment

Poor people depend heavily on nature for their basic needs, including food, water and firewood. However, they are increasingly destroying the very lands they depend

on to survive, through over farming or poor management. For example, farmers are often so poor that they dig up roots for fuel or forage, leaving the soil exposed and unprotected from the wind that blows it away and the water that washes it away. Such environmental degradations make it ever harder to produce food and will mean that great areas of land will be unsuitable for growing crops in the future.



What Is Malnutrition?

People who are hungry or undernourished are at risk of malnutrition. Malnutrition means **'badly nourished'** and is as much about what you eat as how much. Malnutrition is characterised by inadequate intake of protein, energy and/or micronutrients and by frequent infection and disease.

Types of Malnutrition

The type of malnutrition an individual experiences depends on what nutrients are lacking in their diet:

1. Children who lack energy and protein in their diet, in the form of carbohydrates, fats and proteins, can develop a condition called protein-energy malnutrition. Protein-energy malnutrition is by the far most lethal form of malnutrition.
2. Children who lack just one micronutrient (a specific vitamin or mineral) or lack one micronutrient more than other nutrients can develop what is referred to as micronutrient malnutrition. These types of malnutrition are less visible but no less serious than protein-energy malnutrition.

Protein-Energy Malnutrition

Protein-energy malnutrition causes a range of conditions, which differ in their severity. A child may be: failing to grow, underweight, appear severely wasted (whereby they have lost much of their fat and muscle resulting in the body looking very thin) or be suffering from oedema (water retention).

In addition to these obvious physical effects on the body, the child may also have less energy to do things, play and learn and a lowered immunity to infection, resulting in them getting ill more often.

Malnutrition and infection make each other worse because:

1. Malnutrition makes infection worse by increasing the chance of children getting infection due to the body not being so healthy and reducing the child's ability to fight infection.
2. Infections make malnutrition worse by interfering with a child's appetite, by reducing absorption of nutrients into the body and by increasing the need for nutrients.

A child who continues to be undernourished and to have many infections is likely to develop one of the two main types of severe protein-energy malnutrition: marasmus and kwashiorkor. Children with severe protein-energy malnutrition are very ill and need careful treatment and attention to make them better.

Marasmus results from a child having a diet very low in energy and nutrients. It often follows a severe illness or a period of frequent infections. Marasmus usually occurs in children under the age of two, but can occur at any age, particularly during an emergency or famine.

Main signs of marasmus: 1) Extremely low weight. 2) Extreme wasting - this refers to the child/adult losing much of their fat and muscle, so their body looks very thin, and their arms and legs look like sticks. 3) An 'old person's face' - the child's face may look like that of an old person's, as a result of weight loss, skin being in folds and the often anxious look on the child's face.

Kwashiorkor, a condition common in children that have just stopped being breastfed, results from inadequate protein intake. The signs of kwashiorkor may appear very quickly, often when a child has an infection or stops breastfeeding suddenly. However, it usually occurs in children that have been undernourished for some time before the signs occur. Main signs of kwashiorkor:

1) Swelling of the legs, arms and face - this results from water retention and masks severe loss of body weight as the face becomes rounded and moon-shaped and the belly becomes swollen. Doctors refer to this swelling as oedema.

2) Low weight - although not usually as extreme as in marasmus.

3) Changes to skin and hair - skin often becomes paler and thinner, and may flake off whilst hair thins out and lightens in colour. The child may also appear exhausted and listless.

Micro-nutrient Malnutrition

The other main types of malnutrition is micro-nutrient malnutrition which refers to deficiencies in specific vitamins and minerals. Vitamins and minerals are essential for good health but are needed in very small amounts, hence they are called micronutrients. To learn more about the importance of vitamins and minerals please see the 'Importance of Food' factsheet.

The three main types of micro-nutrient malnutrition that affect large numbers of people in the developing world result from deficiencies in vitamin A, iron and iodine.

Vitamin A Deficiency

A diet which lacks enough vitamin A can damage the eyes and can cause blindness. Vitamin A deficiency is in fact the single most important cause of blindness among children in the developing world, with at least half a million children going partially or totally blind every year as a result of it. It also increases risk of infection as it weakens the immune system.

Iron Deficiency

Lack of iron in people's diets can lead to anaemia. Anaemia means that the blood does not contain enough haemoglobin - the substance that makes blood red, which results in it being more difficult to get oxygen around the body. Anaemia reduces people's ability to work, increases their tiredness and slows learning in children. Anaemia is the most widespread form of malnutrition in the world, affecting both developed and developing countries. Women and children are particularly vulnerable to anaemia.

Iodine Deficiency

Iodine deficiency is the main cause of preventable brain damage and mental impairment in the early years of a child's life. Nearly 50 million people suffer from some degree of iodine deficiency related brain damage. The other main effect of iodine deficiency is a disorder called goitre, which involves your thyroid gland in your neck swelling up. The best sources of iodine are fish, table salt and seaweed, so it is often people in isolate, remote areas far from the sea that are affected by iodine deficiency.



What Can We Do About Hunger?

Getting involved in FoodAid is a great way to actively start doing something about hunger and malnutrition around the world. Not only does it increase your knowledge and understanding of the issues surrounding hunger and malnutrition but by raising funds for Concern's projects overseas you are also helping to make a real difference to the lives of those in need.

Below is a list of eight things that you can do to help stop hunger. You will find that information provided in the FoodAid pack will provide an excellent starting point for many of them.

Eight Things You Can Do To Help Stop Hunger

Get the facts.

What is hunger all about? Learn how people in all the regions of the world suffer, and what needs to change to have a world where everyone has enough to eat, now and in the future.

Look in your own backyard.

Is there hunger and homelessness in your own community? Educate yourself - get to know what the lives of people in your own neighbourhood are like.

Get others involved.

Talk to your friends, families and teachers about the problem. Make it a group concern, a living issue in your own community.

Put yourself in hunger's place.

Find out what it's like to go without food. Help set up a day in your school or community where you fast for a meal, several meals or a whole day. Talk about what it feels like to be deprived of food.

Advocate for the cause.

Support campaigns like MakePovertyHistory that aim to change international policies on issues like trade, aid and debt.

Concern Worldwide is a one of over 400 organisations supporting MakePovertyHistory. To find out more about how you can show your support log onto www.makepovertyhistory.org

Put your money where your mouth is.

Find out where the money goes for the products you buy. Support Fairtrade, where the money you spend goes back to the people who made the product you buy.

Dare to care: be there.

Open up your heart. Unless we each bring compassion and heart to the problem, it won't go away.

Support FoodAid'07

Learn about the issues and raise money for Concern to help those in need in the developing world.

You can make a difference - Never doubt that each and every one of us can make a difference!

