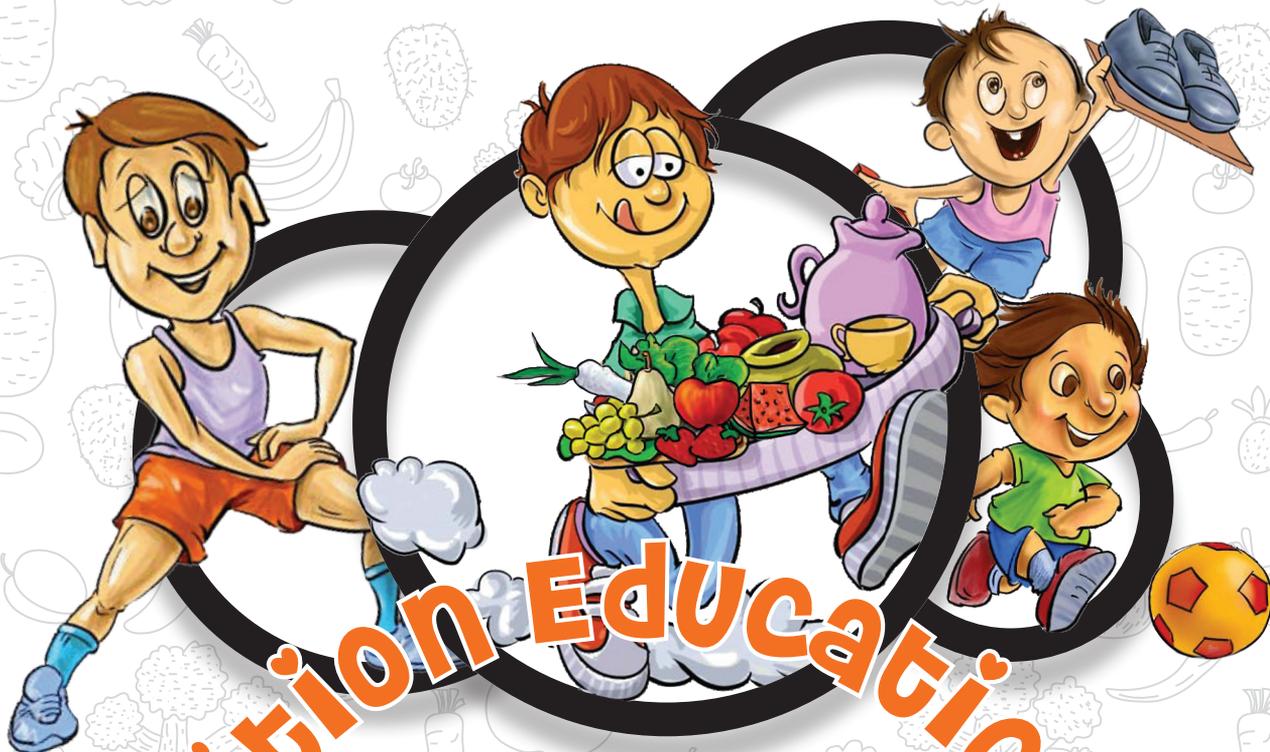


NESTLÉ for
HEALTHIER KIDS 



Nutrition Education for
Kids

OXFORD

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What does it mean to be **healthy?**

Do you remember the last time you were ill? How did you feel? Were you in pain? Did you feel weak? You must have stayed in bed instead of going to school or going out to play.

It does not feel very nice when one is ill. That is why being healthy is so important. To be healthy is to be full of energy—to be able to run about and play—and be able to do all the work that we do.

You must learn a few things so that you are always in good health!



Food and nutrition

Food and nutrition are two different things. Food is everything that we eat. But all food is not healthy. Some foods do not provide nutrition.

What is nutrition?

It is the food that is good for us. It gives us energy, and helps us to grow and be healthy.



How much nutrition do you need?

Our body needs the right nutrients, in the right amounts. Nutrients are substances in food that provide us nutrition. It is also important to get these at set times of the day. We must do this to be healthy and to save ourselves from becoming ill.

Our food must contain all the nutrients that we need. The main nutrients are given on the following pages. Each of these nutrients plays an important part in our body.



Carbohydrates (car-bo-hy-drates)

Carbohydrates give us energy to do work. If it were not for these, we would not be able to run, speak, jump, sing, or even think. They are like the petrol in a car. When a car runs out of petrol, it stops. This is what our body would do if we did not eat enough carbohydrates. We would feel too weak to do the things we like to do. We can get carbohydrates from **bread**, **roti**, **rice**, **pasta**, **fruits**,

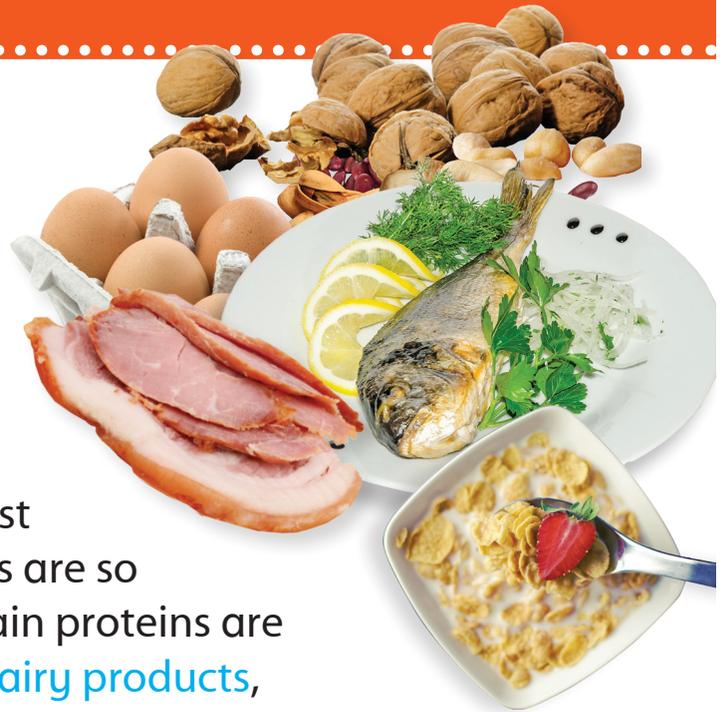


and **milk**. **Sweets**, **cakes**, and other **bakery items** also contain carbohydrates but these do not have other important nutrients like vitamins, minerals, and fibre. We will also learn about these in this book.



Proteins (pro-teens)

Our body is made of tissue. These tissues are undergoing constant wear and tear. They need to be repaired and replaced. Proteins help in the rebuilding of tissues. Another major function of proteins is to give energy, just like carbohydrates. That is why proteins are so important for us. Some foods that contain proteins are **meat**, **milk**, **fish**, **eggs**, **chicken**, **lentils**, **dairy products**, and **nuts**.



Fats and oils

Fats and oils are very important for a healthy body. Like proteins and carbohydrates, they too give us energy.

- They keep our skin healthy and protect our body organs by forming a layer around them.
- They also help to develop our brain.
- They store some important vitamins needed by the body.
- In addition, they give our food a pleasant taste.

Our body stores fats to use as energy and to protect us from cold. We get fats and oils from different types of oils like **sunflower oil**, **coconut oil**, **mustard oil**, **canola oil**, **olive oil** and from **meats**, **dairy products**, **ghee**, and **fish**.

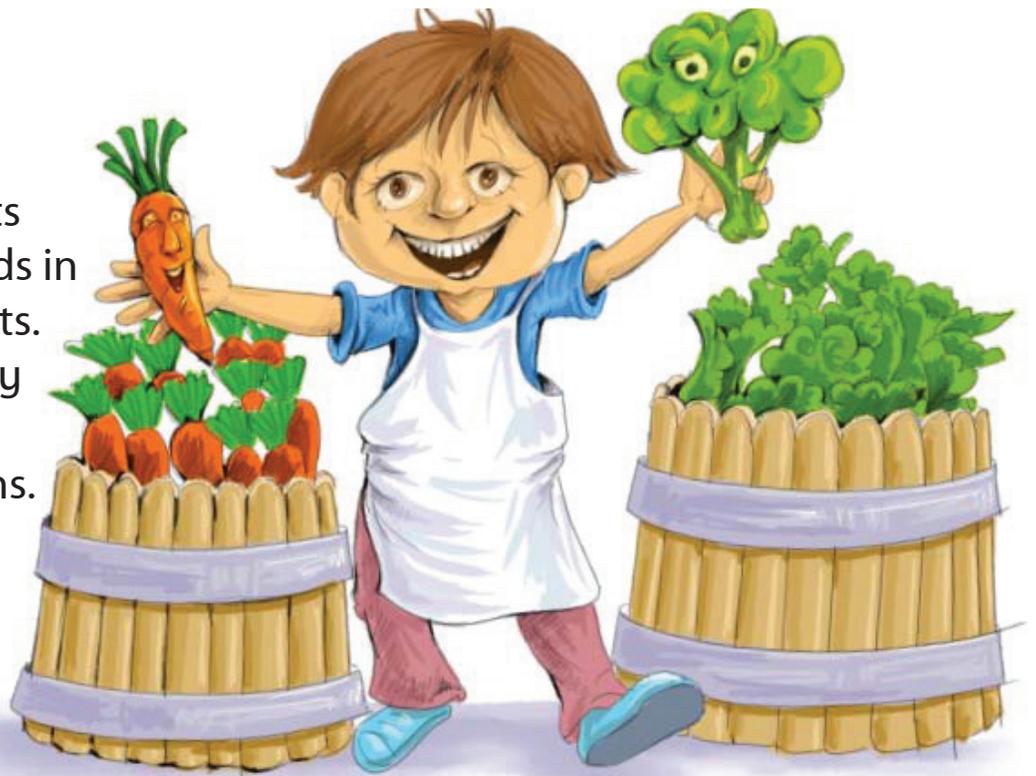
Anything in excess is not good. Though the nutrients mentioned above are all very important needs of our body, we must know how much to have of each.



Vitamins

Vitamins are important nutrients that the body needs in very small amounts. They help the body to perform many important functions. If we do not have enough of these, we can develop serious illnesses.

Here is a list of vitamins and the work that they do.



Vitamin A

What it does: It is good for our eyes and helps us see at night, gives us healthy skin, and helps children grow normally, mainly their bones and teeth.

Found in: milk, cheese, egg yolk, fish, carrots, spinach, cabbage, and tomatoes



Vitamin D

What it does: Calcium and phosphorus are two important things needed for healthy bones and teeth. Vitamin D helps the body absorb calcium and phosphorus. We must have this vitamin or the body will not be able to use calcium and phosphorus that we get from other foods.

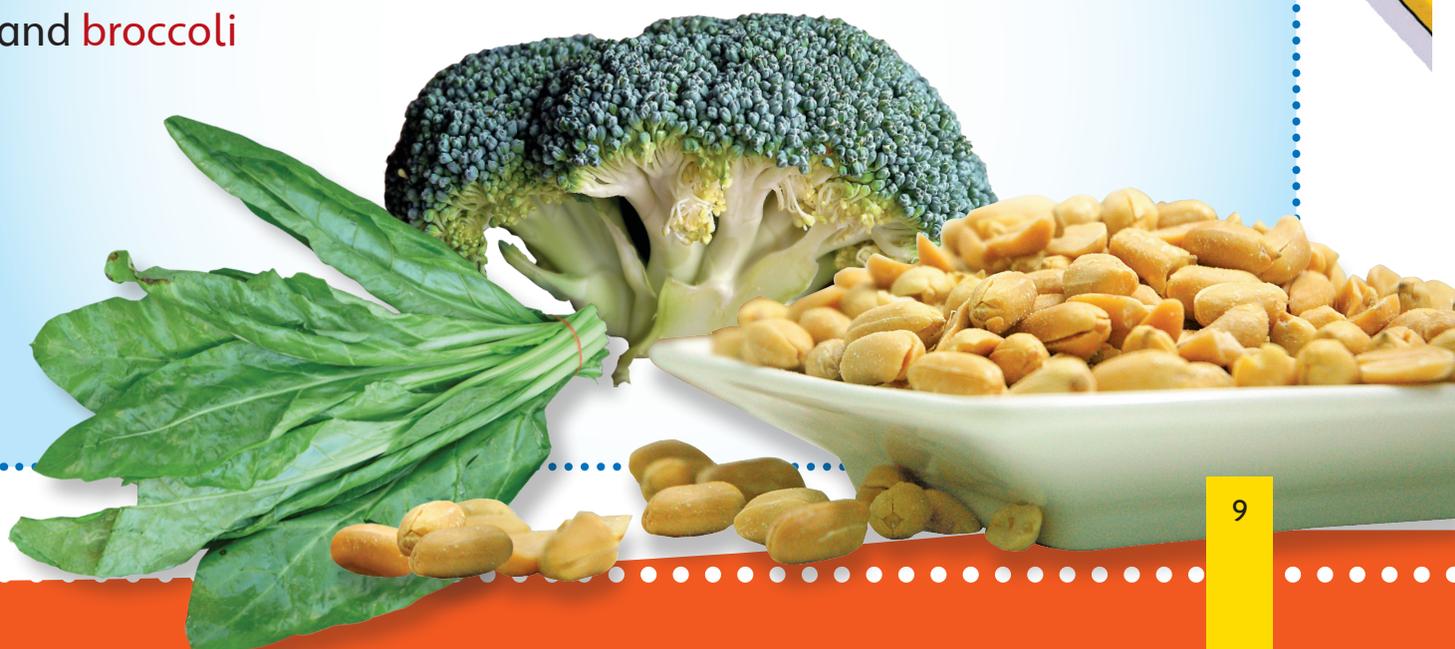
Found in: animal liver, cod liver oil, oily fish, egg yolk, milk, and dairy products



Vitamin E

What it does: It makes our heart healthy and strong; it is also good for our skin and hair, and has many other important functions.

Found in: sunflower seed oil, nuts and nut oils, spinach, and broccoli



Vitamin K

What it does: This vitamin has many important functions; one of these is to help stop the flow of blood from a wound.

Found in: spinach, cabbage, cauliflower, broccoli, kiwi fruit, and grapes



Vitamin B Complex

What they do: The eight B vitamins make it possible for carbohydrates, proteins, and fats to be used by the body. These are very important for normal growth and proper functioning of nerves.

Found in: animal liver, meat, milk, egg, fish, legumes, grains, pulses, banana, and pomegranate, etc.



Vitamin C

What it does:

- It protects us against illness.
- It keeps the gums healthy.
- It is needed for iron to be used by the body.

Found in: green chillies, kiwi fruit, citrus fruit, strawberries, spinach, cabbage, and broccoli



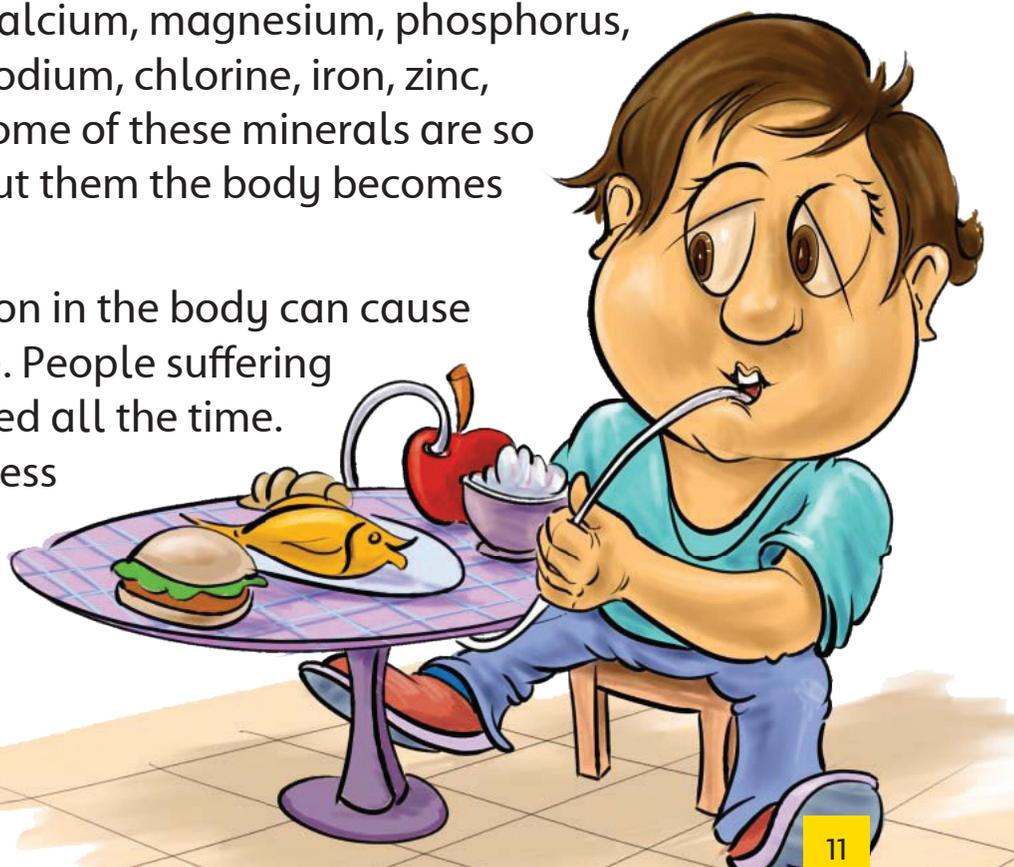
Minerals

The body needs minerals in tiny amounts to perform well. These include calcium, magnesium, phosphorus, potassium, sulphur, sodium, chlorine, iron, zinc, copper, and iodine. Some of these minerals are so important that without them the body becomes seriously ill.

Not having enough iron in the body can cause **anaemia** (a-nee-mia). People suffering from anaemia feel tired all the time.

They become breathless easily, feel dizzy, and their skin becomes pale.

Not having enough iodine can





cause a disease called **goitre**. In serious cases it can stop physical and mental growth. Iodine is found in fish and other seafood. It is also added to cooking salt to make it a part of our diet.

Minerals are found in **fruit**, **vegetables**, **salt**, **meat**, **fish**, **liver**, **lentils**, **nuts**, and **dairy products**.





Water

Just how important is water for us?
Can we live without it?

- We can live without other nutrients for days but not without water.
- It is the only nutrient that does not provide energy!
- All other nutrients can do their job only when they are dissolved in water.
- Water is part of all the liquids in our body like blood, sweat, and urine.
- It is also needed for vitamins B and C to be used by the body.



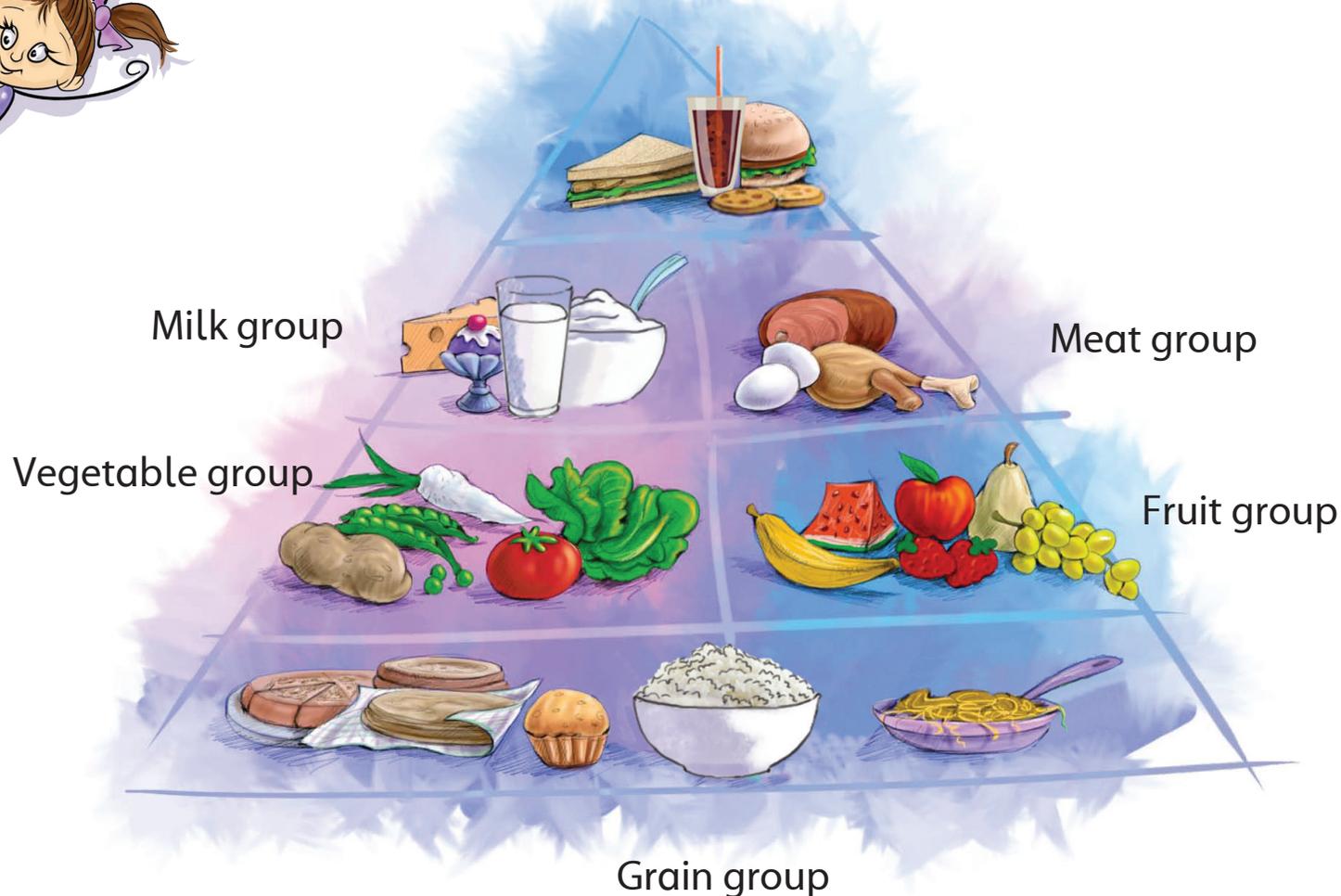
Remember
to drink 6 to
8 glasses of
clean water
every day!

The food pyramid

This is a food pyramid. It tells us what foods to eat and in what amounts in order for us to stay healthy.

There are five food groups which are the building blocks of the food pyramid.

Snacks are at the top of the food pyramid, which means that we should have them in small amounts.



Food group	Present in	Main functions
Grains	roti, bread, rice, pasta	provide energy
Vegetables	all vegetables	help organs to work properly, provide fibre to the body
Fruit	all fruit	protect us from diseases
Meat (proteins)	beef, chicken, fish, eggs	growth, development, energy
Milk	milk, cheese, yogurt, etc.	tissue repair, growth, energy
Other	sweets, junk food, fats	give us energy for some time but store in our body as fat (to be avoided)

A balanced diet

A balanced diet is one which includes foods from all food groups. It has all the important nutrients in the amounts needed by the body.

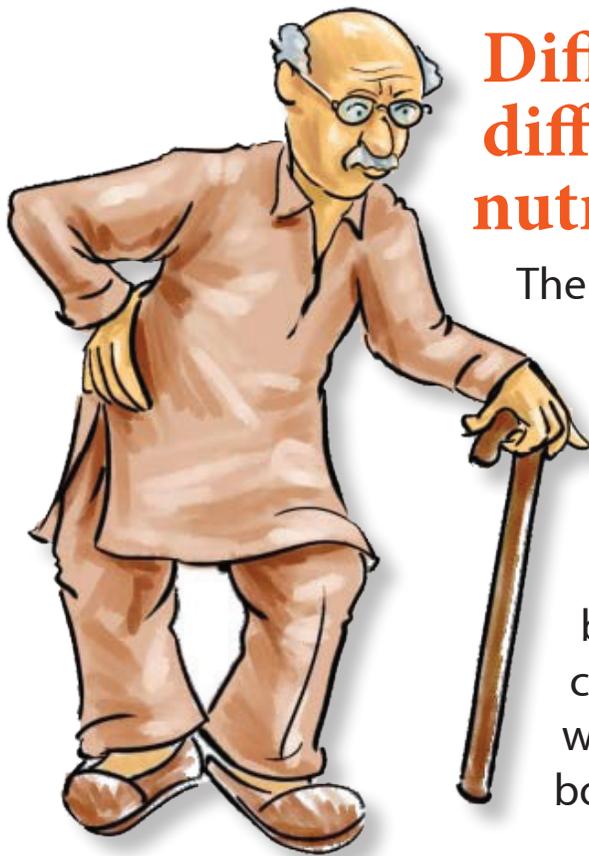
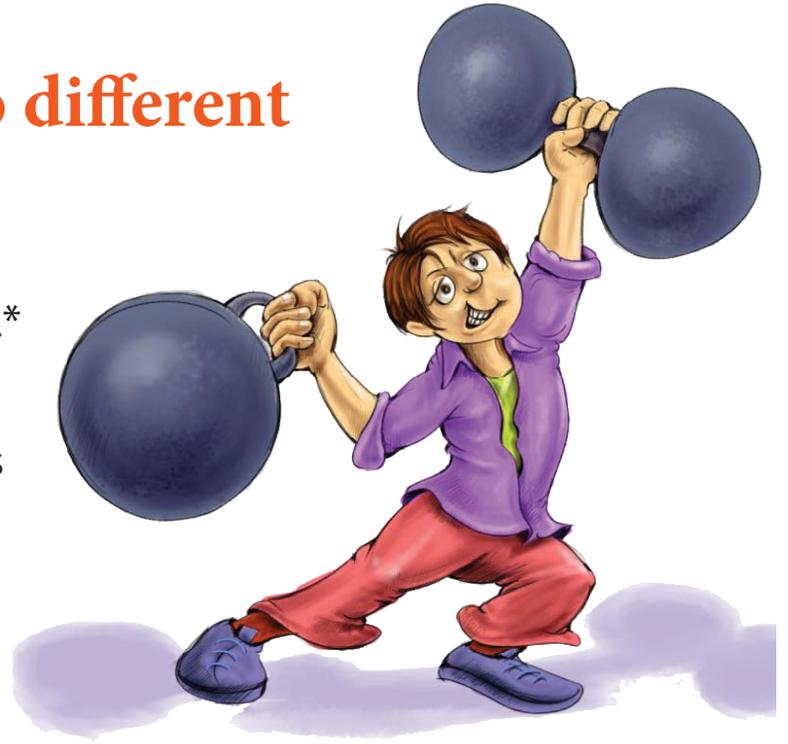


How much energy do different foods contain?

We measure energy in calories.

- 1 gram of pure protein has 4 kcal*
- 1 gram of pure fat has 9 kcal
- 1 gram of pure carbohydrate has 4 kcal

*kcal=kilocalories



Different people need different amounts of nutrients.

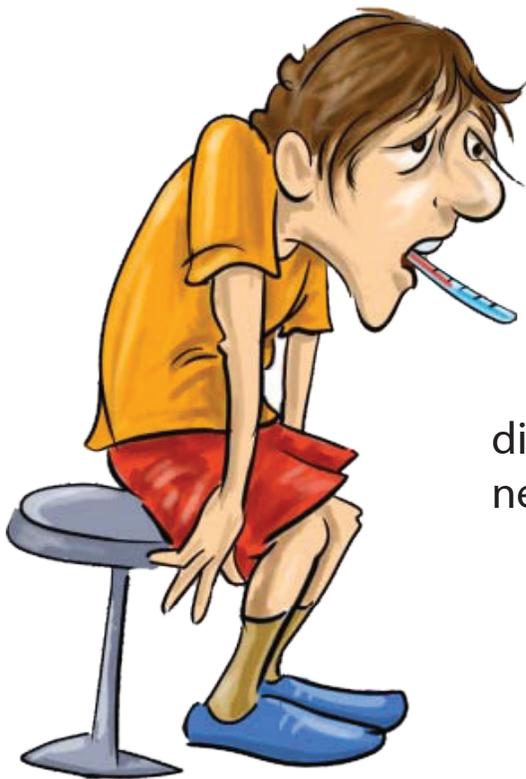
The amount of nutrients a person needs depends on the following things.

Age: The amount of food an older person needs is different from the amount a child needs. Growing children need milk to grow strong teeth and bones, proteins to build muscles, and carbohydrates for energy. Older people will need these in smaller amounts as their body only needs to maintain itself.

Gender: A male needs more calories than a female because of the way their body is made up.

Activity level: People who lead active lives need more calories, and nutrients in larger amounts, than those who spend more time sitting.

Climate: The diet of people living in hot climates is different from that of people living in cool climates.

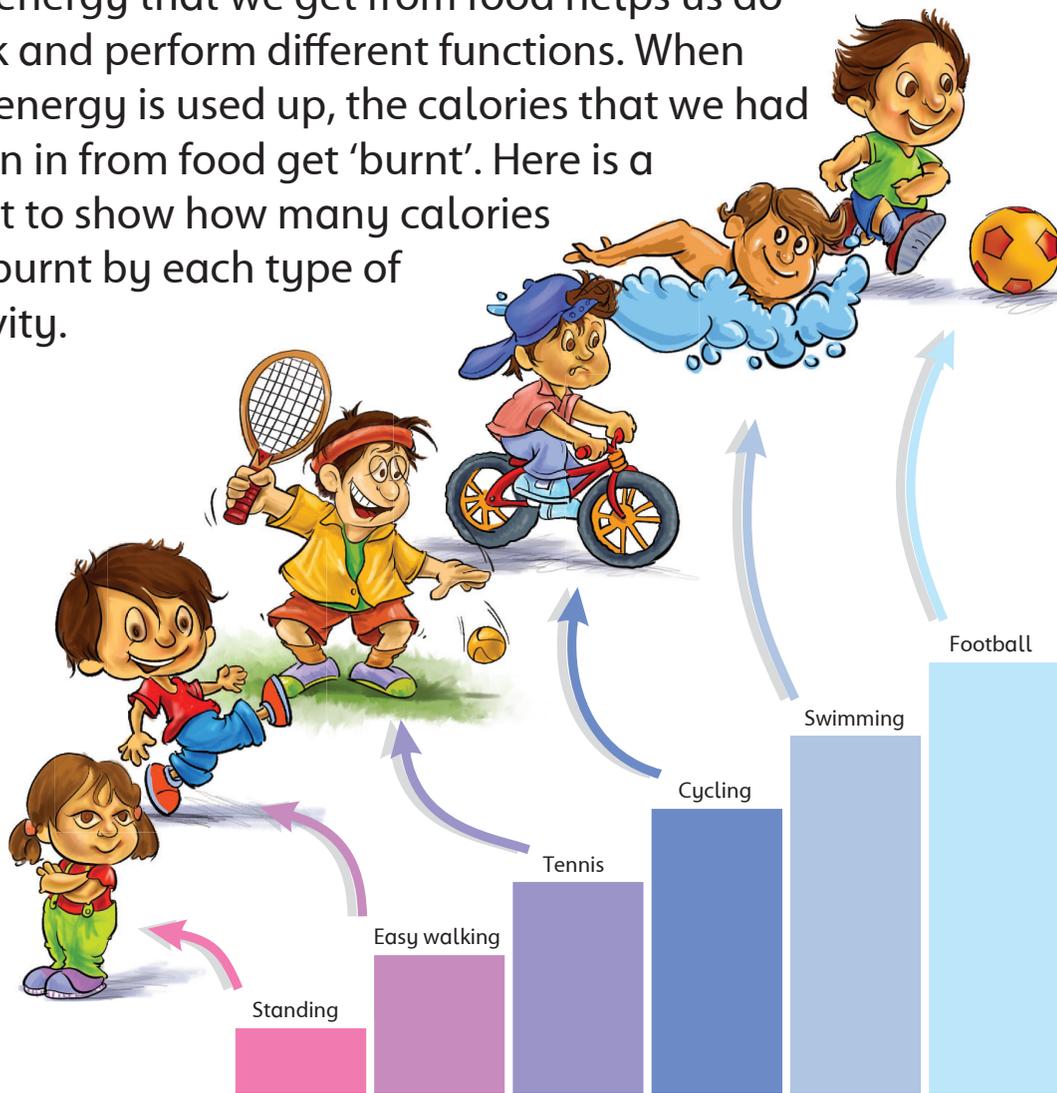


Health: The nutrients one needs during illness are different from those one would need when healthy.



Calories burnt by different activities

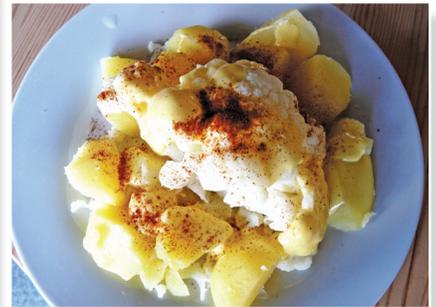
The energy that we get from food helps us do work and perform different functions. When this energy is used up, the calories that we had taken in from food get 'burnt'. Here is a chart to show how many calories are burnt by each type of activity.



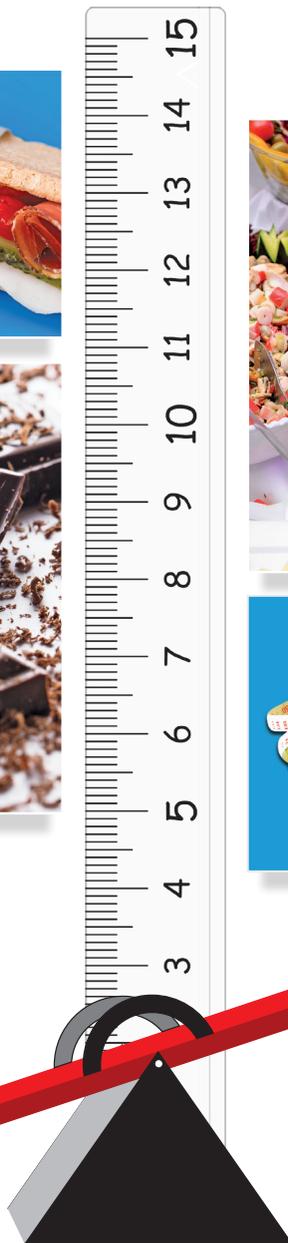
Activity	Energy spent/hour	Activity	Energy spent/hour
Standing	14 kcal	Cycling	329 kcal
Easy walking	60 kcal	Swimming	357 kcal
Tennis	238 kcal	Football	476 kcal

How much energy does a person need?

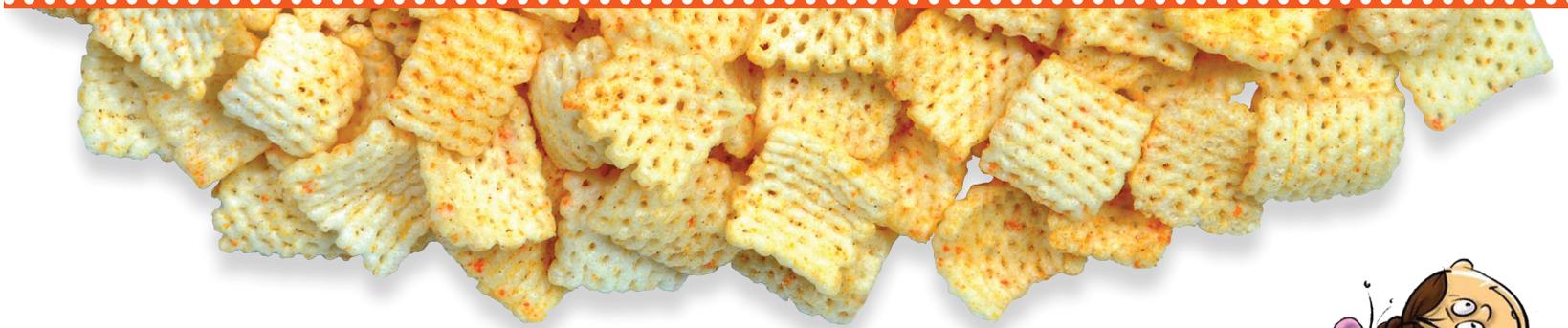
The energy each person gets through food has to meet their energy requirements. When the energy intake is less than the energy used up during activities, the person loses weight. When the energy intake is more than the energy used up, the person gains weight.



Gain weight

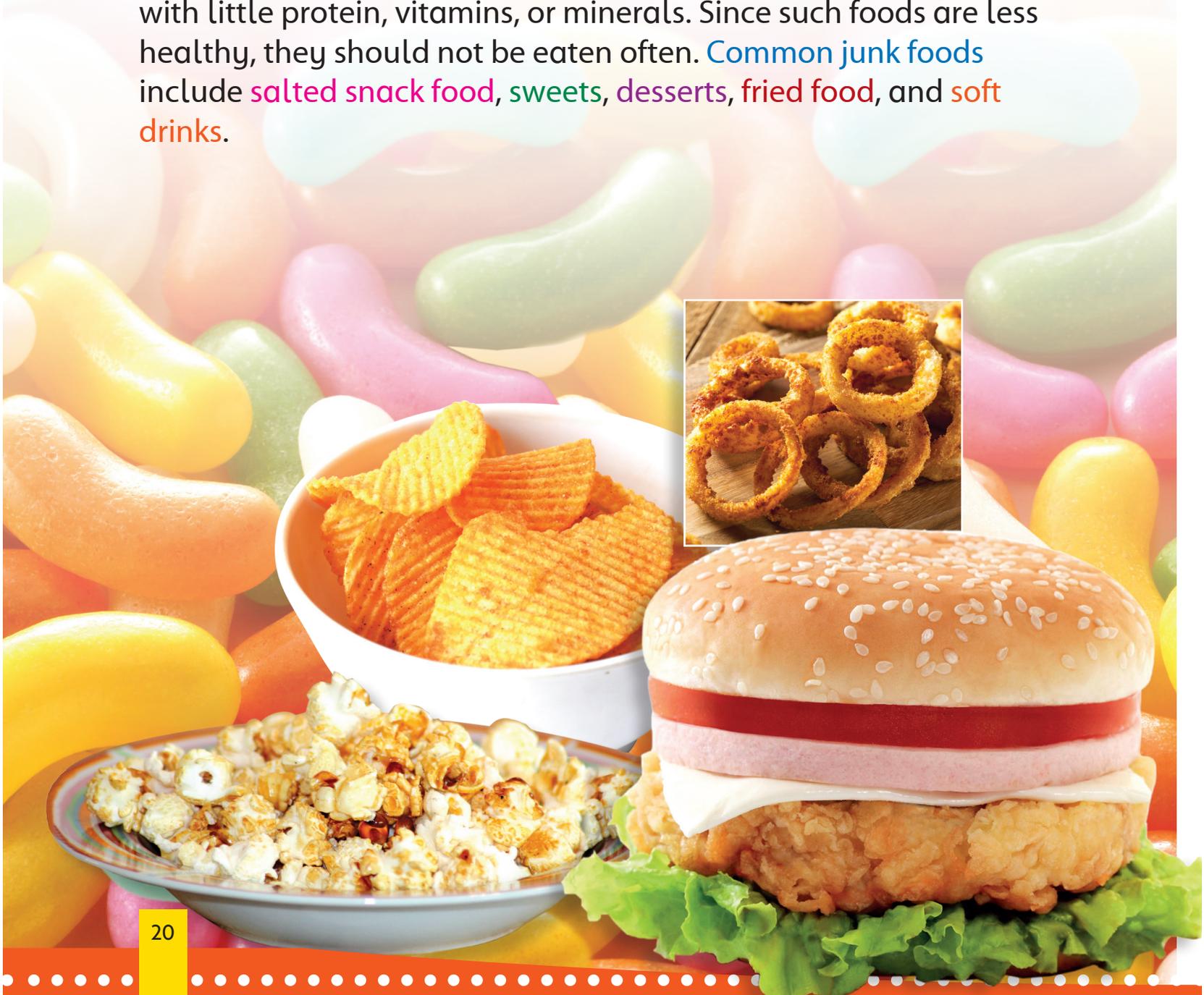


Lose weight



Junk food

Junk food is food that does not give much nutrition. People just like to eat it for the flavour. It is high in fat, sugar, and calories with little protein, vitamins, or minerals. Since such foods are less healthy, they should not be eaten often. **Common junk foods** include **salted snack food**, **sweets**, **desserts**, **fried food**, and **soft drinks**.



What is malnutrition?

Malnutrition is the opposite of nutrition. This happens when the body does not get the right amount of nutrients to carry on bodily functions.

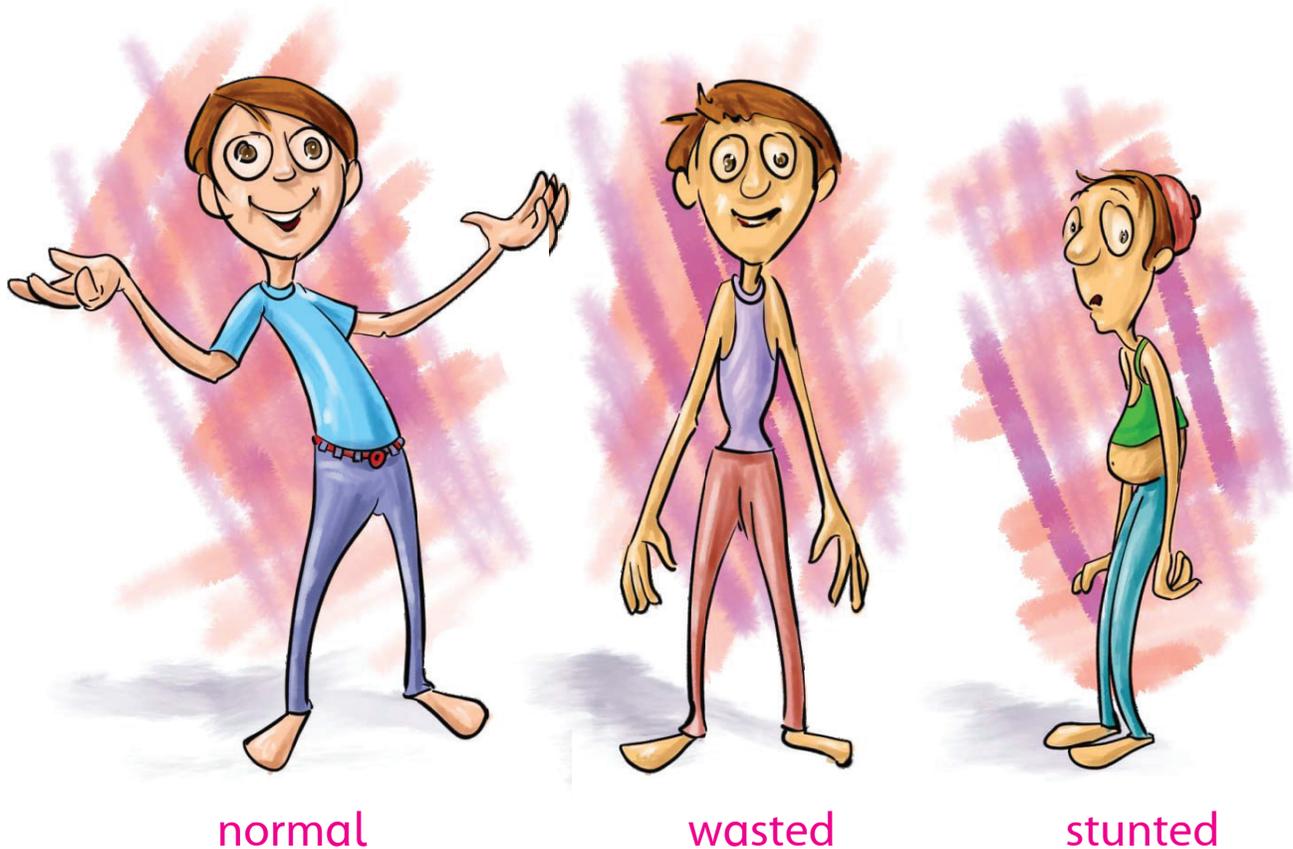
Malnutrition shows its effects slowly. It begins with changes in nutrient levels in the blood and tissues. The different bodily functions fail to take place due to the absence of nutrients. Slowly the body moves towards illness, and even death.



Malnutrition is of two types:

Undernutrition

This happens when the body gets too few of the most important nutrients. Remember, infants, young children, and teenagers need extra nutrients. Nutrients may be lost through diarrhoea, too much sweating, loss of too much blood, or kidney failure.



Undernutrition can result in **stunting** and **wasting**. **Stunting** stops growth in a child. Such a child remains short for his/her age. **Wasting** is also a growth failure. In wasting, the weight of a child is less than normal for their height.

Overnutrition

Overnutrition takes place when a child eats too much of the wrong food, and does not get enough exercise. Overnutrition often leads to obesity.



Obesity

Obesity is a condition in which the body collects too much fat. This can create many health problems. It is so harmful that it can lead to disease and can shorten the lifespan of a person.





What causes obesity?

The main cause of obesity is eating the wrong types of food often and in large quantities. Add to it the lack of physical activity and the situation becomes worse. This means that the extra calories one takes in are not burned but are stored up as fat in the body.



Effects on health

Obesity can be the cause of many health problems like heart disease, diabetes, asthma, and even certain types of cancers.





Treatment

Treatment of obesity requires a change in lifestyle. The condition has to be reversed. All fattening foods, those high in fat and sugar, have to be cut down. Most importantly, exercise should become a habit. Foods with high fibre content, like **fruit** and **vegetables** should form the major part of one's diet.





Physical fitness

To be physically active, we need to do things that keep our body parts moving. If all the muscles of the body are used regularly, we will be healthy and fit. If we are active and follow a healthy eating plan, we will sleep better, feel better, work well, and maintain a healthy body weight. We will also reduce the risk of developing conditions like diabetes, obesity, and heart disease.



Food safety

Food safety is a very important factor in maintaining health. The food we eat has to be clean, fresh, and safe. It should be prepared with a lot of care. When we buy prepared food items from the market (packaged or freshly cooked), we must make sure that care was taken during their production and processing.



Here are some things you should know.

- The kitchen has to be a very clean place, free of dust and grime.
- Hands should be washed before preparing food.
- Cutting boards, knives, utensils, and counter tops should always be kept clean and be washed in hot soapy water after food has been prepared.

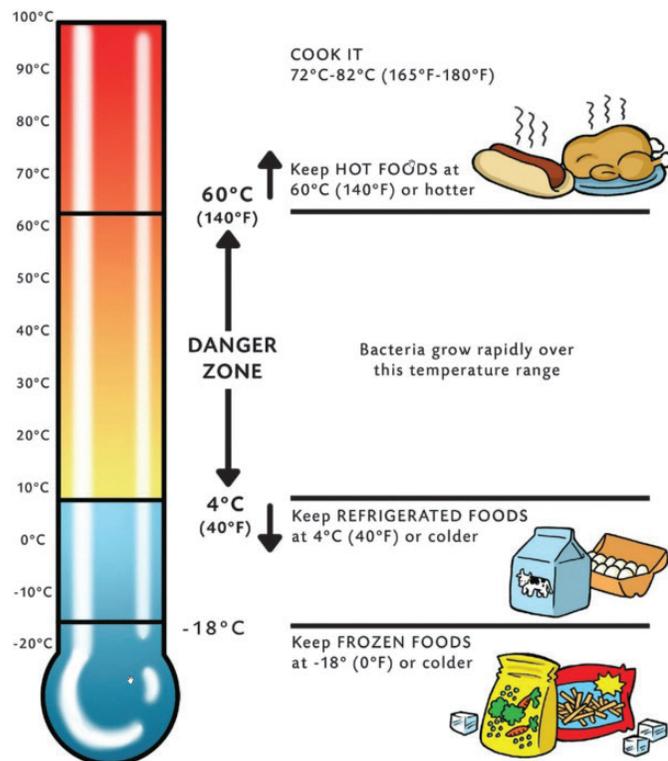




- Food should be cooked thoroughly, especially meat, poultry, eggs, and seafood. This will kill all the bacteria.
- In hot weather, food that can go bad should be put in the fridge after 1–2 hours of cooking.
- Bacteria multiply rapidly between 4.4°C and 60°C. Therefore, the temperature of the fridge should be set at 4.4°C and of the freezer at -18°C.
- Food can go bad after being in the fridge for 3 to 4 days.



- Kitchen surfaces should be cleaned with a clean cloth or paper towel.

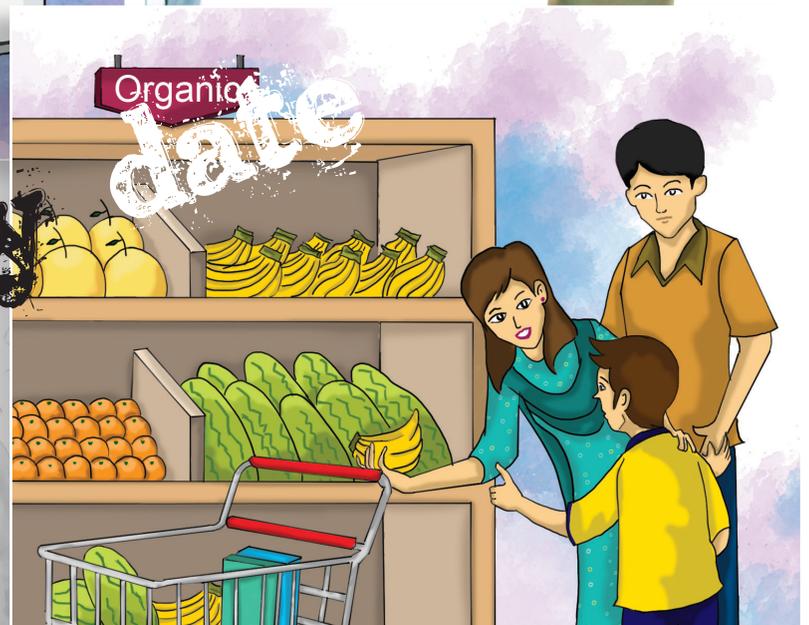


Use safe water and raw materials.

- Always drink water that is safe. Do not drink tap water.
- Choose food processed for safety.
- Do not use food after the expiry date has passed.
- Always select fresh fruit and vegetables.



expiry



Health is wealth

Remember: Health is wealth. A clean kid is a healthy kid!



There are some things that you can do to remain healthy.



Wash hands

Hands must be washed:

- before and after eating meals
- after using the toilet
- after sneezing, coughing, or blowing the nose
- after handling pets
- after touching cuts and wounds



STOP!

THINK!

WASH HANDS!



Brush your teeth

Children must brush their teeth twice a day:

- before breakfast
- before going to bed

During the day after having a meal or snacks, fill your mouth with water and swish it around to get rid of anything sticking to the teeth.





Take a bath

School-going children should take a bath or shower daily. It is even better to shower twice a day in the humid summer season.



School uniform

If you have to wear the same uniform the next day then take it off as soon as you get home and hang it up to air before you wear it again.



Clean shoes

Keep your shoes clean by brushing, polishing, or washing them. Expose them to the Sun from inside, once a week for several hours.



NUTRITION Education for Kids

Nutrition Education for Kids aims to create awareness among schoolchildren about Food and Nutrition and their effects on health.

In this book children will find out about the importance of various food groups and the role each plays in maintaining good health. The significance of healthy lifestyle choices has also been highlighted.



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