



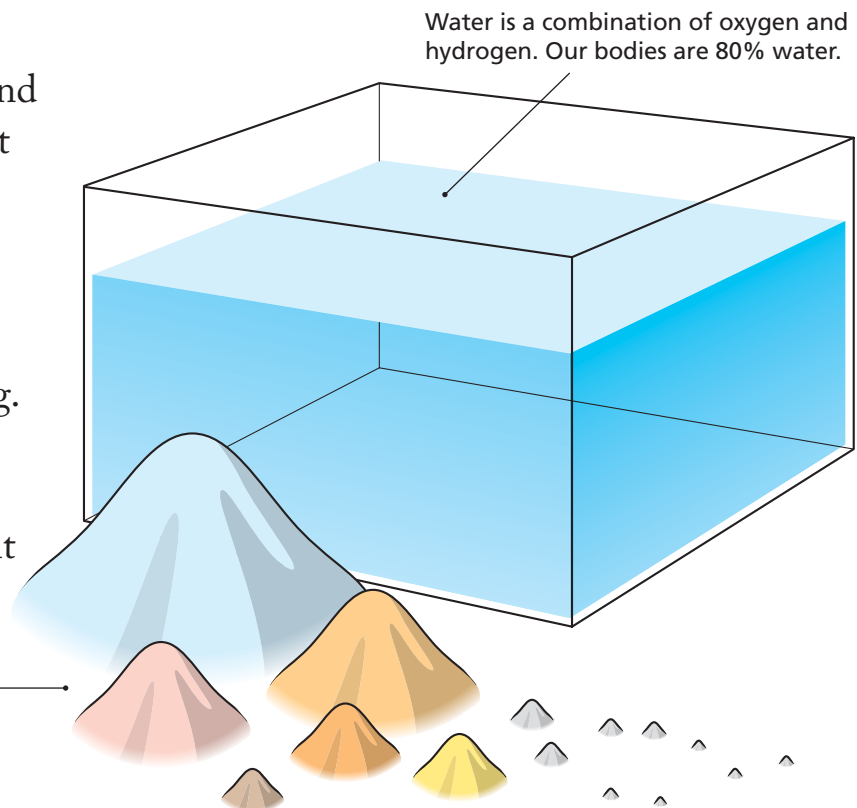
Food and drink

Food and drink are essential if we are to stay alive.

Being healthy means being active and able to do all of the things you want to do. It means being able to resist disease and injury and expecting a long life.

Food and drink provide the **ENERGY** and nourishment for living. Each food contains its own unique combination of nourishment and energy. So healthy food is important for keeping a healthy body.

Other elements combine to make the rest of our body tissues and fluids.



Food variety

There are many kinds of food and drink, but every one is made of some, or all, of five groups of nutrients (Picture 1). They are called **CARBOHYDRATES** (sugar and **STARCH**), **FATS**, **PROTEINS**, **VITAMINS** and **MINERALS**.

Carbohydrates and fats give energy. Proteins are used to build new cells and repair old ones. Vitamins and minerals help build parts of the body like hair, teeth and bones, and keep us healthy. Because each type of food does a different job, the body needs food containing each group – you cannot just eat one type of food or do without water and stay healthy (Picture 2).

▲ (Picture 1) Why you need to eat a variety of foods. Your body is the world's most complicated chemistry set. It contains these chemicals by percentage weight, along with 20 more chemicals in smaller amounts:

Oxygen	65
Carbon	18
Hydrogen	10
Nitrogen	3
Calcium	2
Phosphorus	1.1
Sulphur	0.25
Potassium	0.20
Sodium	0.15
Chlorine	0.15
Magnesium	0.05
Iron	0.004
Copper	0.00015
Manganese	0.00013
Iodine	0.00004

All of these chemicals come from the food we eat. No one food contains all of these chemicals. We must eat a range of foods to make sure we get all of the chemicals we need. Most of these chemicals can be combined into one of five groups. We call the groups carbohydrates, fats, proteins, vitamins and minerals.

Sugars and starches

Natural sugars dissolve easily in water and are quickly used by the body. They are found in the largest amounts in fruit. The kind of sugar we use to sweeten food is not a natural sugar.

Starches provide energy to the body much more slowly. Starches are found in plant seeds, such as wheat, rice and maize, and in tubers such as potatoes.

Fat

The most concentrated form of energy is fat, a substance that makes up a large

proportion of butter, cheese, milk and some kinds of meat and fish.

Fats are used as a reserve of energy. The body stores fat for use later. Most fat is stored just under the skin, where it also helps to slow down heat loss.

Proteins

Proteins are used in making and repairing the body. The main foods which contain proteins are meat, fish, eggs, milk, peas, beans and cereals.

Vitamins and minerals

Your body needs small amounts of many other substances, grouped together as vitamins and minerals. Vitamins serve many vital purposes, including helping to break down our food and fighting disease. Minerals include calcium for building bones and teeth (Picture 3), sodium and potassium, which are used in every part of your body.

▼ (Picture 2) Our bodies are mostly water, so water is an important part of our diet.

Water on its own is good for us, but it also contains many invisible minerals and other chemicals that are good for our bodies too.



► (Picture 3) Some drinks, like milk, have high concentrations of minerals, fat and sugar and are as much food as drink.

Milk contains many useful minerals such as calcium. It also has lots of vitamin D.



Summary

- The body needs food and drink for energy and to build up and repair the body.
- No single food contains all the things we need.
- The body needs water in addition to food.