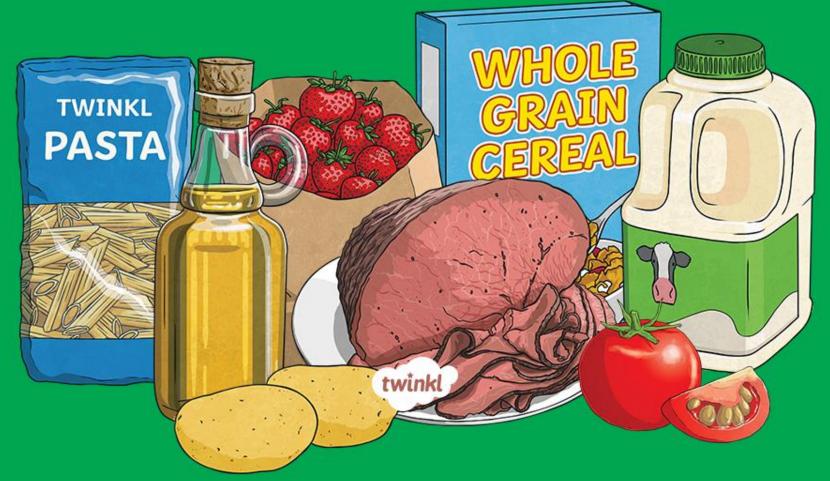
Types of Nutrition





Aim

- I can explain how living things obtain food.
- I can state why animals, including humans, need the right type of nutrients.

Success Criteria

- I can explain how plants obtain food.
- I can explain how animals, including humans, obtain food.
- I can demonstrate I understand the difference between how plants and animals obtain food.
- I can explain the difference between food groups and types of nutrients.
- I can explain what types of nutrients humans need.

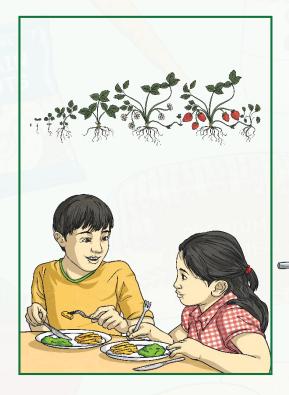
Living Things and Food

Why do living things need food?

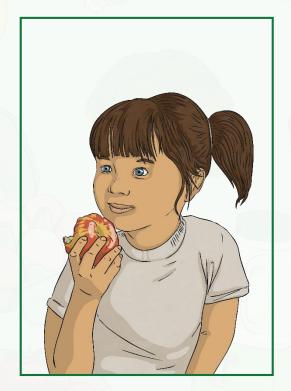
To grow

To be strong

To be healthy







Photosynthesis



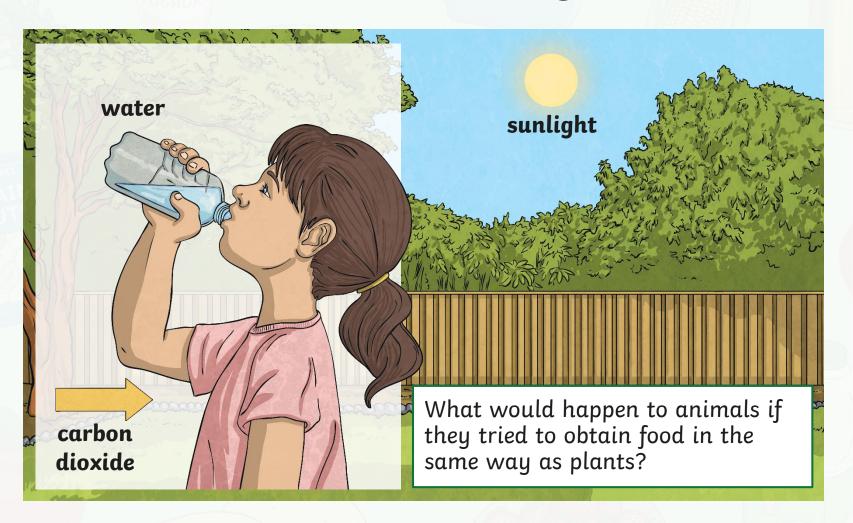


How do plants obtain food?

Plants make their own food! This process is called **photosynthesis**.

They use water, sunlight and carbon dioxide (a gas in the air) to produce food in their leaves.

Animals and Photosynthesis



Human Food

What kind of foods do humans need?



Food is commonly divided into five food groups.

How many of the food groups can you remember?

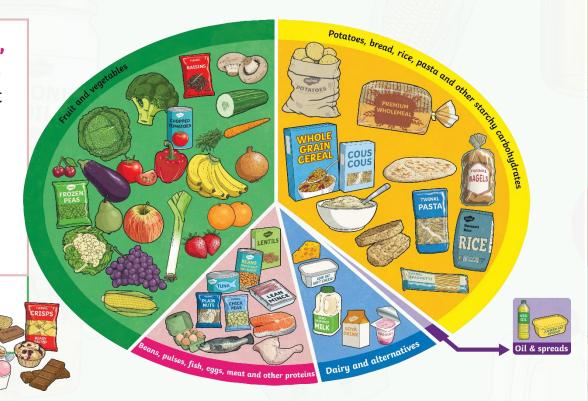
Human Food

What kind of foods do humans need?

Beans, pulses, fish, eggs, meat and other proteins

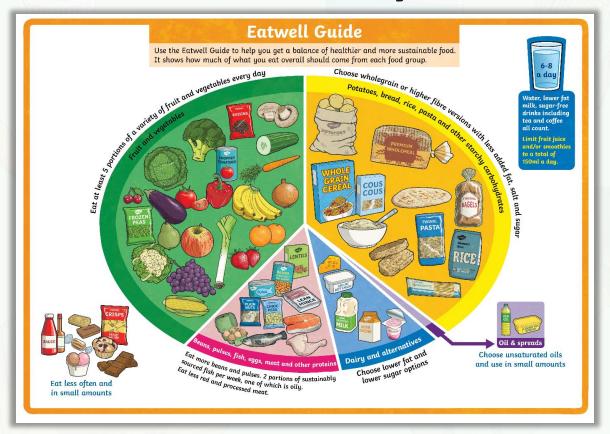
These are very important for helping us grow and build muscles. Try to eat 2 portions of fish a week and try to reduce intake of red and processed meat.

and/or smoothies to 150ml a day.



Why do you think foods that are high in sugar and/or fat are not a food group?

Food Groups

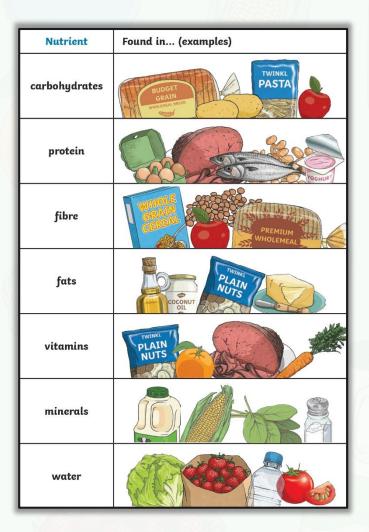


Notice that drinking plenty of water is also very important to keep us healthy.

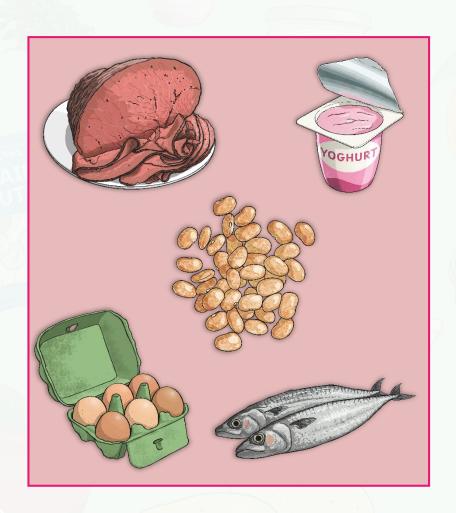
Types of Nutrients

Nutrients are substances that animals need to stay alive and stay healthy. These nutrients are found in the foods we eat.

There are seven nutrients.



Types of Nutrients - Proteins

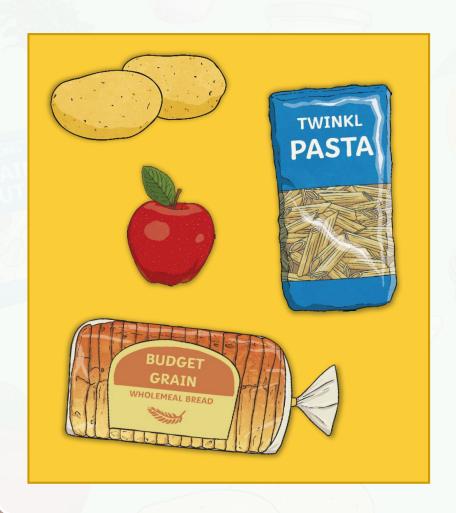


Proteins help your body to grow and repair itself.

Foods high in protein include:

Red Meat Fish Beans Yoghurt

Types of Nutrients - Carbohydrates

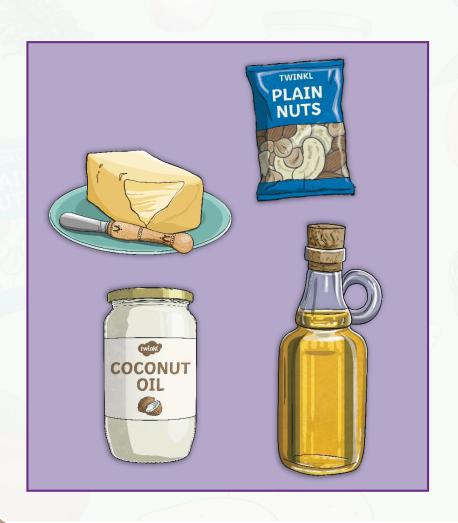


Carbohydrates give you energy.

Foods high in carbohydrates include:

Bread Pasta Fruit Potatoes

Types of Nutrients - Fats

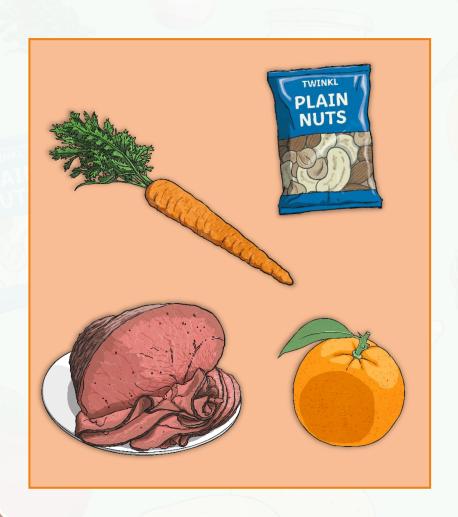


Fats give you energy.

Foods high in fats include:

Nuts Oils Avocados Butter

Types of Nutrients - Vitamins

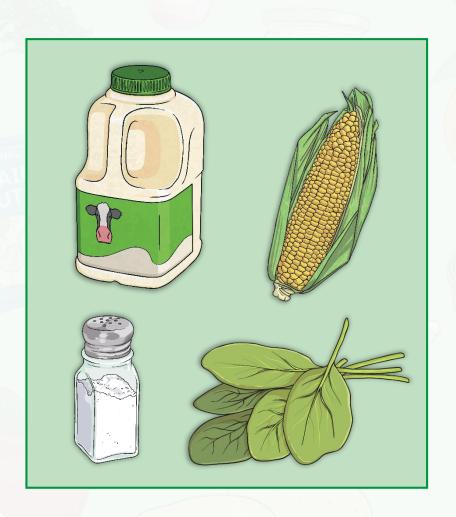


Vitamins keep your body healthy.

Foods high in vitamins include:

Oranges Carrots Beef Nuts

Types of Nutrients - Minerals



Minerals keep your body healthy.

Foods high in minerals include:

Milk Spinach Salt Sweetcorn

Types of Nutrients - Water



Water helps to move nutrients in your body and get rid of waste that you don't need. It is an essential nutrient for our survival. While it is really important to drink plenty of water, it is also important to remember that many foods contain water also.

Foods high in water include:

Tomatoes
Cucumbers
Lettuce
Strawberries

Types of Nutrients - Fibre



Fibre helps you to digest the food that you have eaten.

Foods high in fibre include:

Cereal Apples Wholegrain bread Lentils

Food Groups and Nutrients

Within each food group, there are many foods which contain more than one type of nutrient.

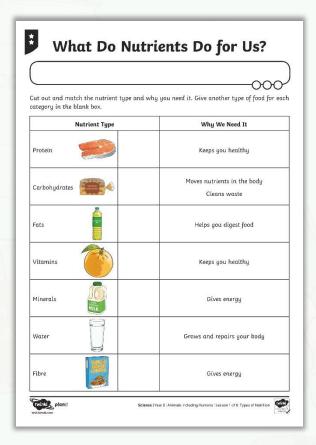
For example, eating broccoli from the fruit and vegetables section would provide with various different nutrients. This food is a great source of minerals (especially a mineral called potassium), a really good source of vitamins and it provides the body with fibre.



What do Nutrients do For us?



Have a go at your Activity sheet.



Although the Eatwell Guide provides human beings with guidance to know how much of different kinds of foods to eat, the guide does not apply to other animals.

Some animals need to eat more of certain nutrients than others. There are special terms for animals that eat particular types of foods.

Carnivores: These animals feed on other animals.

Herbivores: These animals only eat plants.

Omnivores: These animals eat both meat and plants.

Carnivores	Herbivores	Omnivores



Carnivores eat lots of meat so they get lots of their energy from protein rather than from carbohydrates. Their bodies are designed for this.

A carnivore's diet is mostly made up of protein but meat also provides vitamins, minerals and fats.

Although carnivores have a diet which is high in protein, not all carnivores require the same balance of nutrients.



Herbivores get their energy from eating plants. As plants are often not high in carbohydrates, protein and fats, herbivores have to eat large amounts of plant-based foods to get the energy they need. Some herbivores spend a lot of their day eating.

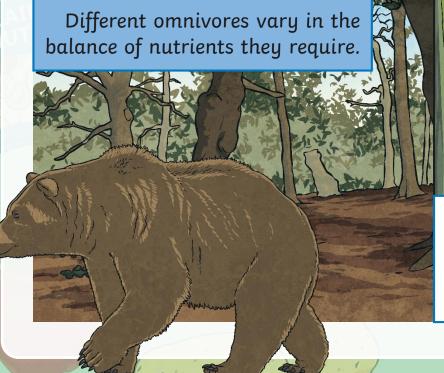
While some herbivores eat a wide variety of plants, others will only eat a limited number of types, meaning that they consume a smaller range of vitamins and minerals.

Elephants eat a wide variety of plant foods such as branches, fruit, grasses and leaves.

Koalas, on the other hand, only eat eucalyptus tree leaves. These leaves do not provide high levels of energy for these animals but as koalas sleep for twenty hours a day, they need less energy than other animals.

Omnivores get their nutrients from both meat and plants. Omnivores can therefore be more flexible in what they eat, often only eating what is available to them.

For example, a brown bear will eat fish when it can catch them in a river, but it will also pick berries to eat if they are available.

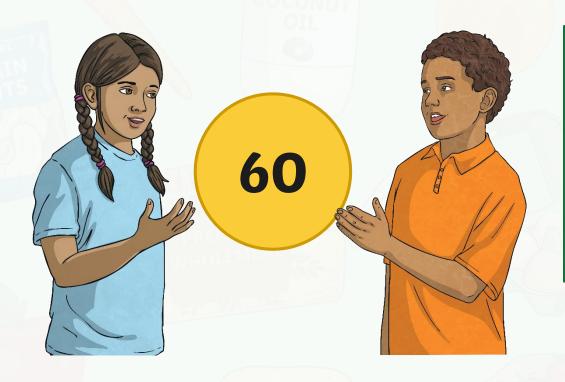


Even pandas, who are famous for eating bamboo for most of their day, occasionally eat rats or birds they catch or find.

Share What You Know



Can you talk for one minute about the things you have learnt about nutrition for humans and animals?



Words to help you...

food groups
five
nutrients
seven
energy
healthy
carnivore