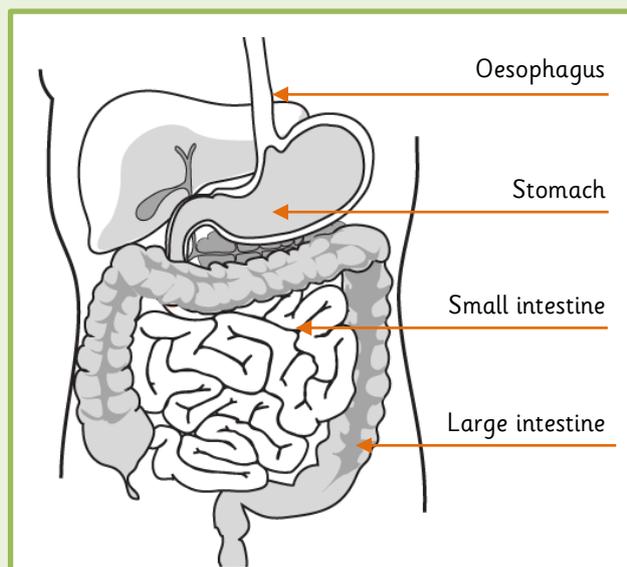


What happens when we eat?

Here is what happens to food when we eat:

1. Food enters the mouth. Our teeth crush the food while our tongue delivers taste information to our brain. Food is mixed with saliva, chewed and swallowed.
2. The bolus (a ball-shaped portion of food) travels down the throat and into the oesophagus. This is the tube connected to the stomach.
3. The oesophagus, which is flexible and muscular, relaxes and contracts in a ripple. This causes food to travel down towards the stomach.
4. Food arrives at the stomach, a muscular sack which can expand and contract. The stomach, along with its powerful acids, breaks the food down into a paste allowing easier digestion.
5. Food leaves the stomach for the small intestine. The food is broken down even further and other organs in the body help out too.



The pancreas and the liver secrete enzymes (chemicals) which digest this food paste. Blood vessels which line the small intestine carry energy (sugars) from the food you have eaten to the rest of your body.

6. Finally, the left over material enters the large intestine. This is a two metre long tract where water from the food is absorbed. Slowly, the watery paste solidifies. All of these waste materials enter the bladder as water and the bowel as solid waste. When the bowel or bladder are full, the person feels like they need to excrete and must go to the toilet to get rid of the waste food and water that their body can not absorb.

Part two: these questions are about 'What happens when we eat?'

1. Here are the six stages of digestion. Use the text to number them 1 to 6 so that they are in the right order:
 - The oesophagus ripples, moving the food towards the stomach.
 - Food travels down the throat and oesophagus.
 - While in the large intestine, the food is separated into liquid and solid waste.
 - Acids mix with the food in the stomach to break it down.
 - You chew some food in your mouth, making a bolus.
 - In the small intestine, the pancreas and liver add chemicals to help digestion.

2. Why has the author included a scientific diagram?

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3. Why is each part of the digestion process given a number?

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4. The author uses brackets several times in this piece of text. Why does the author use brackets when they write: ‘The bolus (a ball-shaped portion of food) travels down the throat...’?

Pick one reason:

- It is a complex sentence and makes the writing formal.
- To give extra information.
- To help the reader understand what the word ‘bolus’ means.
- To give more details and keep the reader interested.

5. Write **one** word that tells us the meaning of the word ‘enzyme’.

.....

Fuelling the body

Your body is a complicated, delicate piece of machinery. Many of the organs in the human body work together to take energy from food to keep you going all day. In some ways, this is just like putting fuel in a car. However, if you did put the wrong fuel in a car, the engine would soon start to splutter and things would go wrong. Your body is just like this – it needs the right fuel. Because of this, you need to think carefully about what you eat.



A balancing act

No-one is saying that you cannot have treats like sweets and crisps. Your diet (which is a way of saying everything you eat) needs to be varied, interesting and enjoyable. Many people plan their meals so that they include a variety of vegetables, protein, fruits and grains. Some people must be extra careful about what they eat. A vegetarian (someone who chooses not to eat meat) may have to find ways to replace meat with another source of protein. All of us need a balanced diet to help keep us healthy, we need the right fuel to keep us going throughout the day, just like a car.

The long food road

The human digestive system is complex, takes a long time to do its work, and involves many different parts of the body. From putting something in your mouth to the moment when 'nature calls', these are the start and end of one of the most amazing and complex processes in nature, and it all happens inside of us all the time, every single day.

All living things eat and all living things excrete. You only get one body, so it is important to take some control over what happens to it, fuel it up properly, exercise it, and try to lead a balanced and healthy life.

Part three – these questions are about 'Fuelling the body'.

1. Why do humans need food?

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2. Why does the author talk about putting fuel in a car when he is talking about humans eating?

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3. Describe one way in which vegetarians have to plan what they eat.

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4. Why did the author write 'nature calls' with quote marks?

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5. Look back at all three texts you have read. Why does the author think that the process of digestion is amazing? Give a reason and an example from the text to support your answer.

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Answers

The Human Dustbin

1. It helps to show what types of food a healthy plateful can be made from.
2. Eaten too much of something
3. To warn you about eating healthily and respecting your body.
4. Treating your body with respect.
Having a healthy diet.

What happens when we eat?

1. Here are the six stages of digestion:
 - 3 The oesophagus ripples, moving the food towards the stomach.
 - 2 Food travels down the throat and oesophagus.
 - 6 While in the large intestine, the food is separated into liquid and solid waste.
 - 4 Acids mix with the food in the stomach to break it down.
 - 1 You chew some food in your mouth, making a bolus.
 - 5 In the small intestine, the pancreas and liver add chemicals to help digestion.
2. To help the reader to visualise and understand the process of digestion better.
3. To break it down into more easily understandable steps.
4. To help the reader understand what the word 'bolus' means.
5. Chemical

Fuelling the body

1. Humans need food to give them energy.
2. Cars need the right kind of fuel to work well and so do humans to help keep them healthy.
3. Vegetarians do not eat meat so they must find alternative sources of protein.
4. It is a more polite way of saying 'go to the toilet'.
5. There are several possible answers – below is one example.
The author thinks the process of digestion is amazing because it is happening all of the time without us even realising! This is shown in the following sentence:
'From putting something in your mouth to the moment when 'nature calls', these are the start and end of one of the most amazing and complex processes in nature, and it all happens inside of us all the time, every single day'.