

Your Digestive System

Have you ever wondered what happens to your food after you've chewed it in your mouth?

Your body is amazing and has a system that sorts and uses the food you eat to make sure your body has everything it needs to work properly. This is called your digestive system. Here's how it works...

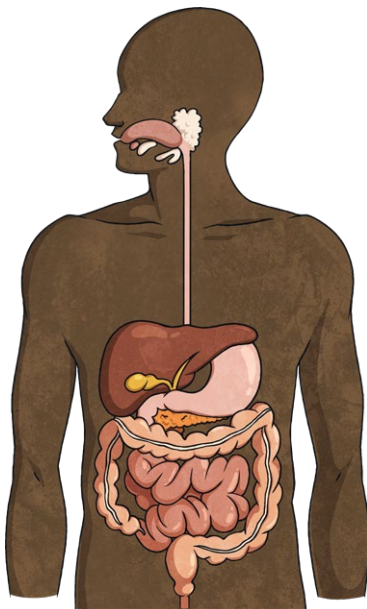
Before the Stomach

First of all, we all know that you put food in your mouth to eat it. You enjoy the taste and the feel of the food in your mouth while your teeth break it down into smaller pieces. Saliva is the juice in your mouth that is mixed with your food to help make it softer.

When food is small and soft enough to be swallowed, it goes down a big tube to your stomach via a tube called the oesophagus (say: 'a-soff-a-guss'). Muscles in the oesophagus take turns to push the food to your stomach. These muscles are so good at this job that they could even get the food to your stomach if you were standing on your head! (Don't try this though!)

Did You Know...?

If you accidentally swallow food down your windpipe, you cough to push it back up.



Fact File

- An adult eats about 500kg of food per year.
- Your body can produce up to 1.5 litres of saliva every day.
- An adult oesophagus is about 25cm long.
- A camera has been invented now that is as small as a pill (called Pillcam). It can be swallowed so it passes through your oesophagus in order to take photos of the inside of your body. It can take up to 55,000 pictures over the 8 hours that it's in there! It's been used since 2001 to let doctors see inside patients.

At the Stomach

When the chewed-up food arrives in the stomach, it is mixed with acid as well as special chemicals called enzymes that further break down the food into something that looks a bit like porridge – this substance is called 'chyme'.

After the Stomach

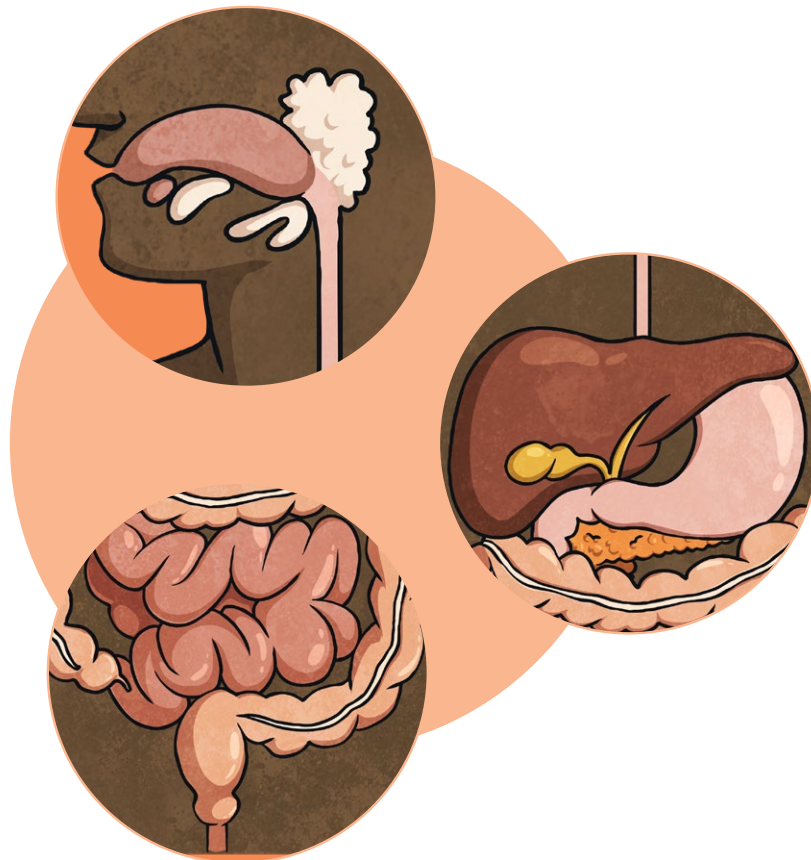
The next part of the journey for your food (which doesn't look like food anymore) is through the small intestine. In the small intestine, all the goodness is taken out of the food so it can go off to different places in the body to keep you healthy.

When the small intestine has done its job of getting all the goodness out of the food, all the material that is unwanted goes into the large intestine. Some foods create a smelly gas in your large intestine, which you get rid of by farting! Finally, the unwanted material makes its way out of the body as poo at the end of the large intestine.

So, there you have it. Isn't your body clever?

Did You Know...?

Your food travels through 9 metres of tubes in total!



Questions

1. Why do you think it is important to chew food before it goes down the oesophagus?

2. What mixes with the food in your mouth?

3. Fill in the missing words?

When food is small and soft enough to be _____, it goes down a big tube to your stomach via a tube called the _____.

4. What does 'chyme' look like.

5. How much food does the average adult eat in a year? Tick one.

- 5kg
 50kg
 500kg
 5000kg

6. Number these organs in the order they are used during digestion.

The first one has been done for you.

- large intestine
 1 mouth
 small intestine
 stomach
 oesophagus

7. Why has the author written '(say: a-soff-a-guss)' in the **Before the Stomach** section?

8. At the end the author says: 'Isn't your body clever?' Do you agree? Why or why not?

Answers

1. Why do you think it is important to chew food before it goes down the oesophagus?
Pupils' own responses, such as: It is important to chew food before it goes down the oesophagus so that it becomes smaller and softer to get through the tube into the stomach. If it were too big or rough, it may get stuck or hurt you.

2. What mixes with the food in your mouth?
Saliva

3. Fill in the missing words?

When food is small and soft enough to be **swallowed**, it goes down a big tube to your stomach via a tube called the **oesophagus**.

4. What does 'chyme' look like.
porridge

5. How much food does the average adult eat in a year? Tick one.

- 5kg
 50kg
 500kg
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6. Number these organs in the order they are used during digestion.
The first one has been done for you.

- large intestine
 mouth
 small intestine
 stomach
 oesophagus

7. Why has the author written '(say: a-soff-a-guss)' in the **Before the Stomach** section?
Pupils' own responses, such as: To tell you how to say the word. The word oesophagus is a tricky word and is not written how it is said.
8. At the end the author says: 'Isn't your body clever?' Do you agree? Why or why not?
Pupils' own responses, such as: I think the body is really clever because there are lots of processes that go into digesting food which is something we do every day. The body also makes sure we have all the different parts of food we need to keep us healthy and disposes of the waste.

Your Digestive System

Have you ever wondered what happens to your food after you've chewed it in your mouth?

Your body has an amazing system called the digestive system. It is a long tube that runs from your mouth, where the food goes in, to your anus (bottom) where the waste comes out. In between that, your digestive system sorts and uses the food you eat to make sure your body has everything it needs to stay healthy. Like a food blender, which uses sharp blades to cut food into tiny pieces, your teeth, tongue and stomach do the same thing to the food you eat, so that it is easier to digest. Read on to find out exactly how your digestive system works...

Before the Stomach

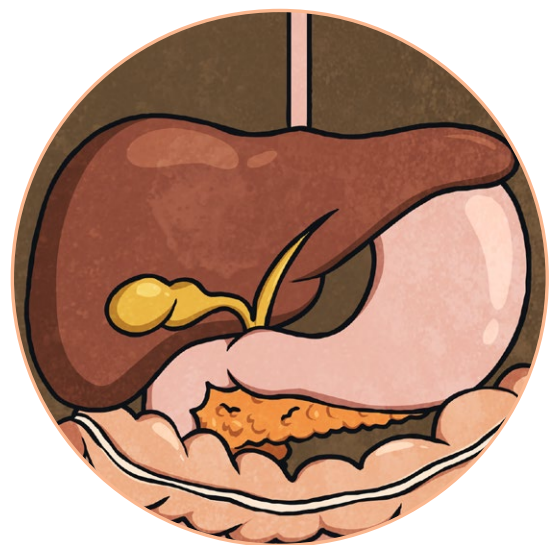
Firstly, we all know that you put food in your mouth to eat it. You do this several times a day when you feel hungry. As you enjoy the taste and the texture of the food, your teeth are breaking it down into smaller pieces. Then, saliva is mixed with it and your mouth cools it or warms it to a good temperature for you to be able to swallow.

When the food is broken down enough, it is swallowed and goes down a big tube to your stomach called the oesophagus (pronounced: a-soff-a-guss). Muscles in the oesophagus move in waves to move the food down to your stomach. These muscles are so good at this job that they could even get the food to your stomach if you were standing on your head! (Don't try this though!)

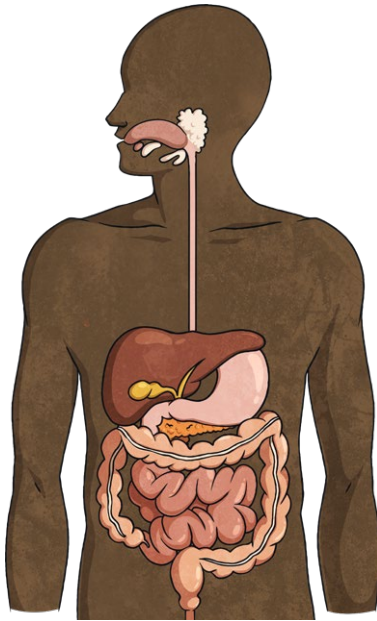
If you accidentally swallow food down your windpipe, which can occasionally happen, you cough and it pushes the food back up.

At the Stomach

When the chewed-up food arrives in the stomach, it is mixed with acid that breaks the food down even more into something that looks a bit like porridge. This substance is called 'chyme'.



Fact File



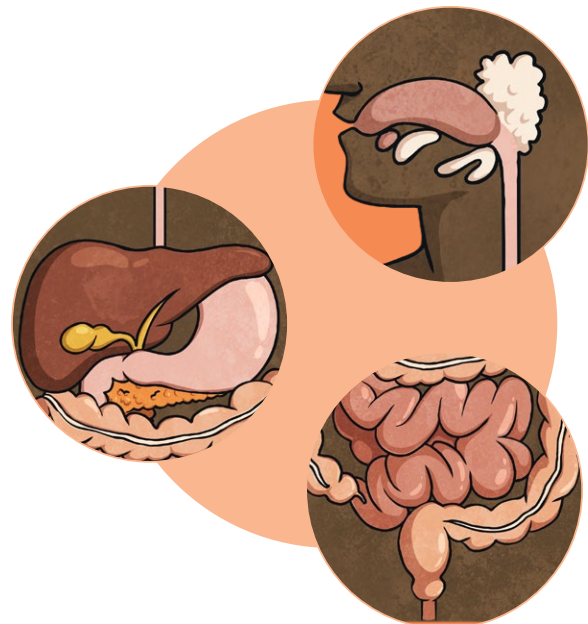
- An adult eats about 500kg of food per year.
- Your body can produce up to 1.5 litres of saliva every day
- An adult's oesophagus is about 25cm long.
- In total, your food travels through 9 metres of tubes.
- A camera has been invented now that is as small as a pill (called Pillcam). It can be swallowed so it passes through your oesophagus in order to take photos of the inside of your body. It can take up to 55,000 pictures over the 8 hours that it's in there! It's been used since 2001 to let doctors see inside patients.

After the Stomach

The next part of the journey for your food (which doesn't look like food anymore) is through the small intestine. It's here that all the goodness is taken out of the food and goes off to different places in the body for you to use.

When the small intestine has done its job of getting all the goodness out of the food, all the material that is unwanted goes into the large intestine. Some foods create a smelly gas in your large intestine, which you get rid of by farting! Finally, the unwanted material makes its way out of the body as poo at the end of the large intestine.

So, there you have it. Isn't your body clever?



Questions

1. Why do you think it is important to chew food before it goes down the oesophagus?

2. What mixes with the food in your mouth?

3. In the 'Before the Stomach' section why has the author used an exclamation mark after the sentence 'These muscles are so good at this job that they could even get the food to your stomach if you were standing on your head!'?

4. How much food does the average adult eat in a year?

5. What does 'chyme' look like?

6. Number these organs in the order they are used during digestion.

- large intestine
- mouth
- small intestine
- stomach
- oesophagus

7. Draw **three** lines and match each part of the digestive system with the job it does. The first one has been done for you.

teeth	●	●	Pushes food to your stomach.
oesophagus	●	●	Mixes food with acid and enzymes to further break down the food.
small intestine	●	●	Breaks the food down into smaller pieces to be swallowed.
stomach	●	●	Takes out all the goodness of the food, which goes off to different places in the body.

8. In 75 words or less, summarise the journey food goes through in the digestive process.

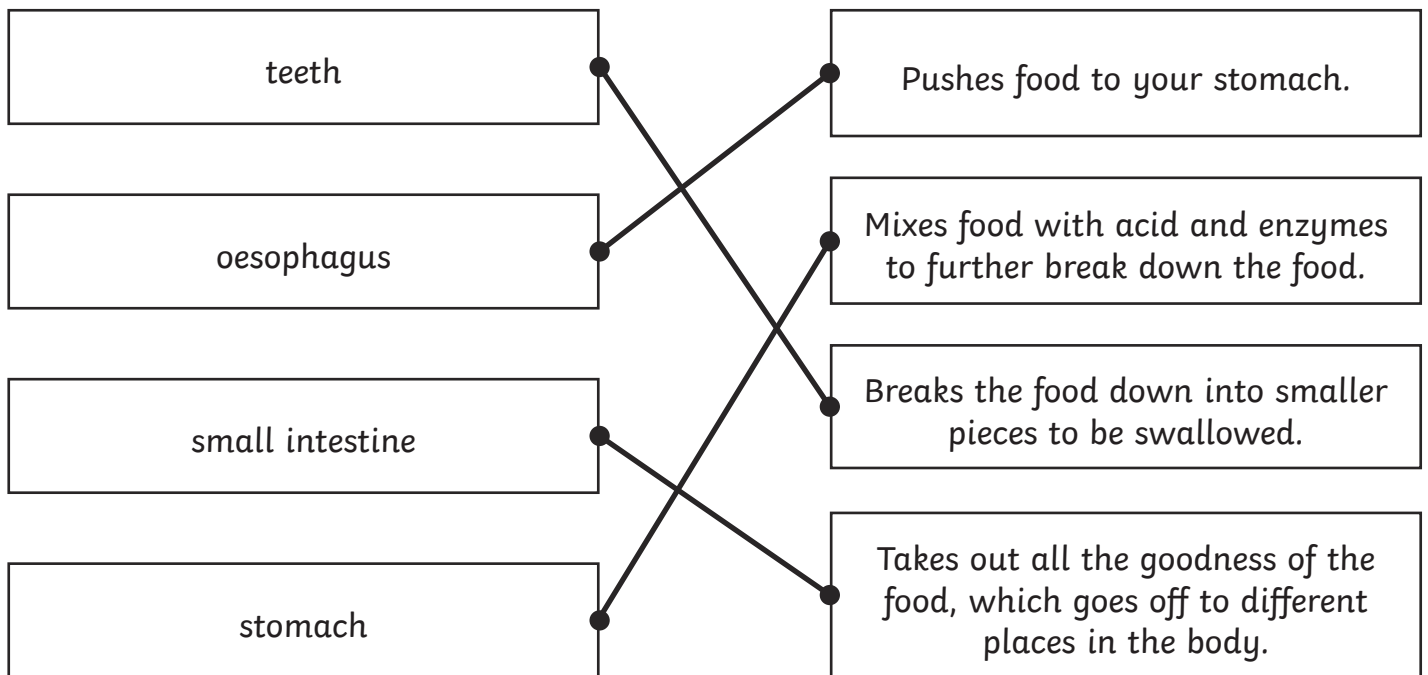
9. At the end the author says: 'Isn't your body clever?' Do you agree? Why or why not?

Answers

1. Why do you think it is important to chew food before it goes down the oesophagus?
Pupils' own responses, such as: It is important to chew food before it goes down the oesophagus so that it becomes smaller and softer to get through the tube into the stomach. If it were too big or rough, it may get stuck or hurt you.
2. What mixes with the food in your mouth?
saliva
3. In the 'Before the Stomach' section why has the author used an exclamation mark after the sentence 'These muscles are so good at this job that they could even get the food to your stomach if you were standing on your head!'
Pupils' responses will vary, such as: An exclamation mark has been used because it is surprising that the body can do this.
4. How much food does the average adult eat in a year?
500kg
5. What does 'chyme' look like?
porridge
6. Number these organs in the order they are used during digestion.

5	large intestine
1	mouth
4	small intestine
3	stomach
2	oesophagus

7. Draw **three** lines and match each part of the digestive system with the job it does. The first one has been done for you.



8. In 75 words or less, summarise the journey food goes through in the digestive process.

Pupils' own responses, such as: Food enters the mouth and is chewed up and mixed with saliva. It travels down the oesophagus to the stomach where it is mixed with digestive juices and broken down. It then moves through the small intestine where all the goodness is taken out of the food and is used in different parts of the body. The unwanted food then travels through the large intestine to be discarded.

9. At the end the author says: 'Isn't your body clever?' Do you agree? Why or why not?

Pupils' own responses, such as: I think the body is really clever because there are lots of processes that go into digesting food which is something we do every day. The body also makes sure we have all the different parts of food we need to keep us healthy and disposes of the waste.

Your Digestive System

Have you ever wondered what happens to your food after you've chewed it in your mouth?

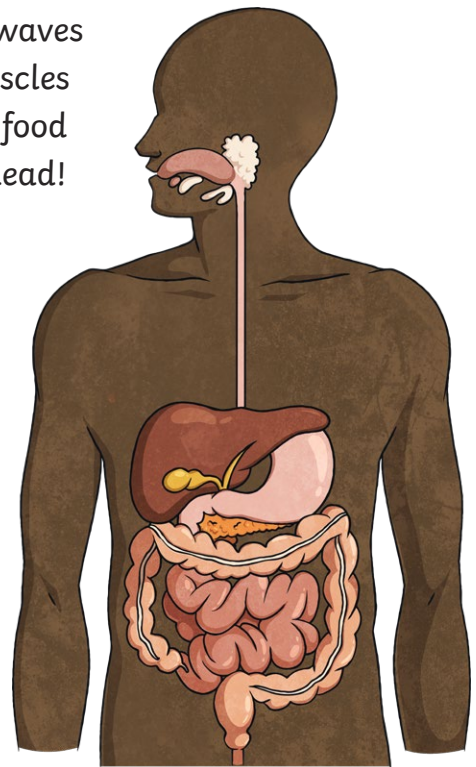
Your body has an amazing system called the digestive system. It is a long tube that runs from your mouth, where the food enters, to your anus (bottom) where the waste is excreted (exits). In between that, your digestive system sorts and uses the food you consume to make sure your body has everything it requires to stay healthy. Like a food blender, which uses sharp blades to cut food into tiny pieces, your teeth, muscly tongue and stomach do the same thing to the food you eat, so that it is easier to digest. Read on to find out exactly how your digestive system works...

Before the Stomach

Firstly, we all know that you put food in your mouth to eat it. You enjoy the taste and the texture of the food while your teeth break it down into smaller pieces. Saliva is then mixed with it to help make it softer and break it down. Also, your mouth cools it or warms it to an acceptable temperature for you to swallow.

When the food is broken down enough, it is swallowed and goes down to your stomach via a tube called the oesophagus (pronounced 'a-soff-a-guss'). Muscles in the oesophagus move in waves to push the food down to your stomach. These muscles are so good at this job that they could even get the food to your stomach if you were standing on your head! (Don't try this though!)

Your trachea (pronounced 'truh-kee-uh'), also known as your windpipe, which carries air to your lungs, is a tube situated next to the oesophagus. It has a flap called an epiglottis (pronounced 'ep-i-glot-is'), which shuts off your windpipe during the swallowing process, to prevent food from going down the wrong tube. If you do accidentally swallow food down your windpipe, which can occasionally happen, you cough, and it pushes the food back up again.



At the Stomach

Next, the chewed-up and softened food arrives in the stomach (which is a stretchy sack shaped like the letter 'J'). The stomach has two important jobs to do. Firstly, it needs to churn up the food you have just eaten into a liquid. Secondly, it needs to get this liquid from the stomach to the small intestine. Here is how it works...

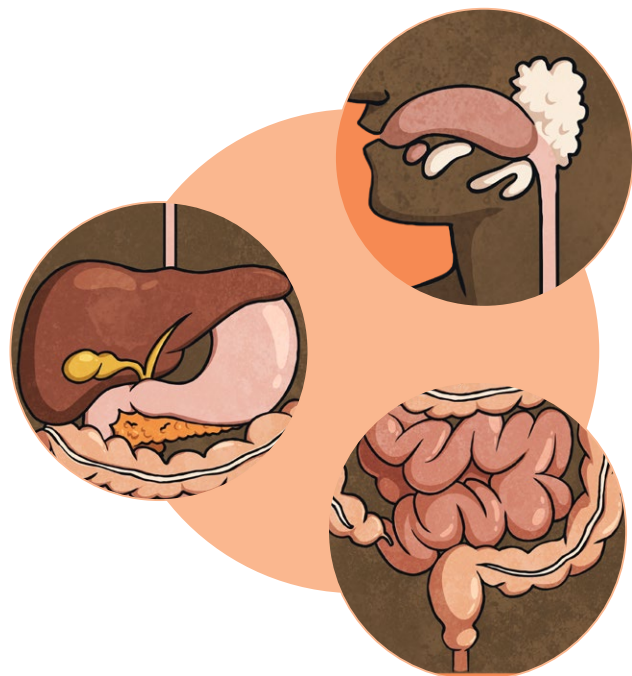
The food is mixed with digestive juices that include acid and special chemicals called enzymes that further break down the food. It's broken down into a substance called 'chyme', which resembles porridge. The stomach juices also help to kill any bad bacteria that might be in the food, which could potentially make you ill.

After the Stomach

After the stomach, your food (which doesn't look like food anymore) journeys on through a network of coiled tubes called the intestines. It starts at the small intestines, where all the goodness is taken out of the food and transported to different places in the body for you to use. The small intestine is lined with millions of tiny bumps, called villi. The villi help the food nutrients get into your bloodstream.

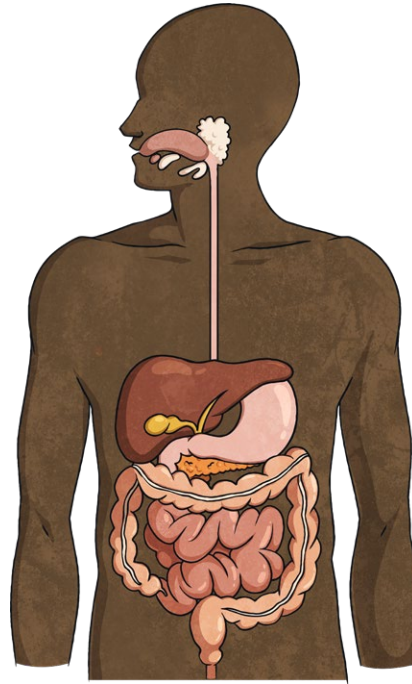
When the small intestine has done its job of getting all the goodness out of the food, all the unwanted watery waste containing food that cannot be digested, goes into the large intestine. Your rectum is the penultimate destination for the food, and this is where faeces (poo) is stored. The poo then makes its way out of the body when you go to the toilet.

So, there you have it. Isn't your body clever?



Fact File

- The average adult eats about 500kg of food per year.
- Your body can produce up to 1.5 litres of saliva every day.
- An adult oesophagus is about 25cm long.
- In total, your food travels through 9 metres of tubes.
- An adult's stomach can stretch to 20 times its normal size after a meal.
- A camera has been invented now that is as small as a pill (called Pillcam). It can be swallowed so it passes through your oesophagus in order to take photos of the inside of your body. It can take up to 55,000 pictures over the 8 hours that it's in there! It's been used since 2001 to let doctors see inside patients



Questions

1. Why do you think it is important to chew food before it goes down the oesophagus?

2. How much food does the average adult eat in TWO years?

3. What are the two different jobs the stomach has?

4. In the **After the Stomach** section, the author has used brackets to remind us that the food does not look like food at this point. Why doesn't it look like food?

5. Where in your body do the nutrients and goodness come out of the food to go into the rest of your body?

6. Draw **four** lines and match each part of the digestive system with the job it does.

teeth ●

oesophagus ●

small intestine ●

stomach ●

● Pushes food to your stomach.

● Mixes food with acid and enzymes to further break down the food.

● Breaks the food down into smaller pieces to be swallowed.

● Takes out all the goodness of the food, which goes off to different places in the body.

7. Draw **four** lines to match the scientific names with the description or name that the organs are sometimes more commonly known as.

epiglottis ●

oesophagus ●

anus ●

trachea ●

● food pipe

● bottom

● windpipe

● flap at top of windpipe

8. In 75 words or less, summarise the journey food goes through in the digestive process.

9. In the fact file, the author tells you about a thing called a 'Pillcam' – why would doctors find this useful?

10. At the end of the text, the author says: 'Isn't your body clever?' Do you agree? Explain why or why not.

Answers

1. Why do you think it is important to chew food before it goes down the oesophagus?

Pupils' own responses, such as: It is important to chew food before it goes down the oesophagus so that it becomes smaller and softer to get through the tube into the stomach. If it were too big or rough, it may get stuck or hurt you.

2. How much food does the average adult eat in TWO years?

1000kg

3. What are the two different jobs the stomach has?

Firstly, it needs to churn up the food you have just eaten into a liquid. Secondly, it needs to get this liquid from the stomach to the small intestine.

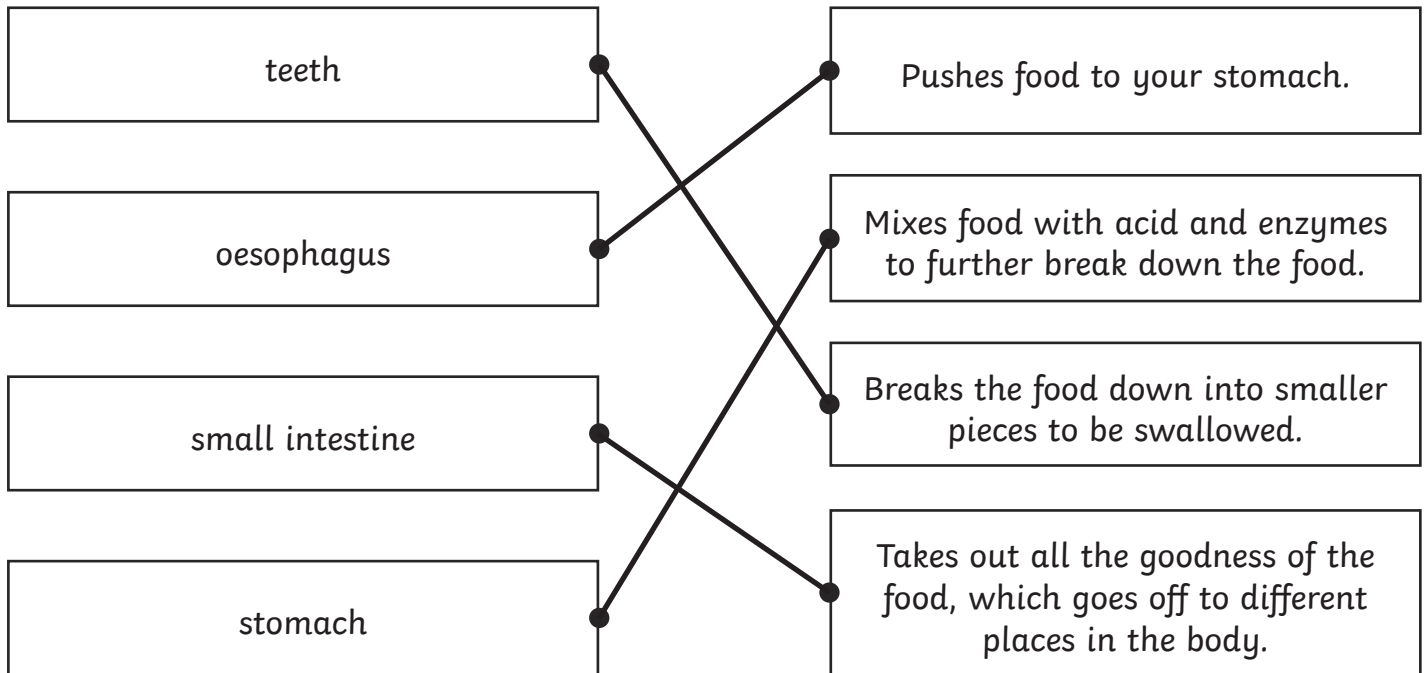
4. In the **After the Stomach** section, the author has used brackets to remind us that the food does not look like food at this point. Why doesn't it look like food?

Pupils' own responses, such as: It doesn't look like food at this point because it has been broken down and has mixed with digestive juices so that it looks like porridge.

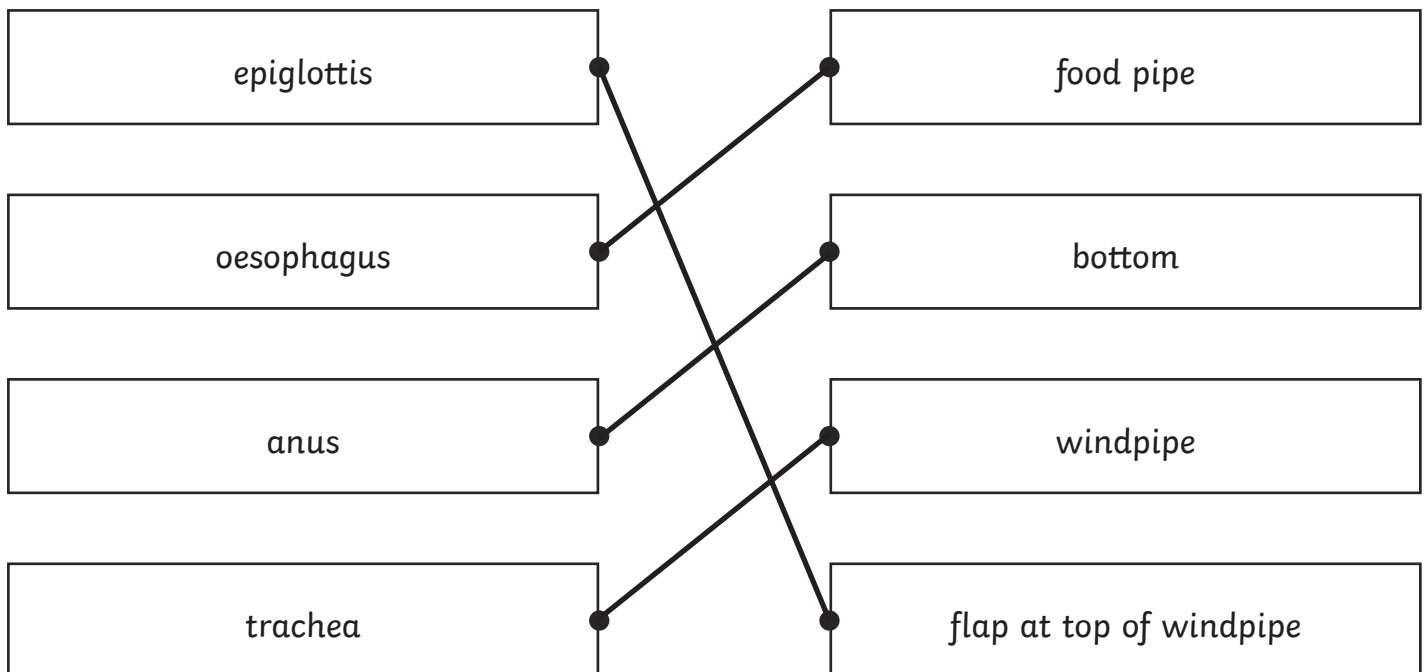
5. Where in your body do the nutrients and goodness come out of the food to go into the rest of your body?

small intestine

6. Draw **four** lines and match each part of the digestive system with the job it does.



7. Draw **four** lines to match the scientific names with the description or name that the organs are sometimes more commonly known as.



8. In 75 words or less, summarise the journey food goes through in the digestive process.

Pupils' own responses, such as: Food enters the mouth and is chewed up and mixed with saliva. It travels down the oesophagus to the stomach where it is mixed with digestive juices and broken down. It then moves through the small intestine where all the goodness is taken out of the food and absorbed into the blood. The unwanted food then travels through the large intestine to be discarded.

9. In the fact file, the author tells you about a thing called a 'Pillcam' – why would doctors find this useful?

Pupils' own responses, such as: Doctors would find it useful because they can look to see if something is wrong inside someone's digestive system.

10. At the end of the text, the author says: 'Isn't your body clever?' Do you agree? Explain why or why not.

Pupils' own responses, such as: I think the body is really clever because there are lots of processes that go into digesting food which is something we do every day. The body also makes sure we have all the different parts of food we need to keep us healthy and disposes of the waste.