Lesson 1

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 you get everything you need to stay healthy. It's called your digestive system. Here's how it 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 whilst 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 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!)

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.

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 and softened food arrives in the stomach (which is a stretchy sack shaped like a letter 'J'), it is mixed with acid and enzymes (pronounced: en-zimes) that break the food down. Once it's broken down, it looks a bit like porridge- it is a substance called 'chyme'. 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

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, which 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. Then, it 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 about you Digestive System

1. Why do you have to chew food before it goes down the oesophagus?

2. Name something that happens to the food whilst in your stomach.

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

4. Put these organs in the correct order to show the stages of the digestive system:

large intestine mouth small intestine stomach oesophagus

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

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

7. Why has the author used an exclamation mark after the word ‘head’ near the end of the ‘Before the Stomach’ section?

8. What is ‘chyme’?

9. Why has the author started the text with a question sentence?

10. Why has the author written ‘(pronounced: a-soff-a-guss)’ in the ‘Before the Stomach’ section?

Answers

1. Why do you have to chew food before it goes down the oesophagus?

To break it down to be smaller and softer pieces to move down the oesophagus and through the body. If it were too big or too rough, it might hurt you or get stuck.

2. Name something that happens to the food whilst in your stomach.

Accept any answers from: breaks down more, gets stored for a while, mixes with acid/juices/enzymes, or the juices in there help kill bacteria in the food.

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

1000kg (2 x 500kg)

4. Put these organs in the correct order to show the stages of the digestive system:

mouth, oesophagus, stomach, small intestine, large intestine

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

To look for something wrong/any problems on the inside of someone's digestive system.

7. What has the author used an exclamation mark after the word 'head' near the end of the 'Before the Stomach' section?

Because it is surprising that the body can do this.

8. What is 'chyme'?

A substance that looks like porridge that contains broken down food mixed with acid, juices and enzymes

9. Why has the author started the text with a question sentence?

To engage the reader/make you read on.

10. Why has the author written '(pronounced: a-soff-a-guss)' in the 'Before the Stomach' section?

The word oesophagus is a tricky word to read and say, and is not pronounced how it is spelt.