

## Science

Begin by watching the [kidshealth clip](http://kidshealth.org/en/kids/dsmovie.html). (<http://kidshealth.org/en/kids/dsmovie.html>) Mention organs like the gall bladder that your child may have heard of – perhaps someone in the family has had a surgical operation to have theirs removed (your digestive system can cope with this as it's used to store the bile - digestive juice - that the liver produces), or the appendix, which is generally thought to have no function in humans anymore, but in, e.g. ruminants, contains thousands of bacteria which help break down cellulose – large molecules (found in plants). Again, they might know someone who has had their appendix removed.

What happens when we eat food that is poisonous or going bad? We might be sick (vomit) &/or have the runs (diarrhoea). When you are sick the stomach pushes the bad food as quickly as possible back out of your stomach so that your body isn't harmed by the poison or bad food (it doesn't taste nice because of the acidic digestive juices). When you have diarrhoea, the large intestine hasn't absorbed as much water as normal (isn't functioning normally). Our bodies can be harmed if we don't eat enough of some foods, e.g. scurvy results from a lack of Vitamin C, rickets results from a lack of Vitamin D (which we make from cholesterol when exposed to adequate sunlight), lack of iron can cause anaemia, goitre is caused by lack of iodine, and night blindness is caused by a lack of Vitamin A. We can of course become overweight if we eat too much food, which causes many health problems.

## Activity

Move to a large space or the garden for a physical revision activity! You are going to demonstrate your understanding of the human digestive system. This won't be as easy as it would be in school, unless you can rope in siblings or parents too! However, the children are very imaginative and I'm sure they will find a way around it! Use your bodies to show the shape of an incisor, a canine and a molar tooth. You will need to discuss what shape you should be and why. A canine should be pointed, an incisor should be wide and thin and a molar should be broad. Agree on what the 3 shapes should be. Explain that you are going to play a game where you will become different parts of the digestive system. You should move about the space in different directions and speeds, and when your adult shouts out a word, you need to become it. To start off, just play using the words 'molar', 'canine' and 'incisor'. Then add the small intestine – when this is called out, you should all lie in a long line, head-to-feet. Next, add the large intestine. When this is called out, you should make a bridge with a partner and stand in a row (to make a long, wide tunnel). Then add 'stomach'. When this is called out, stand still and make a bubbly movement to show the gases and acid working to break-up the food. Finally, add oesophagus. When this is called out you should stand up straight, and take 6 seconds to drop to a ball on the floor. Each time a part is called out, ask your child to explain the function of that part.

Celebrate their knowledge and understanding of the human digestive system. It is a complicated process that many adults do not really understand. There are many long and complicated scientific names. Add the words to your book between the word teeth and the word faeces. Can you say the correct order for the oesophagus, stomach, small intestine and large intestine.