

Food Glorious Food
KS3
Monday - Science

The Digestive System

Make a list of the food that you have eaten today. Was this food healthy?

We need to have various different categories of food to ensure that we get everything for our body to function at its best. This includes carbohydrates, protein, fat, vitamins, minerals and fibre.

Can you name two foods in each of these categories?

As well as eating a healthy diet our body has to digest this food to allow the body to absorb the correct nutrients.

Watch this video on the digestive system.

<https://www.youtube.com/watch?v=Og5xAdC8EU>

Now fill out the missing words in the passage.

The body needs food for a number of reasons. We need food for growth and to worn out or damaged parts. We also get from food. Energy is used for movement, producing and to keep all of the parts working properly. Before the body can use the food we eat it must pass into the blood. The food is broken down into very small soluble molecules by the system. These molecules then pass through the walls of the and into the blood.

intestines

heat

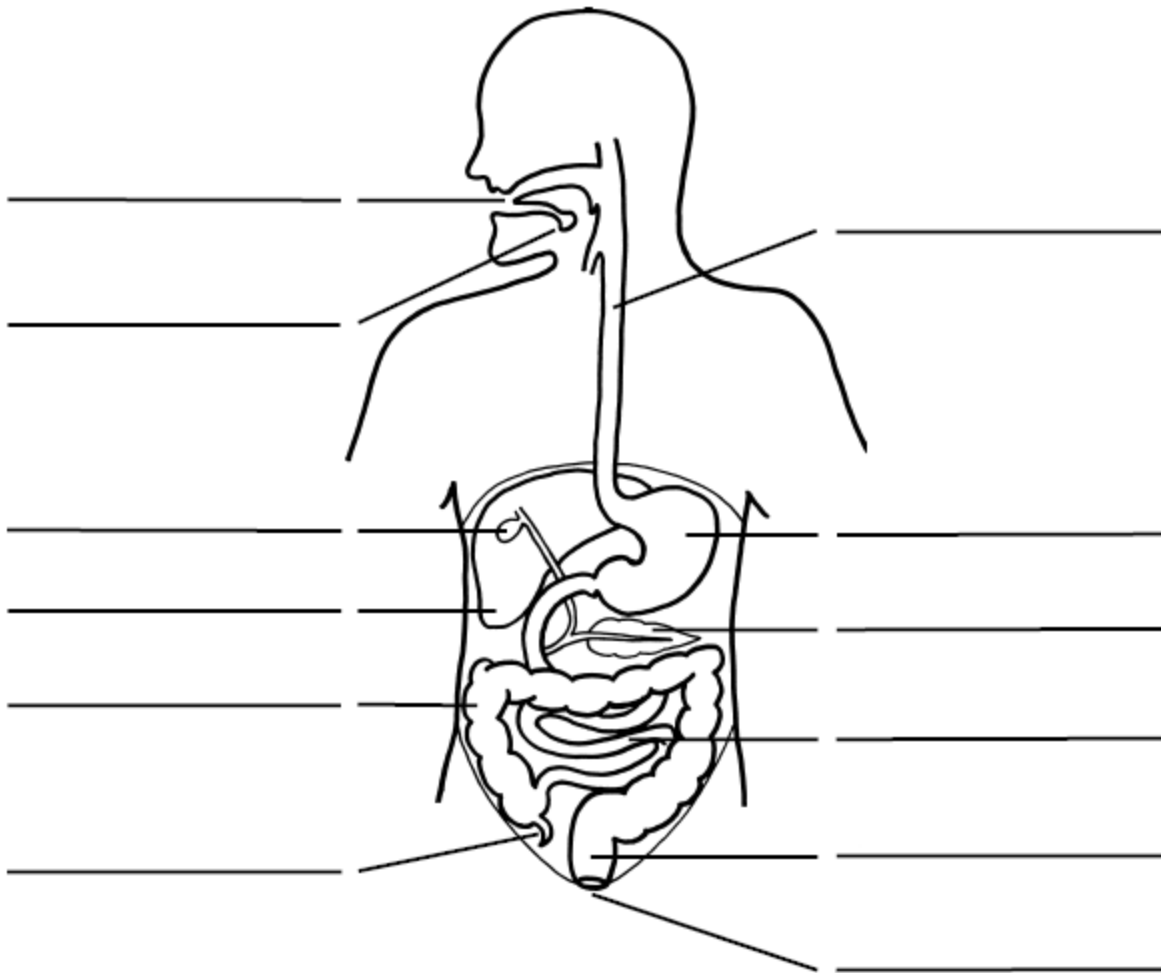
repair

cells

digestive

energy

Look carefully at the diagram of the digestive system. Label the correct parts of the digestive system.



- | | | | | | |
|----------|----------------|-----------------|--------------|-----------------|--------|
| tongue | salivary gland | liver | gall bladder | small intestine | gullet |
| pancreas | stomach | large intestine | appendix | rectum | anus |

Food is slowly broken down by our digestive system. It is broken up by chewing in the mouth and by churning of the stomach muscles. Special chemicals called ENZYMES break up large food molecules into smaller ones. These molecules then slowly seep out into the blood through tiny pores in the walls of the small intestines. Any undigested food enters the large intestine where water is absorbed back into the blood. The solid waste is then passed out of the body.

The Organs in the Digestive System

Read the description of the functions of these organs. Use your knowledge of the digestive system to work out which organ each description is for.

Organ	Function
	Here the food is chewed and moistened with saliva. The food is shaped into a round ball before it is swallowed.
	This is a tube that squeezes the food down to the stomach.
	This is a bag that churns up the food. It contains gastric juice and hydrochloric acid. Gastric juice contains an enzyme that digests protein. The acid kills germs.
	This is a very long tube that the food passes into after it leaves the stomach. Here the food is completely digested and then it is absorbed through the walls and into the blood stream.
	This is a small leaf-shaped organ. It makes pancreatic juice which passes into the small intestine. This juice contains an alkali that helps to neutralise the acid from the stomach. It also contains several enzymes.
	This organ makes a chemical called BILE which is stored in a small bag called the GALL BLADDER. The bile is squeezed into the small intestine where it helps to break up large pieces of fat.
	This is a wide tube that the undigested food passes through. Water is absorbed from this back into the body.
	This organ has no function in humans but it helps with digestion of plant material in herbivores such as sheep. It sometimes becomes infected in humans and then it must be removed.
	The dried out waste food material is stored here until it is ready to be passed out of the body through the anus.