

Digestive System Explanation Text

LO: I can explain the functions of the digestive system.

1.

The mouth is where food enters the digestive system but the process of digestion starts even before that happens!! The salivary glands produce saliva when food is smelt. You may have come across the phrase 'mouth-watering', which indicates food that smells so good that your mouth is full of saliva.

Saliva contains an enzyme called amylase (pronounced am- uh - leys). This breaks down starch which is a type of carbohydrate. The tongue is important as it mixes the food with the saliva.

Teeth tear, cut and grind food in the mouth so that it can be transported through the body more easily.

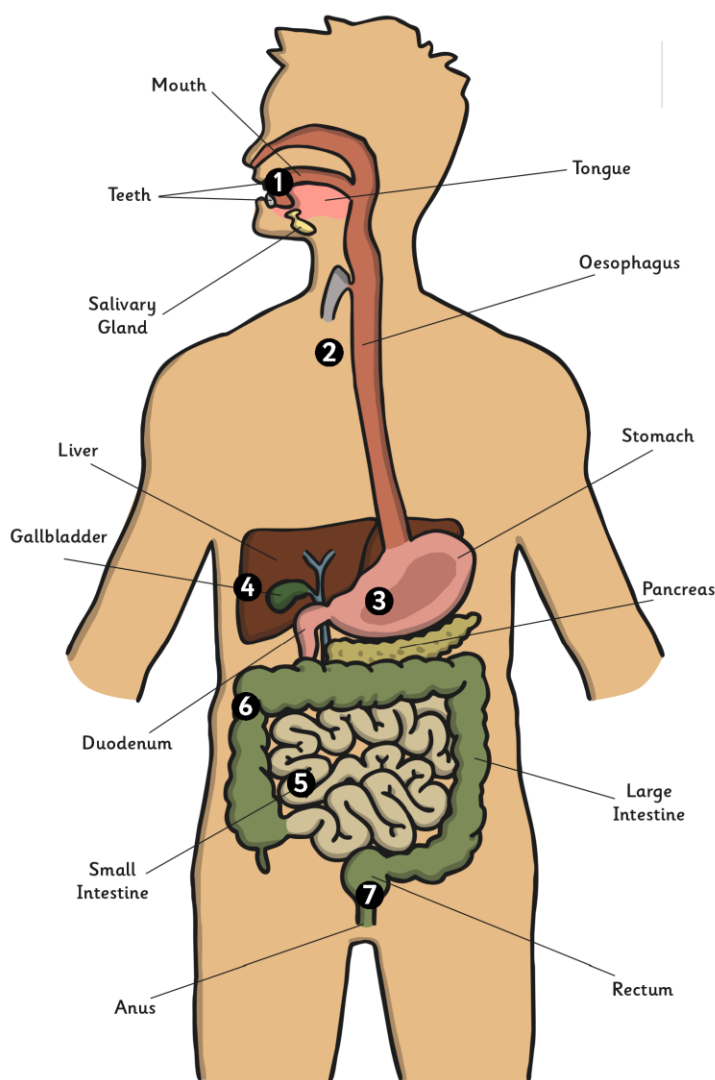
The soft palate is the name of the top of the mouth, this part of the mouth moves the food through the mouth and towards the oesophagus.

2.

The next part of the digestive process takes part in the oesophagus. This is a long muscular tube that leads to the stomach. Here the food is moved down by the muscles in synchronised waves (pairs of muscles contracting and relaxing at the same time). This movement is called peristalsis. Muscles in your intestine also work like this.

3.

Enzymes and acids are produced in the stomach lining to break food down. The stomach contains powerful muscles that churn and mix food into smaller and smaller pieces.



4.

The liver, pancreas and gallbladder are vital to the digestive process even though food does not pass through them.

The pancreas produces enzymes to break down fats, carbohydrates and proteins which are released in the duodenum.

The liver produces bile – this is an important fluid which breaks down fats in our diets. It sends the bile to the gallbladder to store, which releases it into the duodenum when it is needed.

6.

After the other two parts of the small intestine absorb the nutrients they need, any part of the food that is not needed travels to the large intestine. The large intestine absorbs water from the remaining food and the rest forms into stools.

5.

The small intestine is split into three parts. The duodenum is the first part of the small intestine and it is here that the food is broken down by enzymes and bile.

7.

The large intestine moves the stools to the rectum. The rectum has two functions: firstly it stores the stools until they are ready to be released. Secondly, it sends signals to the brain that there are stools that need releasing. The final process in the digestive process is when stools move from the rectum are released from the anus.

In order to be healthy the body needs to both take nutrients from the food and also get rid of the parts of the food it does not