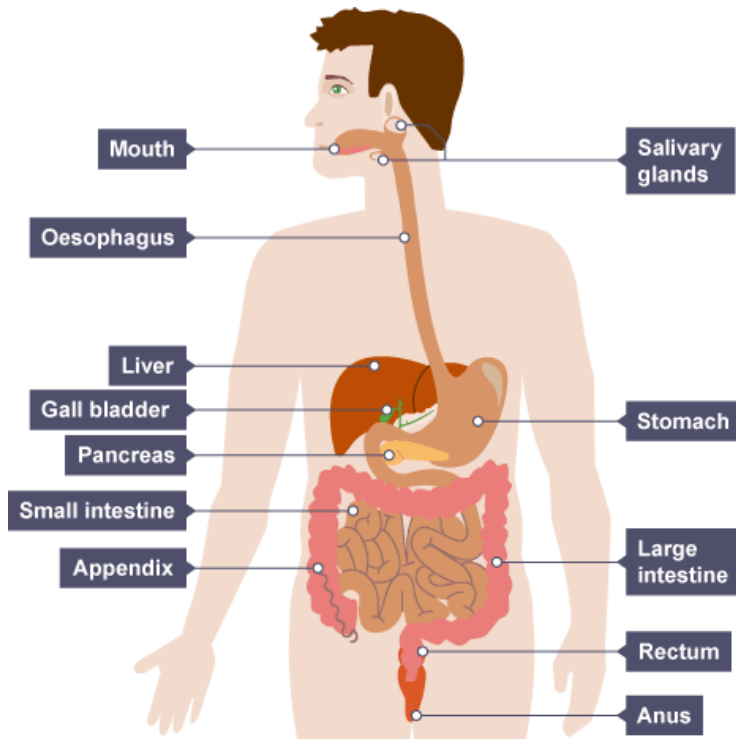


# Food and Digestion

## Human digestive system

The food we eat has to be broken down into other substances that our bodies can use. This is called **digestion**. Without digestion, we could not absorb food into our bodies and use it. Digestion happens in the **digestive system**, which begins at the mouth and ends at the anus.



After we swallow, our food passes through these organs in turn:

- oesophagus or gullet
- stomach
- small intestine
- large intestine

## Stages of digestion

Different things happen to food as it passes through the digestive system:

- food is digested in the mouth, stomach and small intestine
- digested food is **absorbed** into the bloodstream in the small intestine
- excess water is absorbed back into the body in the large intestine
- any undigested food passes out of the anus as faeces when we go to the toilet

**Digestive enzymes** break down large molecules into smaller molecules.

## Nutrients

A nutrient is a substance needed by organisms to stay alive and healthy. A healthy human **diet** involves seven different kinds of nutrient: **Carbohydrates, Proteins, Lipids (fats and oils), minerals, vitamins, fibre and water**

Too little of a particular nutrient will lead to a **deficiency disease**

Nutrient	Use in the body	Good sources
Carbohydrate	To provide energy	Cereals, bread, pasta, rice and potatoes
Protein	For growth and repair	Fish, meat, eggs, beans, pulses and dairy products
Lipids (fats and oils)	To provide energy. Also to store energy in the body and insulate it against the cold.	Butter, oil and nuts
Minerals	Needed in small amounts to maintain health	Salt, milk (for calcium) and liver (for iron)
Vitamins	Needed in small amounts to maintain health	Fruit, vegetables, dairy foods
Dietary fibre	To provide roughage to help to keep the food moving through the gut	Vegetables, bran
Water	Needed for cells and body fluids	Water, fruit juice, milk