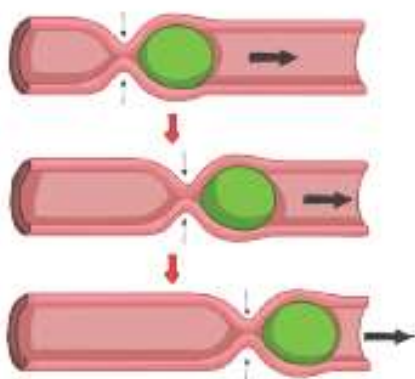


KNOWLEDGE ORGANISER

- The seven different food groups are: carbohydrates, fats, proteins, vitamins, minerals, fibre and water.
 - Carbohydrates are for energy and are found in pasta, rice and bread.
 - Proteins are for growth and repair. Fish and meat are rich in protein.
 - Fats are an energy source and help with insulation. Dairy products are rich in fats.
- Unhealthy eating can lead to: obesity, malnutrition, heart disease, strokes or diabetes.
- The energy requirement of an individual will depend upon their age, body size and activity rates. The more active a person, the higher their energy intake.
- Digestion involves breaking down food until it is small enough to be absorbed into the bloodstream.
- The route taken by food is:
 - Mouth
 - Oesophagus
 - Stomach
 - Small intestines
 - Large intestines
 - Rectum
 - Anus
- Enzymes are biological catalysts, they speed up the breaking down of food.



organ	Made up of tissues, performs a specific function within an organism.
mouth	Food is physically broken down into smaller pieces and mixed with enzymes.
oesophagus	Links the mouth to the stomach, controls the movement of food by peristalsis.
stomach	Churns food, mixes it with more enzymes and contains hydrochloric acid.
small intestines	Food is absorbed from the small intestines into the blood.
large intestines	Water is reabsorbed.
rectum	Stores waste food as faeces.



- Peristalsis- this is the contracting and relaxing of the oesophagus muscles to move food in a controlled way towards the stomach.

Digestive enzymes

- **carbohydrase** – breaks **carbohydrate** into smaller sugars.
- **protease** – breaks **protein** into amino acids.
- **lipase** – breaks **fat** into fatty acids and glycerol.