THEME: THE HUMAN BODY

TOPIC : DIGESTIVE SYSTEM

What is digestive system?

- This is a group of organs which work together to digest food in the body.

What is digestion?

- This is the breakdown of food into smaller molecules the body can use.
- This is the breakdown of food into smaller soluble molecules.
- This is the breakdown of food into smaller molecules that can be absorbed into the bloodstream.

Where does digestion of food start and end in the body?

- **Digestion** starts in the **mouth** and ends in the **ileum.**

Give any two types of digestion

- Mechanical digestion
- Chemical digestion

What is mechanical digestion?

- This is the physical breakdown of solid food into smaller particles.

Give two ways how mechanical digestion is carried out

- By chewing/mastication
- By churning

What is mastication/chewing?

- This is the breakdown of food into smaller particles by the teeth.

What is churning as used in digestion.

- This is the process by which food is mixed with digestive juices in the stomach.

Note. Food is churned into a chyme in the stomach.

What is a chyme?

- This is a semiliquid food that is partly digested.

What is chemical digestion?

- This is the breakdown of food into smaller molecules by chemical agents.
- This is the breakdown of food into smaller particles by the help of enzymes.
- This is the type of digestion that involves the action of enzymes.

What are enzymes?

- These are proteins which speedup chemical reactions.

What are digestive enzymes?

- These are proteins which speedup digestion of food.
- These are chemical substances that speedup digestion of food.

Give any two importance of enzymes in the process of digestion

- Enzymes speed up digestion of food.
- Enzymes catalyze digestion of food.

How do enzymes speed up digestion of food?

- By reducing/lowering the activation energy.

State four characteristics of enzymes.

- They are proteins in nature/They are proteinaceous
- They are soluble in nature
- They are specific in their action
- They can be inhibited by inhibitors
- They speed up chemical reactions
- They work under a narrow temperature range
- They are affected by pH
- They are needed in minute amounts.
- They are destroyed/affected by heat.