

(5) How are fats digested in our bodies? Where does this process take place?

Ans:- The complete digestion of fats takes place inside small intestine. The bile juice, which contains bile salts breakdown the fats into smaller globules to increase the efficiency of the enzyme action. Bile also makes the medium alkaline. The walls of the small intestine secrete intestinal juice containing enzyme lipase. It finally converts the emulsified fats into fatty acids and glycerol.

(6) What is the role of saliva in the digestion of food?

Ans:- Saliva is secreted by the salivary glands in the mouth. It contains the enzyme salivary amylase, which breaks down starch into maltose. It lubricates the mouth and food.

(7) What are the necessary conditions for autotrophic nutrition and what are its byproducts?

Ans:- The necessary conditions for autotrophic

nutrition are:-

- (i) water
- (ii) carbon dioxide -
- (iii) sunlight
- (iv) chlorophyll.

The byproduct of autotrophic nutrition is O_2 , which is released into the atmosphere through stomata.

(8) What are the differences between aerobic and anaerobic respiration? Name some organisms that use anaerobic mode of respiration.

Ans.:

Aerobic Respiration	Anaerobic Respiration.
<ul style="list-style-type: none">→ It occurs in the presence of oxygen.→ Releases large amount of energy.→ Begins in the cytoplasm and continues in the mitochondria.→ Examples:- most plants and animals	<ul style="list-style-type: none">→ It occurs in the absence of oxygen.→ Releases relatively less amount of energy.→ Occurs only in the cytoplasm.→ Examples:- yeast, in human muscles during heavy physical work.

(9) How are alveoli designed to maximise the exchange of gases?

Ans: The alveoli are balloon like structures which are made up of thin moist membranes which are richly supplied with blood and provide a very large surface area for the gaseous exchange.

(10) What would be the consequences for the deficiency of haemoglobin in our body?

Ans: The consequences of the deficiency of haemoglobin is that blood would be unable to carry sufficient amount of oxygen required by the body and would cause less respiration. This is referred to as Anaemia, and the person feels weak, skin becomes pale, person feels lazy and is unable to perform heavy physical task.