

Digestion & Absorption

Very Short Answer Type Questions

1. The food mixes thoroughly with the acidic gastric juice of the stomach by the churning movements of its muscular wall. What do we call the food then?
2. Trypsinogen is an inactive enzyme of pancreatic juice. An enzyme, enterokinase, activates it. Which tissue/ cells secrete this enzyme?/ How is it activated?
3. In which part of alimentary canal does absorption of water, simple sugars and alcohol takes place?
4. Name the enzymes involved in the breakdown of nucleotides into sugars and bases?
5. Define digestion in one sentence.
6. What do we call the type of teeth attachment to jaw bones in which each tooth is embedded in a socket of jaws bones?
7. Stomach is located in upper left portion of the abdominal cavity and has three major parts. Name these three parts.
8. Does gall bladder make bile?
9. Correct the following statements by deleting one of entries (given in bold).
 - a. Goblet cells are located in the intestinal mucosal epithelium and secrete chymotrypsin / mucus.
 - b. Fats are broken down into di- and monoglycerides with the help of amylase/ lipases.
 - c. Gastric glands of stomach mucosa have oxyntic cell / chief cells which secrete HCl.
 - d. Saliva contains enzymes that digest starch /protein.

Short Answer Type Questions

1. What is pancreas? Mention the major secretions of pancreas that are helpful in digestion.
2. Name the part of the alimentary canal where major absorption of digested food takes place. What are the absorbed forms of different kinds of food materials?
3. List the organs of human alimentary canal and name the major digestive glands with their location.

4. What is the role of gall bladder? What may happen if it stops functioning or is removed?
5. Correct the statement given below by the right option shown in the bracket against them
 - a. Absorption of amino acids and glycerol takes place in the. (small intestine/ large intestine)
 - b. The faeces in the rectum initiate a reflex causing an urge for its removal. (neural /hormonal)
 - c. Skin and eyes turn yellow in infection. (liver /stomach)
 - d. Rennin is a proteolytic enzyme found in gastric juice in (infants / adults).
 - e. Pancreatic juice and bile are released through. (intestine- pancreatic/ hepato-pancreatic duct)
 - f. Dipeptides, disaccharides and glycerides are broken down into simple substances in region of small intestine. (jejunum/ duodenum)
6. What are three major types of cells found in the gastric glands? Name their secretions.
7. How is the intestinal mucosa protected from the acidic food entering from stomach?
8. How are the activities of gastro-intestinal tract regulated?
9. Distinguish between constipation and indigestion. Mention their major causes.
10. Describe the enzymatic action on fats in the duodenum.

Long Answer Type Questions

1. A person had roti and dal for his lunch. Trace the changes in those during its passage through the alimentary canal.
2. What are the various enzymatic types of glandular secretions in our gut helping digestion of food? What is the nature of end products obtained after complete digestion of food?
3. Discuss mechanisms of absorption.
4. Discuss the role of hepato – pancreatic complex in digestion of carbohydrate, protein and fat components of food.
5. Explain the process of digestion in the buccal cavity with a note on the arrangement of teeth.