ODM EDUCATIONAL GROUP

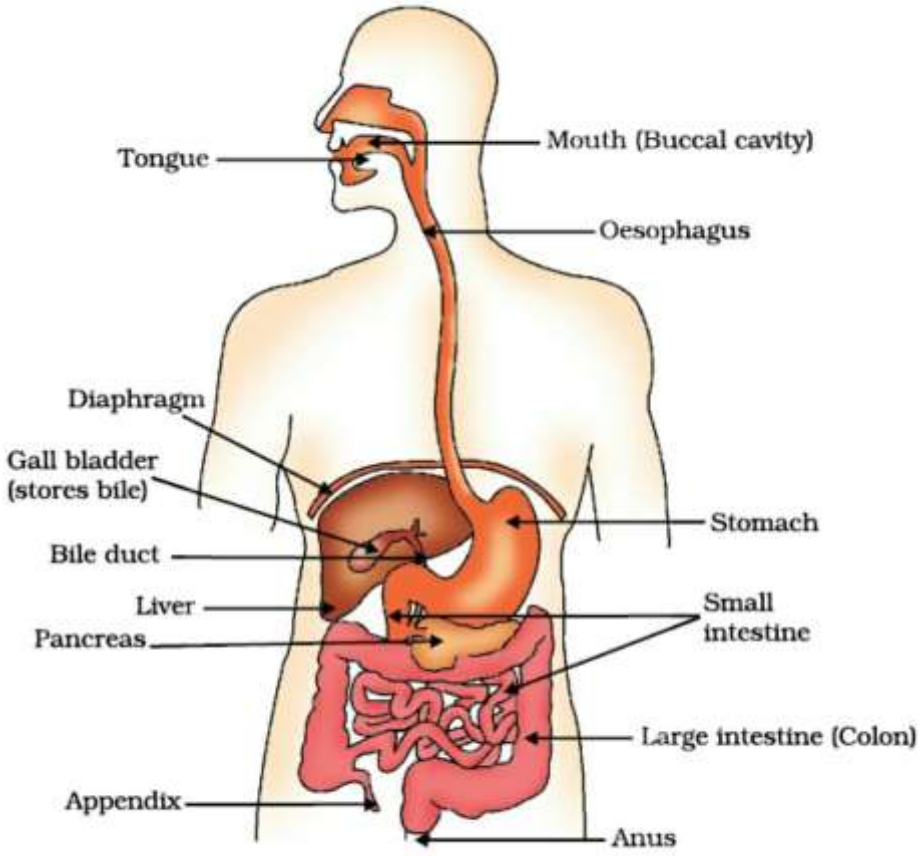
Changing your Tomorrow

SUBJECT:BIOLOGY
CHAPTER:6
CHAPTER NAME: LIFE PROCESSES.
PERIOD-3

Website: www.odmegroup.org
Email: info@odmps.org

Toll Free: **1800 120 2316**
Sishu Vihar, Infocity Road, Patia, Bhubaneswar- 751024

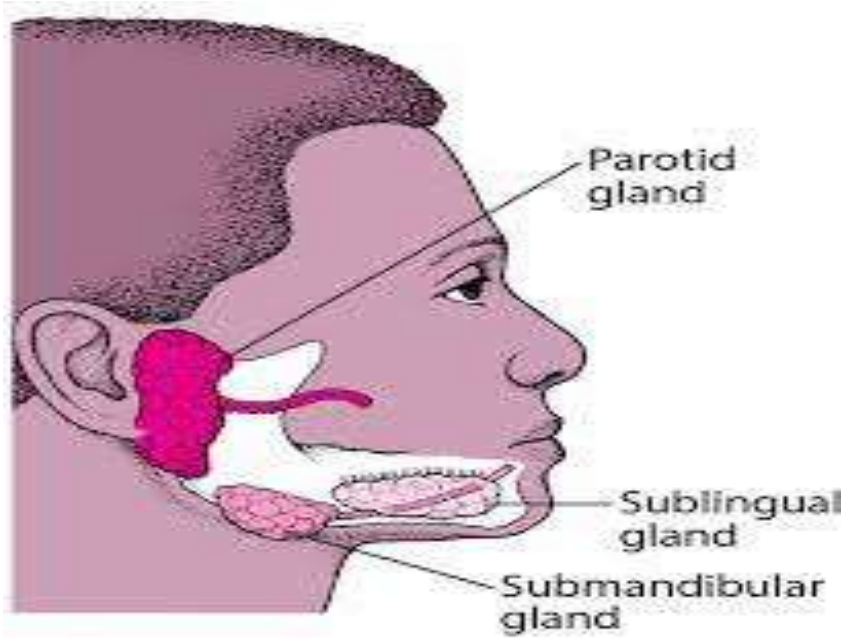
Human digestive system.



ODM EDUCATIONAL GROUP
Changing your Tomorrow

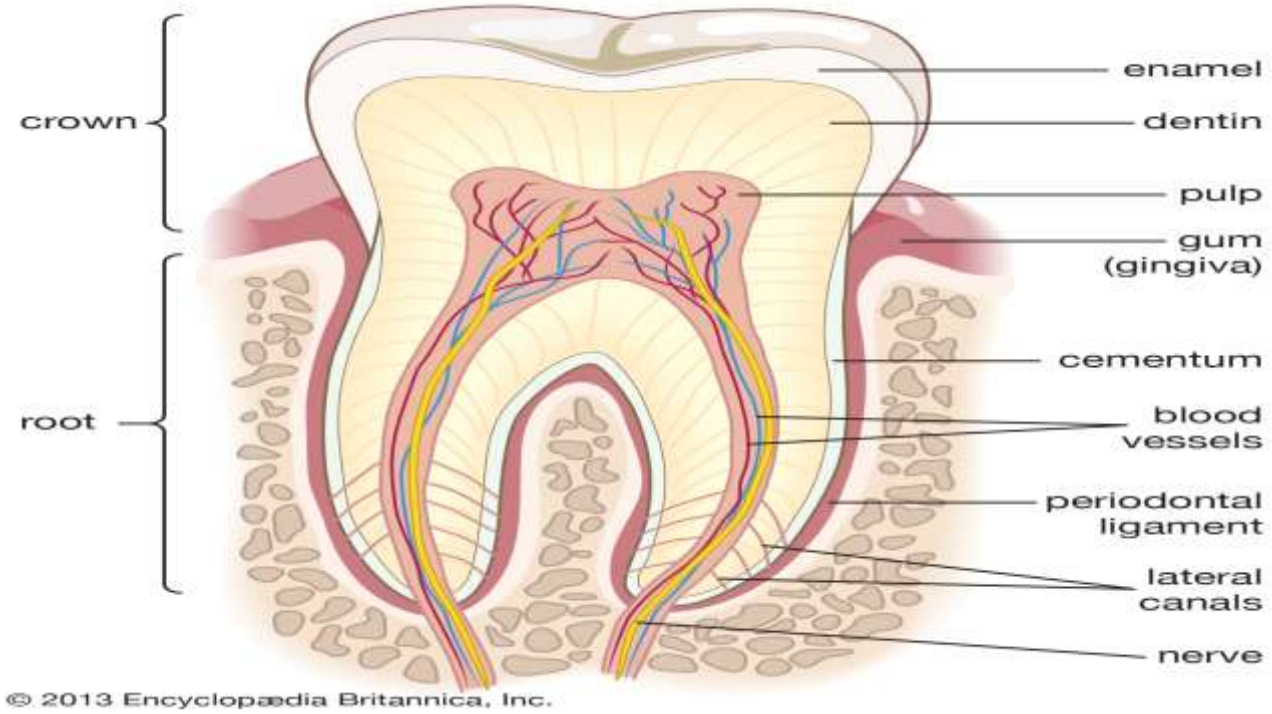
Mouth or Buccal Cavity

- The mouth has teeth and tongue.
- Salivary glands are also present in the mouth. The tongue has gustatory receptors which perceive the sense of taste. Tongue helps in turning over the food, so that saliva can be properly mixed in it.



Teeth

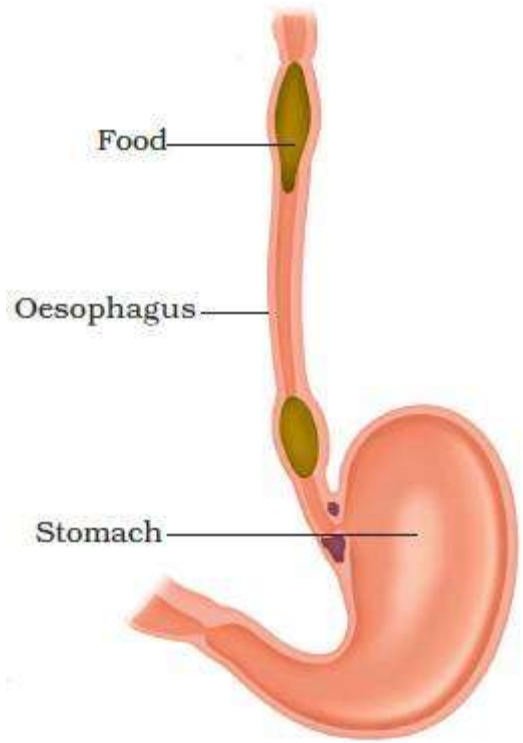
- Teeth help in breaking down the food into smaller particles so that swallowing of food becomes easier. There are four types of teeth in human beings. The incisor teeth are used for cutting the food



ODM EDUCATIONAL GROUP
Changing your Tomorrow

- The canine teeth are used for tearing the food and for cracking hard substances. The premolars are used for coarse grinding of food. The molars are used for fine grinding of food.Salivary glands secrete saliva. Saliva makes the food slippery which makes it easy to swallow the food. Saliva also contains the enzyme salivary amylase or ptyalin. Salivary amylase digests starch and converts it into sucrose.

Oesophagus.



Stomach

- Stomach: Stomach is a bag-like organ. Highly muscular walls of the stomach help in churning the food. The walls of stomach secrete hydrochloric acid. Hydrochloric acid kills the germs which may be present in food. Moreover, it makes the medium inside stomach as acidic. The acidic medium is necessary for gastric enzymes to work. The enzyme pepsin; secreted in stomach; does partial digestion of protein. The mucus; secreted by the walls of the stomach saves the inner lining of stomach from getting damaged from hydrochloric acid.

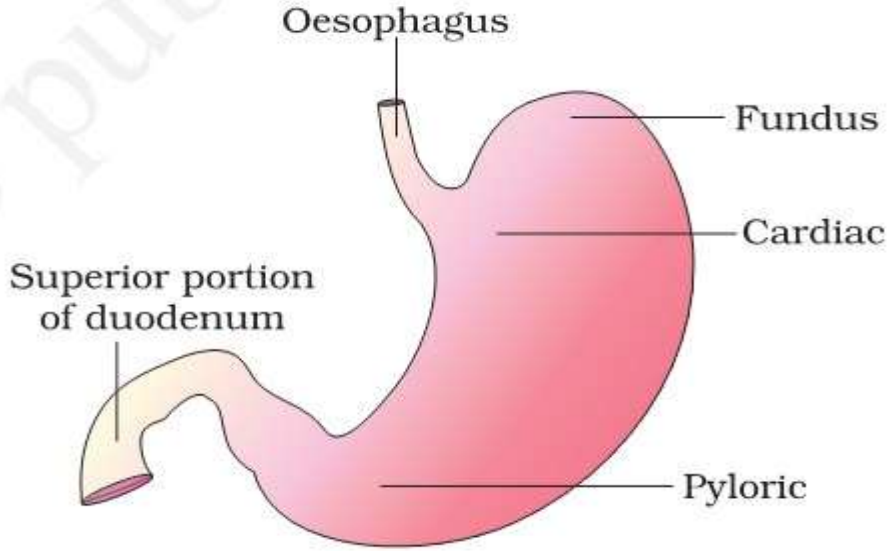
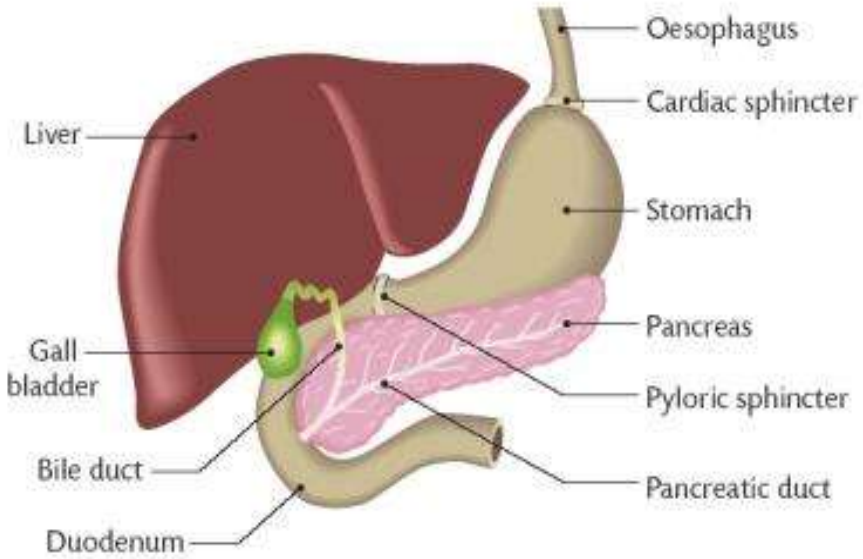


Figure 16.3 Anatomical regions of human stomach

liver

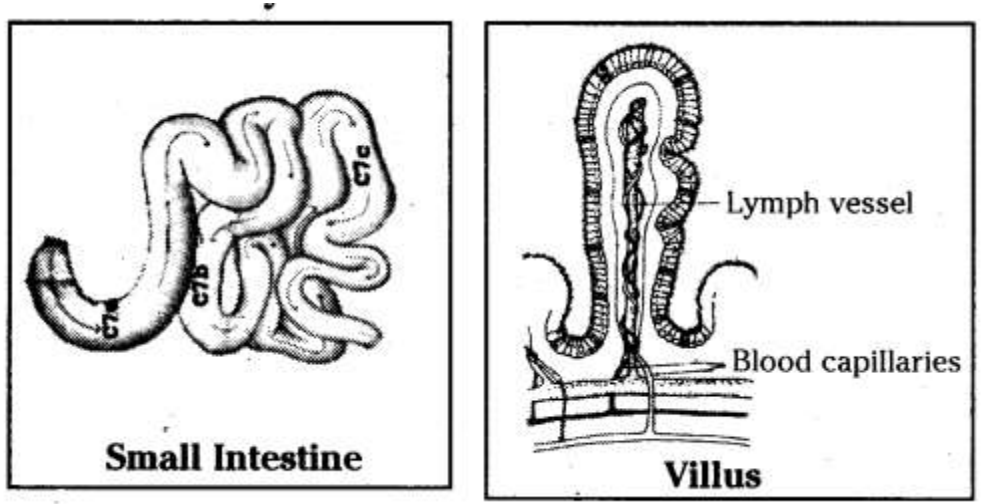


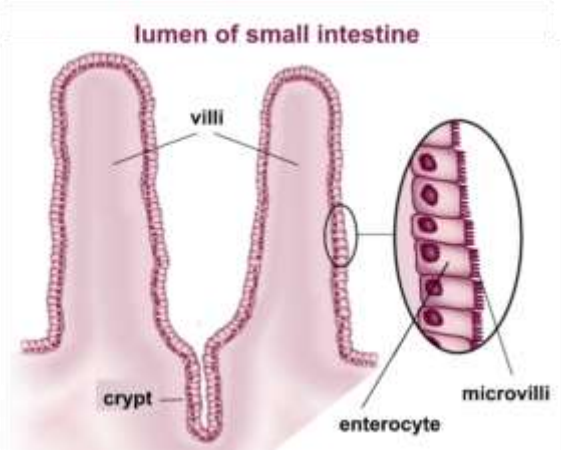
Pancreas

- Pancreas: Pancreas is situated below the stomach. It secretes pancreatic juice which contains many digestive enzymes.Bile and pancreatic juice go to the duodenum through a hepato-pancreatic duct. Bile breaks down fat into smaller particles. This process is called emulsification of fat. After that, the enzyme lipase digests fat into fatty acids and glycerol. Trypsin and chymotrypsin are enzymes which digest protein into amino acids. Complex carbohydrates are digested into glucose. The major part of digestion takes place in the duodenum.No digestion takes place in jejunum. The inner wall in the ileum is projected into numerous finger-like structures; called villi. Villi increase the surface area inside the ileum so that optimum absorption can take place. Moreover, villi also reduce the lumen of the ileum so that food can stay for longer duration in it; for optimum absorption. Digested foo

Small intestine

- Small Intestine: It is a highly coiled tube-like structure. The small intestine is longer than the large intestine but its lumen is smaller than that of the large intestine. The small intestine is divided into three parts, viz. duodenum, jejunum and ileum.

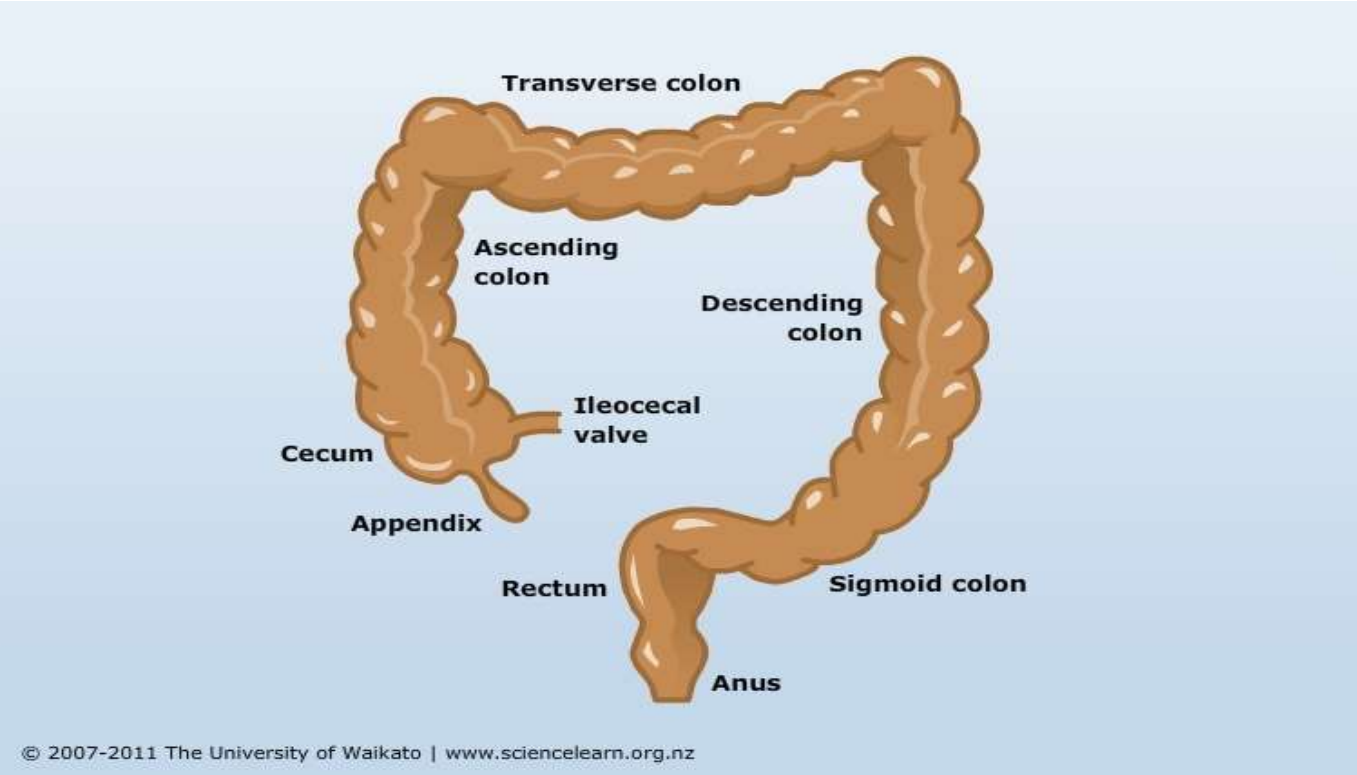




ODM EDUCATIONAL GROUP
Changing your Tomorrow

Large intestine

- Large Intestine: Large intestine is smaller than small intestine. Undigested food goes into the large intestine. Some water and salt are absorbed by the walls of the large intestine. After that, the undigested food goes to the rectum; from where it is expelled out through the anus.



ODM EDUCATIONAL GROUP
Changing your Tomorrow

- https://www.youtube.com/watch?v=zr4onA2k_LY

HOME ASSIGNMENTS

- In box Question - 3,4Pg No- 101 and Exercise Question No- 5, 6

ODM EDUCATIONAL GROUP
Changing your Tomorrow

THANKING YOU

ODM EDUCATIONAL GROUP.

ODM EDUCATIONAL GROUP

Changing your Tomorrow