

- Tongue:
 1. It is a muscular tissue.
 2. Functions-
 - a) Tastes food
 - b) Helps swallow food
 - c) Helps mix food with saliva
 - d) Pushes the food under the teeth to crush and grind
- After the food is decomposed into more simpler units it goes to the stomach through the oesophagus.
- Stomach:
 1. Large organ which expands as soon as food enters it.
 2. The muscular wall of the stomach helps mix the food thoroughly with more digestive juices.
- Gastric glands are present in the stomach and release:
 1. HCl- creates an acidic medium.
 2. Mucus- protects the inner lining of the stomach from the acid.
 3. Pepsin- digests proteins (peptones and peptides)
- A sphincter muscle then releases the food in small amounts to the small intestine.
- Small intestine:
 1. It is the longest part of the alimentary canal.
 2. It is fitted into a compact space due to intensive coiling.
 3. The length of the small intestine varies. Herbivores have a longer small intestine because they eat grass and allow the cellulose to be digested. Carnivores have a shorter small intestine as meat is easier to digest.
 4. Site of complete digestion of carbohydrates, proteins and fats.
- The food coming from the stomach is acidic and has to be made alkaline.
- Bile juice makes the food alkaline by acting on fats.
- Fats are present in the intestine as large globules, thus it is difficult for the enzymes to act on them. Therefore bile salts break down the big globules into smaller ones.
- Pancreatic Juice:
 1. Secreted by pancreas.
 2. Contains enzymes like tripsin(digests proteins) and lipase(breaks down emulsified fat).
- Intestinal Juice:
 1. Secreted by the walls of the small intestine.
 2. The enzymes in it convert:
 - a) Proteins into amino acids.
 - b) Complex carbohydrates into glucose
 - c) Fats into fatty acids and glycerol
- Villi:
 1. Present in the inner lining of the smaller intestine.
 2. They are finger like projections.
 3. Increase the surface area for absorption.
 4. They are richly supplied blood vessels and carry the absorbed food to each and every cell of the body.
- The absorbed food is then used for obtaining energy, building up new tissues and the repair of old tissues.