

Chapter 16

DIGESTIVE SYSTEM

INTESTINE:

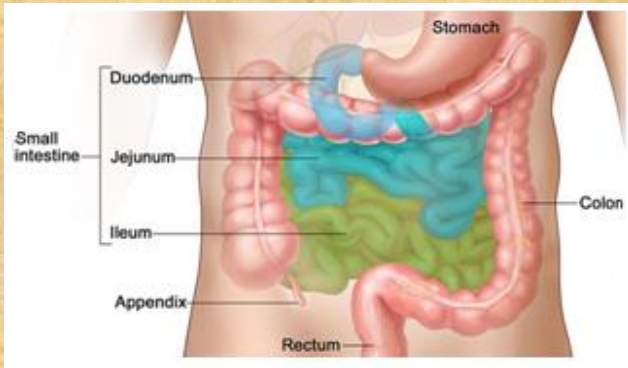


Figure: Intestine

- Intestine is large tube which is initially narrow and later broader.
- Narrow tube is called – **Small Intestine.**
- Broader tube is called – **Large Intestine.**

Small Intestine:

- It is a long tube of about 6 meters in length.
- It is divided in to:
 - Duodenum
 - Jejunum
 - Ileum.

Duodenum:

- It is short and 'C' shaped part.
- It receives the food from stomach through pyloric opening, bile juice, pancreatic juice, through Hepato-pancreatic duct.

Jejunum:

- Middle coiled part.
- Wall is more thick and vascular than ileum.

Ileum:

- Longest highly coiled region.
- Wall is thin and less vascular.

Ileocaecal valve:

- Ileum opens in to the caecum through an opening guarded by Ileocaecal valve.

Plicae circulars or Foldings of Kerckring:

- There are primary circular foldings, which bear true villi as secondary folds.
- These folds increase the surface area and also slow down the movement of food.

Peyer's Patches:

- Small white patches of Lymphoid tissue which occur in the [Intestinal tonsil's] wall of small Intestine.

Large Intestine:

- It is 1.5 meters in length.
- It helps in absorption, production of certain vitamins, formation and Elimination of Faeces.
- It is divided into major 3- parts:
 - (i) Caecum
 - (ii) Colon
 - (iii) Rectum

(i) Caecum:

- Small blind sac.
- Its a beginning part of large Intestine.
- Lodges many symbiotic microorganisms.
- **Vermiform appendix:**

Finger like blind tube which arises from caecum. It's a vestigial.

(ii) Colon:

- It is divided into Ascending, transverse, Descending and Sigmoid parts.
- **Taeniae coli:**
3- longitudinal conspicuous muscle bands of colon.
- **Haustra:**
Outer surface of colon with series of pouches.

(iii) Rectum:

- Straight, expandable muscular tube.
- It is concerned with the temporary storage of the Faeces.

Anal canal: Terminal portion of the Rectum that opens out through Anus.

Anus: It is guarded by 2 – sphincters.

Internal Anal Sphincter – Smooth muscle [Involuntary]

External Anal Sphincter – Skeletal Muscle [Voluntary]

