

Peristalsis allows the food to be mixed with the digestive juices and to move along the gut. When the circular muscles constrict and the longitudinal muscles relax, the wall of the gut becomes narrower and longer (constricts). This pushes the food forward. When the longitudinal muscles constrict, the wall of the gut becomes wider and shorter (dilates) for the food to pass through.

Stomach:

Stomach is a muscular bag, with thick and well developed walls. The stomach has numerous pits which lead to gastric glands that secrete gastric juice. (The role of gastric juice will be further discussed in the upcoming lessons) The stomach is able to store food for a few hours. There is a ring of muscle called the pyloric sphincter located where the stomach joins the small intestine. When this ring relaxes the entrance into the small intestine opens.

The Small Intestine:

The small intestine consists of a u-shaped duodenum, jejunum and the much coiled ileum. In humans the small intestine is 6 metres long. The walls of the small intestine contain glands which secrete digestive enzymes. The small intestine is also adapted to absorb broken molecules of food.

The Large Intestine:

The large intestine is 1.5 metres long. It is much broader than the small intestine. The large intestine consists of the colon and the **rectum**. At the junction between the colon and small intestine are the appendix (no specific function) and caecum (sac-like structure). These two, caecum and appendix have no specific function in humans. Faeces are stored in the rectum, when the rectum contracts the faeces are expelled from the **anus**. The main function of the colon is to absorb water and mineral salts from the undigested food material. No digestion occurs in the large intestine.