

Human Anatomy: Lecture 6

Anatomy of the Digestive system part 2

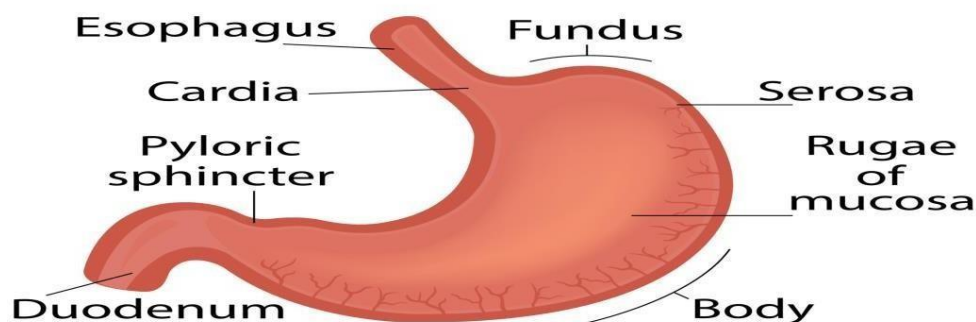
Stomach Anatomy

- Usually “J” shaped, located on the left side of the abdominal cavity, anterior to the spleen between the esophagus and small intestine (duodenum)

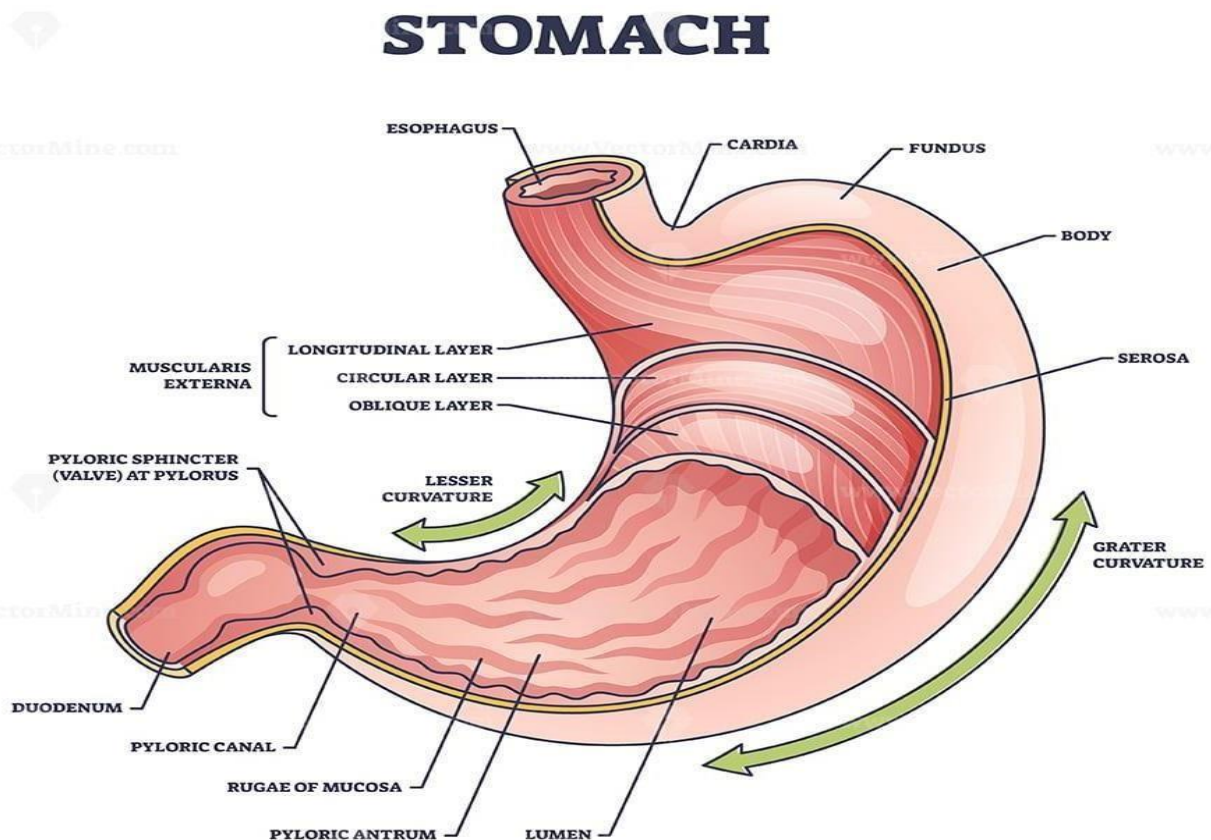
Regions of the stomach

- Cardiac region – near the heart
- Fundus
- Body
- Antrum
- Pylorus: funnel-shaped terminal end
- Food empties into the small intestine at the **pyloric sphincter**

STOMACH STRUCTURE



- Rugae – internal folds of the mucosa
- External regions
- Lesser curvature
- Greater curvature
- Layers of peritoneum attached to the stomach
- Lesser omentum – attaches the lesser curvature to the liver
- Greater omentum – attaches the greater curvature to the posterior body wall



Small Intestine

- The body's major digestive organ roughly 6 meters long
- Muscular tube **extending** from the **pyloric sphincter** to the **ileocecal valve**
- Site of nutrient absorption into the blood

Main parts of the small intestine

1- Duodenum

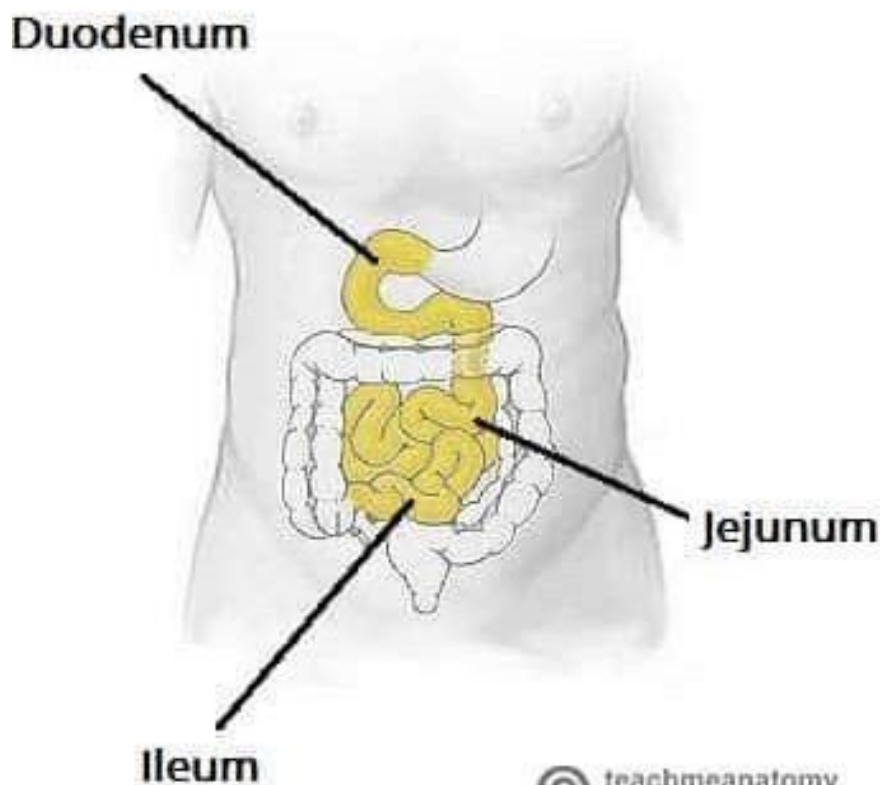
Attached to the stomach

2- Jejunum

Attaches anteriorly to the duodenum

3- Ileum

Extends from jejunum to large intestine



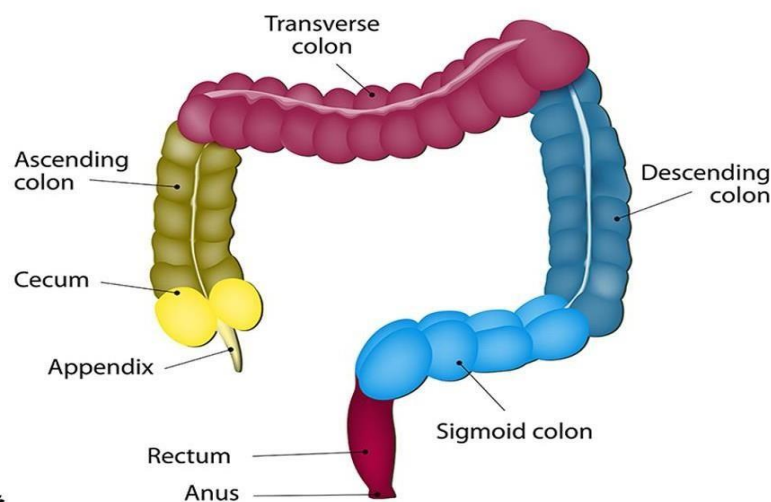
Large Intestine

- (About 1.5 m long)
- Larger in diameter, but shorter than the small intestine
- Frames the internal abdomen

Structures of the Large Intestine

- Cecum – sac like first part of the large intestine
- Vermiform Appendix ,Hangs from the cecum
- Colon (Ascending ,Transverse ,Descending ,S-shaped sigmoidal)
- Rectum: About 15cm long & **Stores waste before egestion**
- Anus (external body opening): **Muscular ring that controls egestion**

Large Intestine



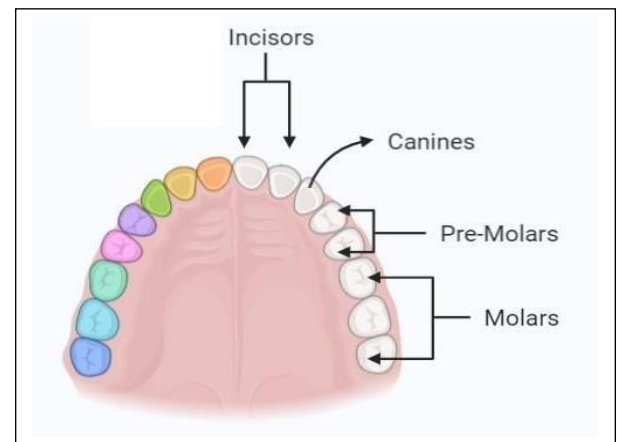
Accessory Digestive Organs

- Teeth
- Salivary glands
- Pancreas
- Liver
- Gall bladder General

Teeth

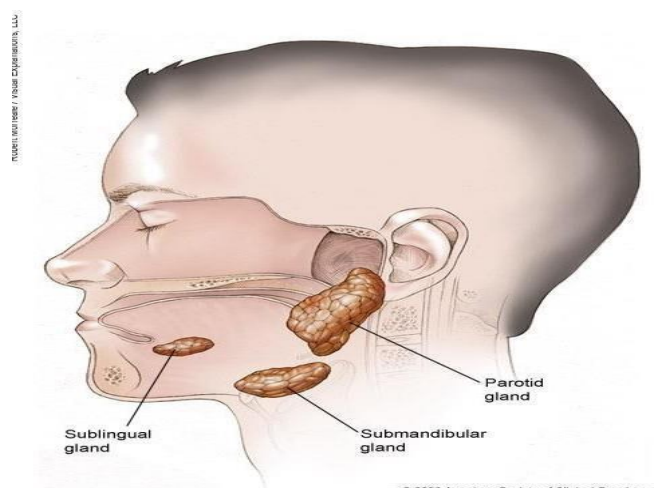
The role is to masticate (chew) food (**Mechanical breakdown**) which include:

- 1- Incisors used for cutting
- 2- Canines used for stabbing and holding
- 3- Premolars
- 4- Molars large surface area used for grinding



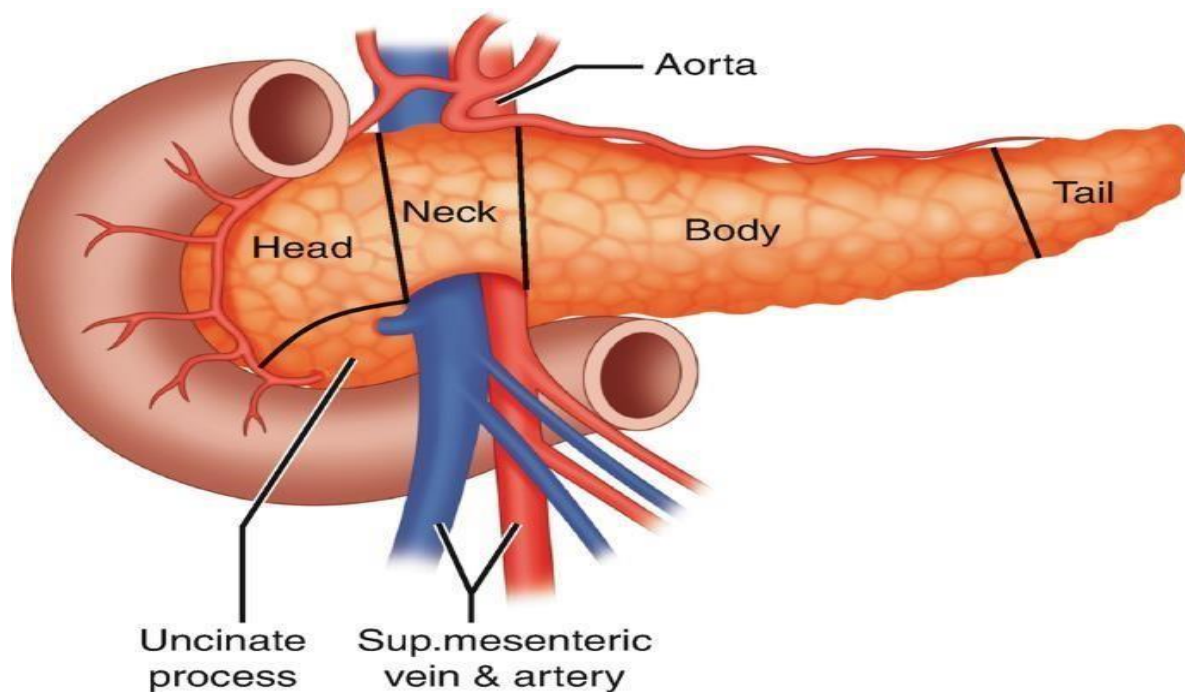
Salivary Glands

- Saliva-producing glands
- **Parotid glands** – located anterior to ears
- **Submandibular glands**
- **Sublingual glands**



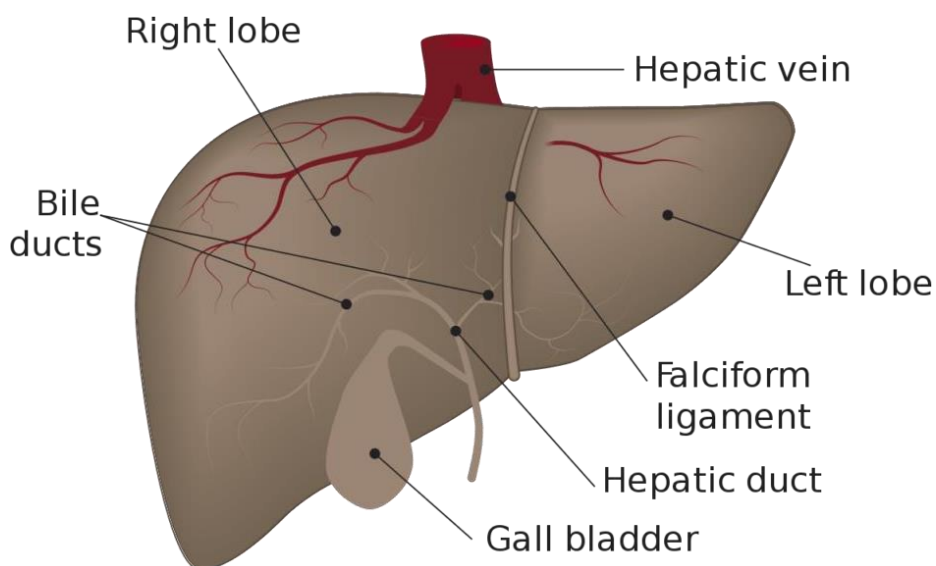
Pancreas

- About 6 inches long, **sits** across the back of the abdomen, **behind the stomach**.
- The head of the pancreas is on the right side of the abdomen and is connected to the duodenum through a small tube called the **pancreatic duct**.
- Produces a wide spectrum of **digestive enzymes** that break down all categories of food
- Enzymes are secreted into the **duodenum**



Liver

- Largest gland in the body reddish-brown in color
- Located on the **right side of the body under the diaphragm**
- Consists of four lobes suspended from the diaphragm and abdominal wall by the falciform ligament
- Left Quadrate
- Caudate Right
- Connected to the gall bladder through the common **hepatic duct**



Gall Bladder

- Sac found in hollow fossa of liver
- Stores bile from the liver by way of the **cystic duct**
- Bile is introduced **into the duodenum in the presence of fatty food**

