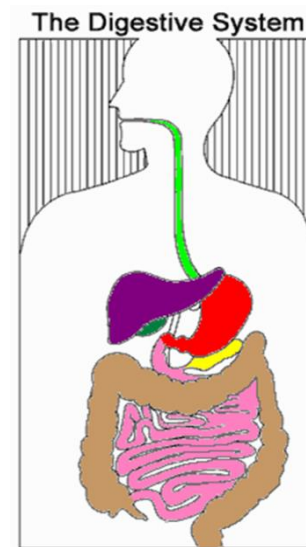


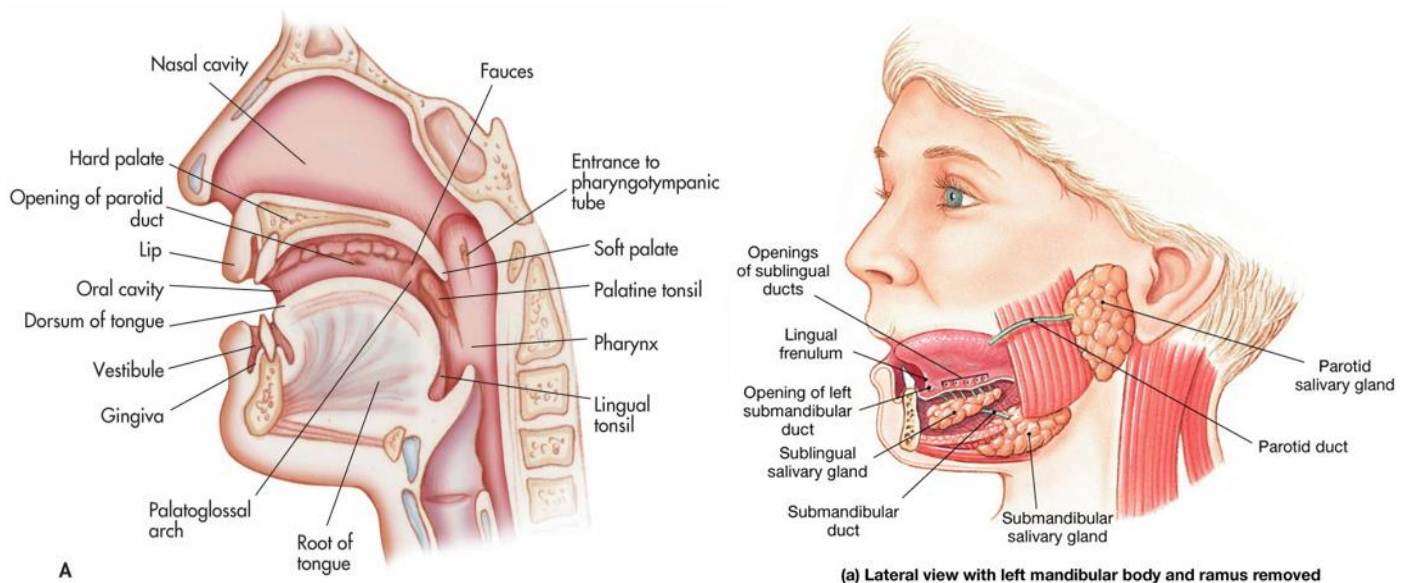
Human Digestive System Anatomy

The digestive system, also called the *gastrointestinal* (GI) system or *alimentary canal*, and several **accessory organs**. Varies in size and structure in several regions:

- mouth
- pharynx (throat)
- esophagus
- stomach
- small intestine
- large intestine
- rectum
- anus.



Mouth (oral cavity): has a roof that separates it from the **nasal cavities**. The roof has two parts: an **anterior hard palate** contains several bones and a **posterior soft palate** contains ends in a finger-shaped projection called the **uvula**.



Salivary Glands: are scattered throughout the oral cavity. Three pairs of large multicellular glands. Secreting saliva which moist food and contain enzymes like amylase that degrade carbohydrates.

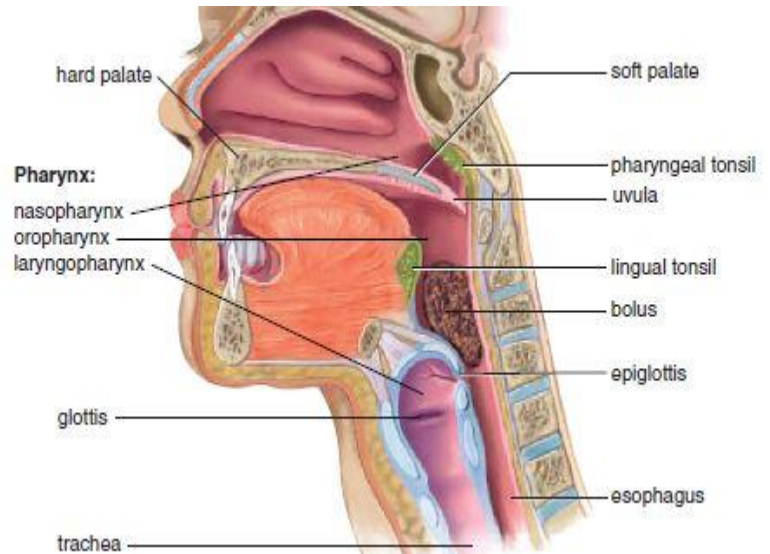
A. Parotid gland: located below the ear

B. Submandibular gland: Below mandible

C. Sublingual gland: Below the tongue

Pharynx: the **food passage** and the **air passage** cross in the **pharynx**. The pharynx has **three parts**:

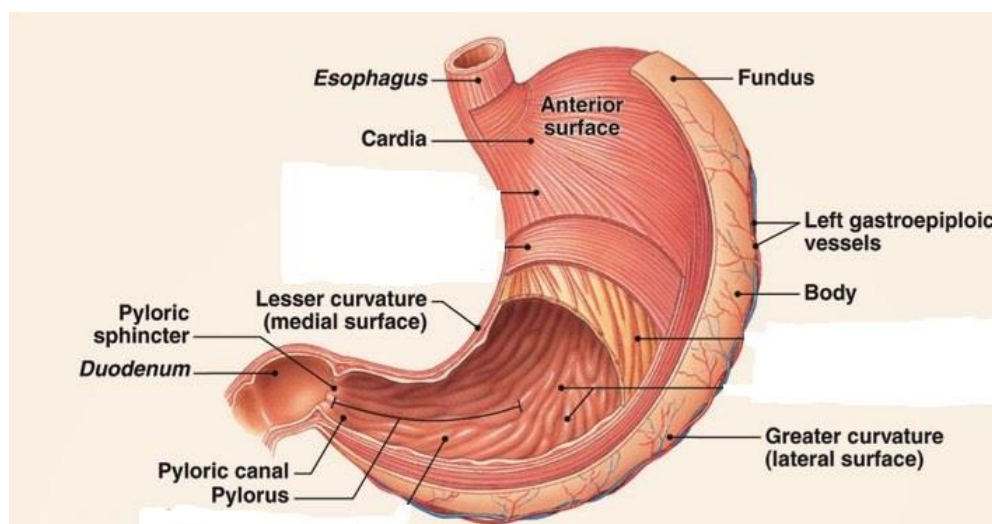
1. The **Nasopharynx:** posterior to the **nasal cavity**, is a passageway **for air**.
2. The **oropharynx:** posterior to the **soft palate**, is a passageway **for both air and food**.
3. The **laryngopharynx:** extends from the oropharynx to the esophagus and is posterior to the larynx. **Is a passageway for food**.



Esophagus: that extends between the pharynx and the stomach. It is **about 25 cm** long and lies in the mediastinum, **anterior to the vertebrae** and **posterior to the trachea**. The esophagus **transports food from the pharynx to the stomach**.

Stomach: is a thick-walled, **J-shaped organ** that lies on the **left side** of the abdominal cavity. The stomach has **four regions**:

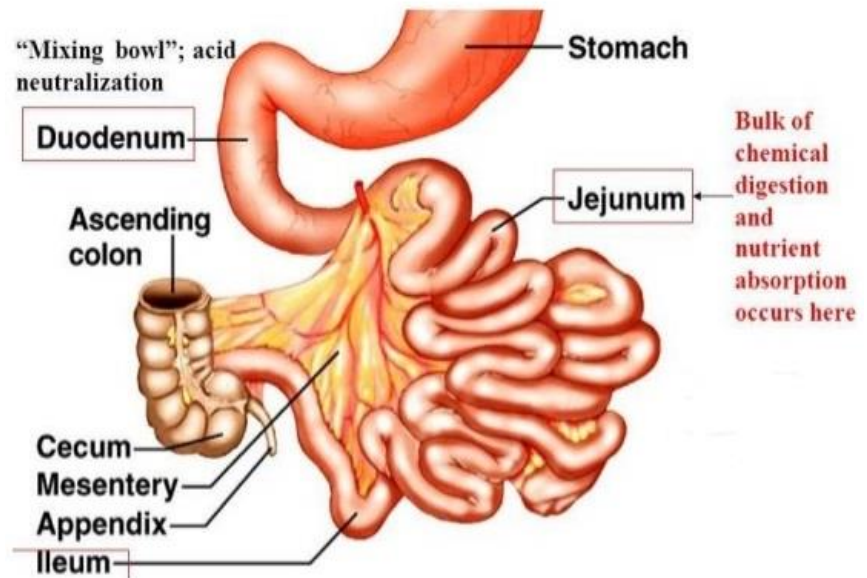
1. **The cardiac region;** is near the **heart**, surrounds the lower **esophageal sphincter** where food enters the stomach. also called the **cardiac sphincter**
2. **The fundus region:** is an expanded portion **superior** to the cardiac region.
3. **The body region:** is the **main part**. Which turns to the right, thus creating a **greater curvature** and a **lesser curvature**.
4. **The pyloric region:** the opening between the stomach and the small intestine, which is surrounded by a thick ring of smooth muscle called the **pyloric sphincter**.



Small Intestine: is extends from the **pyloric sphincter** of the stomach to the **ileocecal valve**.

The small intestine has the following regions:

- **Duodenum** The first region (25 cm) contains **distinctive glands**.
- **Jejunum** The next region (2.5 m) contains **folds and villi**.
- **Ileum** The last (3.5 m) contain fewer **folds and villi** than the jejunum



Large intestine: is extends from the **ileum** to the **anus**. The large intestine has the following regions:

- **Cecum** :pocket at proximal end with **Appendix**
- **Colon:** Have no villi consist from 4 parts
 - 1- **Ascending colon** - on right, between cecum and right colic flexure.
 - 2- **Transverse colon** - horizontal portion.
 - 3- **Descending colon** - left side, between left colic flexure.
 - 4- **Sigmoid colon** – S shape, bend near terminal end
- **Rectum:** Ending at **the anus** - which has internal involuntary sphincter and external voluntary sphincter.

ANATOMY OF THE LARGE INTESTINE

