

Chapter 16

DIGESTIVE SYSTEM

PALATE:

- Palate separates buccal passage from nasal passage
- Make it possible to chew and Breath
- Palate is divided into 2-parts:
 - i. **Hard Palate**
 - ii. **Soft palate**

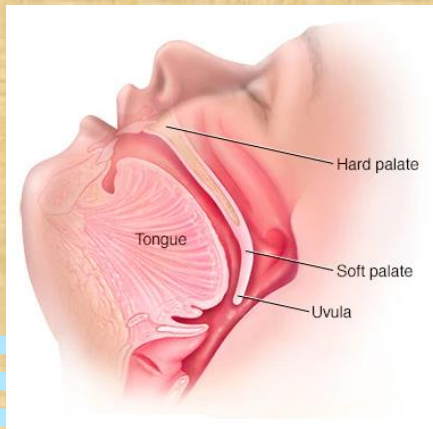


Figure: Palate

Hard Palate:

Anterior rough part – called Palatine rugae.

Soft Palate:

Posterior smooth part which ends with a structure called “Uvula”.

Uvula:

It closes the internal nostrils at the time of swallowing to prevent the movement of food into the nasal passage.

PHARYNX:

- Short funnel shaped common passage for food and air.
- It is divided in to 3- parts.

Narso Pharynx:

- Upper part of the pharynx

- Internal nostril and the Eustachian tubes open into Nasopharynx

Oro Pharynx:

- Middle part of the pharynx

Laryngo pharynx:

- Continuous part of the pharynx.
- It opens into larynx through glottis covered by Epiglottis and also opens into oesophagus through 'Gullet'.

OESOPHAGUS:

- It is thin long tube (Muscular) that lies posterior to the Trachea.
- Commonly called food pipe.
- It extends through neck, thorax, pierce the diaphragm and opens into the stomach.
- Digestive glands are absent, only mucous glands are present.
- Anterior opening is Gullet surrounded by upper oesophageal sphincter of striped muscles.
- Lower opening in to the stomach is cardia surrounded by lower oesophargeal or cardiac sphincter of smooth muscles.
- **Gullet:**
 - Opening of oesophagus.
- **Cricopharygeal sphincter:**
 - Guarded the oesophagus.
 - Internally, it is lined by stratified non-Keratinized squamous epithelium.
- **Oesophageal hiatus:**
 - Oesophagus pierces the diaphragm (opening of diaphragm)

STOMACH:

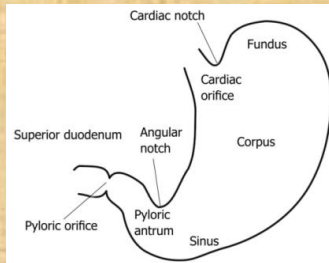


Figure: Stomach

- Empty “J” shape bag, most distensible and widest organ.
- It is located upper left portion of the abdominal cavity below the diaphragm.
- **Gastric Rugae:** Mucosa of stomach folded in to finger like foldings.
- It helps in mechanical churning and chemical digestion of food.
- Gastric rugae disappear when stomach full stretched.
- **Stomach parts:** Cardiac, Fundic, Corpus, Antrum & Pylorus.

Sphincters:

Cardiac sphincter:

- Between oesophagus and stomach. It prevents backward movement of Food.

Pyloric sphincter:

- Posterior opening of stomach.
- Regulate the movement of food from stomach in to oesophagus.

Outer surface of stomach:

Greater curvature – convex border of the stomach.

Lesser curvature – Concave middle border of the stomach.