

Chapter 16

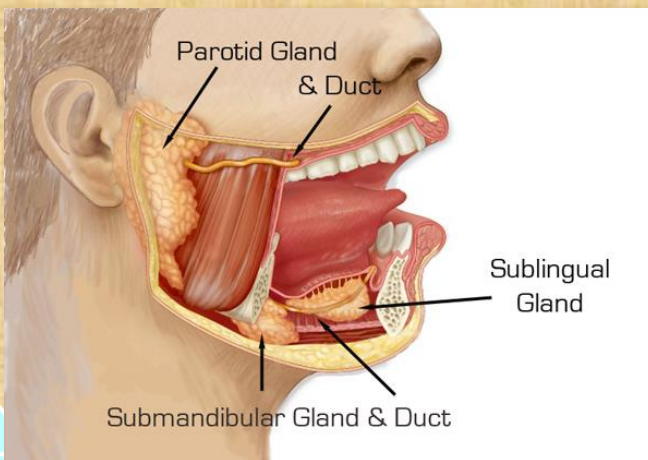
DIGESTIVE SYSTEM

DIGESTIVE GLANDS:

- Digestive glands are salivary glands, Gastric glands, liver, pancreas, Intestinal glands.

Salivary glands: Saliva is produced by 3 – pairs of salivary glands.

- There are compound, tubulo – alveolar glands.



Parotid glands: Largest glands, One pair

- Located Interior and exterior to the ears.
- From each gland stenson's duct arise.
- Opens in to the vestibule opposite to the second maxillary molar tooth.

Sub-Lingual glands:

- Smallest gland which located beneath tongue.
- Sub lingual ducts are **Ducts of Rivinus**
(or) **Ducts of Bartholin.**

Sub- Maxillary glands:

Found at the angles of the lower Jaw from each gland wharton's Duct arise and opens below the tongue, Lateral to the lingual Frenulum, behind the incisors.

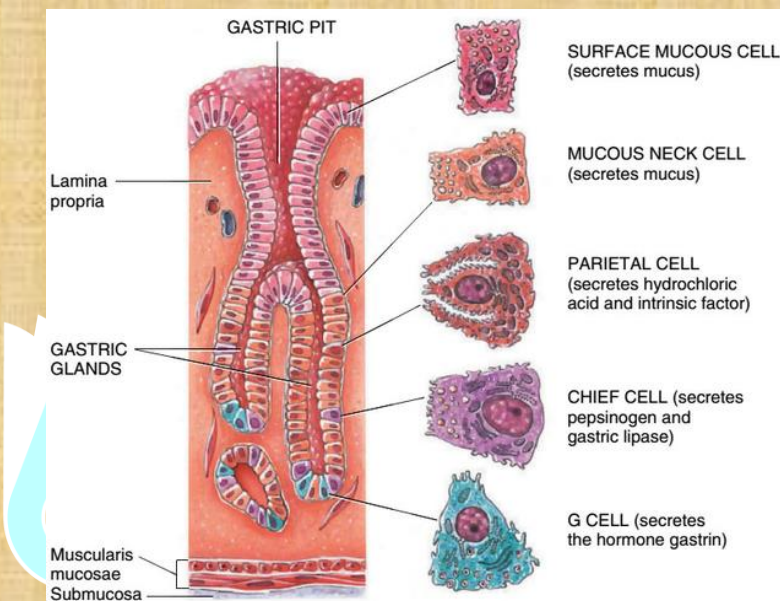
- 3- pairs of salivary glands produce salivary juice pH 6.7 contains 99.5 % of H₂O.
- Serosus cells secrete salivary amylase / ptyalin.

- Mucous cells secrete Mucin.
- **Strach** – Digesting salivary amylose.
- **Lysozyme, Thiocyanates** – Anti Microbial Agents
- Salivation is stimulated by Cranial nerves VII & IX.

Factors:

- Smell, Sight, Sound or thought of Food may also stimulate secretion of saliva.

GASTRIC GLAND:



- Epithelial cells of mucosa extend down into the lamina propria, where they form columns of secretory cells.
- Gastric glands contain 3 – types of Exocrine gland cells.

1) Mucous cells – Neck cells:

- Secrete mucus.

2) Parietal cells – Oxyntic cells:

- Secrete Hydrochloric acid [HCL].
- Castle's intrinsic factor – Needed for absorption of vitamin B₁₂.

3) Chief cells: Peptic cells – Zymogen cells:

- Secrete pepsinogen, prorennin (in infants).
- Gastric Lipase.

- The secretion of these cells constitute Gastric juice pH – 1.5 to 3.5.
- Gastric juice secretes 2 Ltrs per day.
- These cells present based on location are 3 – types.

1) Cardiac Glands

2) Fundic Glands

3) Pyloric Glands

G - Cells:

- Present in antrum part of stomach.
- Secretes Hormone – Gastrin.

