

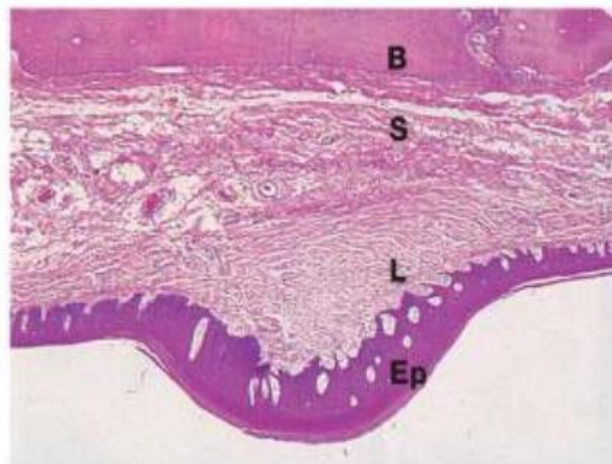
Histology of the oral cavity

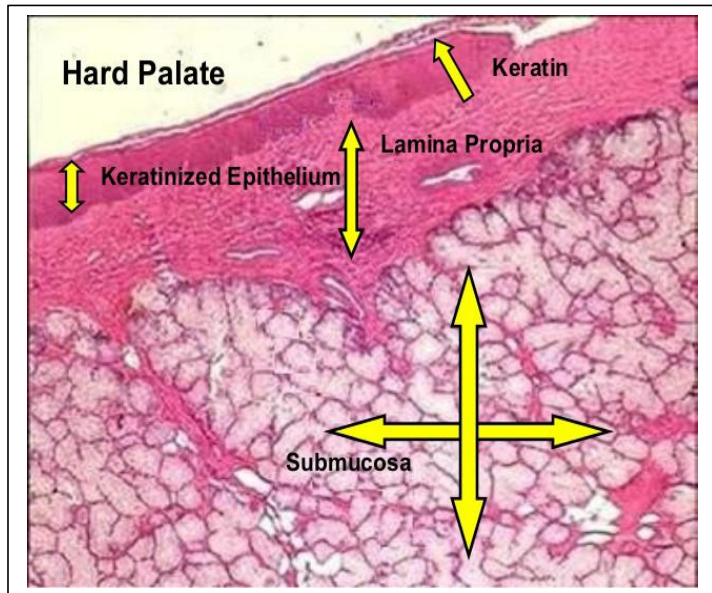
ORAL MUCOSA

- All of the oral mucosa is made up of a **thick stratified squamous epithelium**, supported by a **lamina propria**. The epithelium is **thick** because the epithelial lining of the oral cavity is subject to a lot of wear and tear.
- **In mobile areas**, such as the soft palate, underside of the tongue, floor of the mouth, and mucosal surfaces of the cheeks and lips, the epithelium is **not keratinised**.
- In other areas, such as the gums (gingivae), hard palate, and most of the upper surface of the tongue, the epithelium is **keratinised**.
- **Underneath** the oral mucosa, there is a **tough collagenous submucosal layer**, with accessory salivary glands, **except** where the oral mucosa lies over bone, where the submucosa is thin.

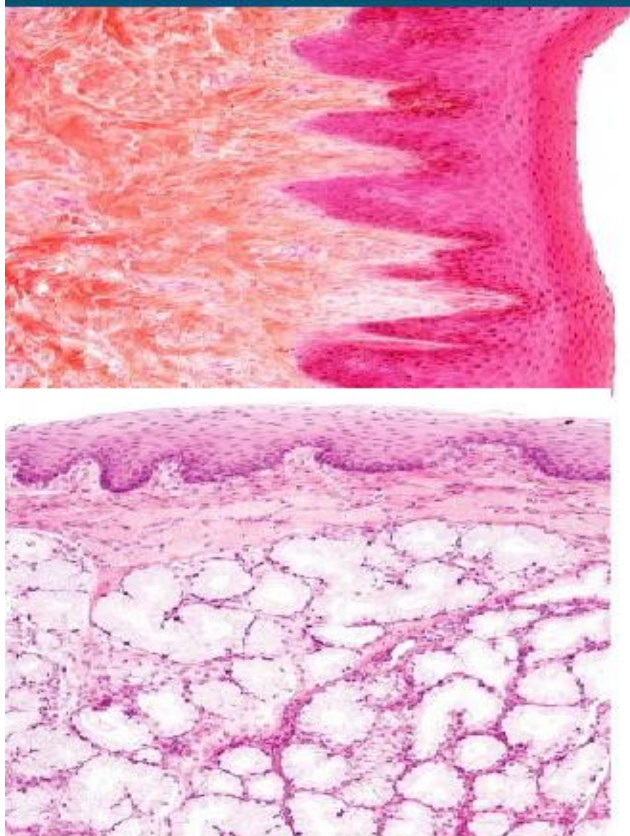
HISTOLOGY OF THE HARD PALATE :

- the palate is covered by a thick stratified squamous epithelium **Ep** supported by densely collagenous lamina propria **L**.
- The mucosa of the hard palate is bound down to the underlying bone **B** by relatively dense submucosal tissue **S** containing a few accessory salivary glands.





HISTOLOGIC STRUCTURE OF THE HARD AND SOFT PALATE



Medical Faculty of Udayana University.

Separate the oral and nasal cavity

- **Hard Palate**

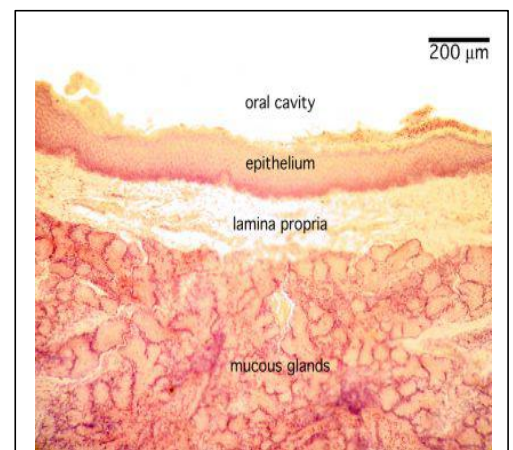
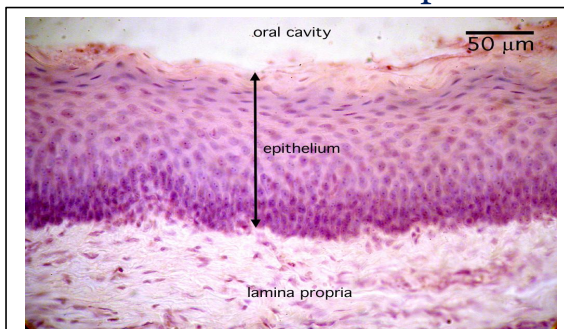
- Keratinized St. Sq. Epith.
- Dense. Irreg. Coll. C.T
- Rests on bony tissue

- **Soft Palate**

- Non-keratinized St. Sq. Epith
- Irreg. Coll. C.T.
- Minor Salivary Glands

- **Uvula ~ Soft Palate**

See these sections of Soft palate histology ;



HISTOLOGY OF THE LIPS

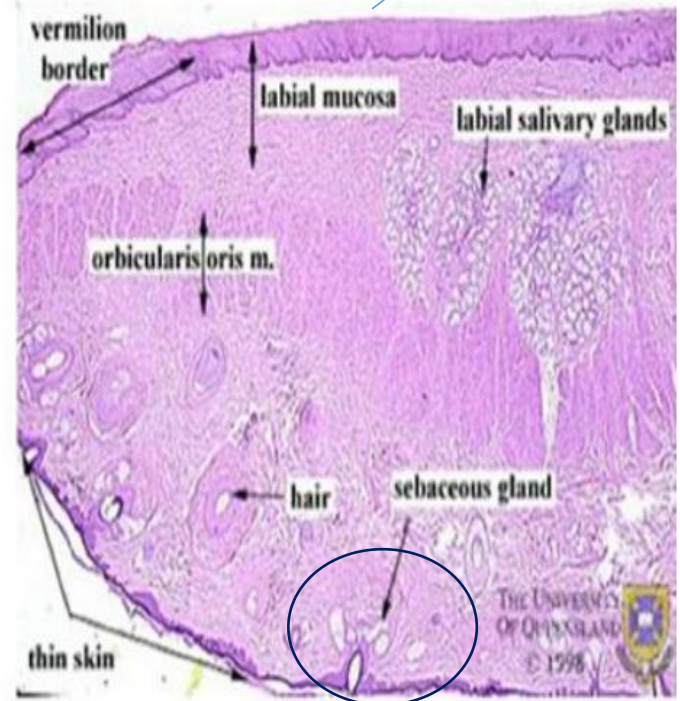
Core of lip is

- skeletal muscle embedded in fibroelastic C.T.

Each lip has 3 surfaces:

- Cutaneous surface: covered by skin with hair follicles & glands.
- Red surface: covered by modified skin. St. squamous non-keratinized which has **thick stratum lucidum**, making it more translucent. Its dermis is rich in vessels that's why appear red
- Oral surface: S.Q NON- k . Then lamina propria. Labial salivary glands are present in L.P

Oral surface
Notice it is of **S.Q Non-k**



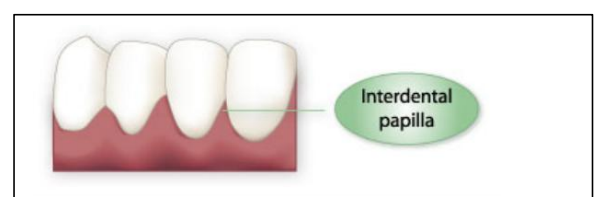
- Type of gland found within the cutaneous surface : Sebaceous glands غدة مفرزة للدهون

GINGIVAE

- consist of mucosal tissue that covers the **alveolar processes of the maxilla and mandible** and ends at the **neck** of each tooth.
- The gingivae functions to cover the alveolar bone and surround the teeth. the gingiva is the only clinically visible component of the periodontium inside the mouth.

Healthy gingiva will appear **pink** in colour

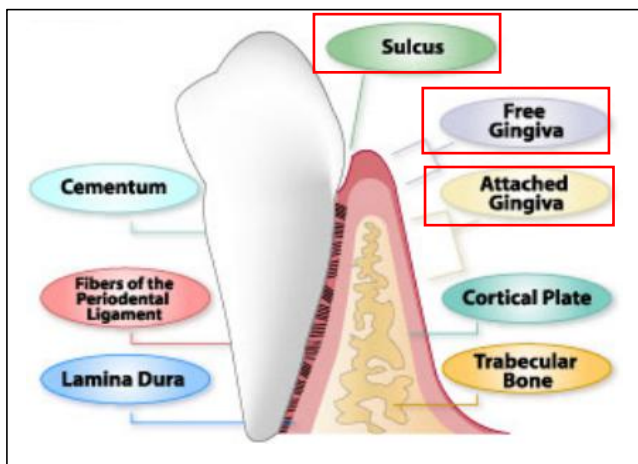
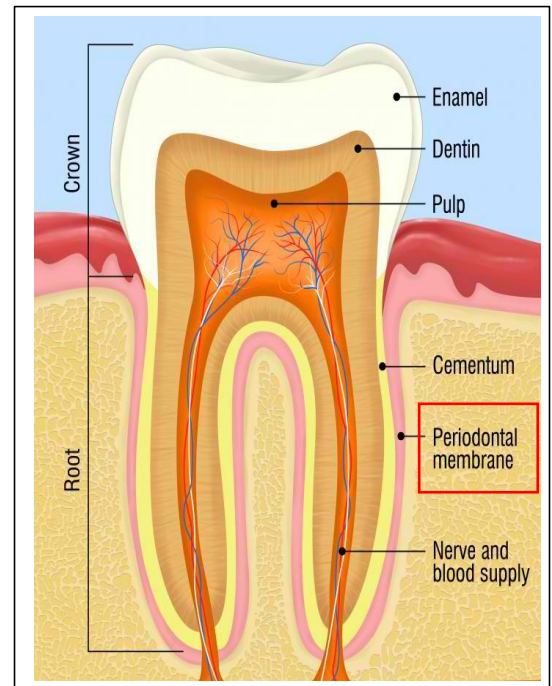
- The gingival margin follows a **serrated** course across the dentition due to the **interdental papillae**, which fill the interdental spaces beneath the tooth contacts.



- Notice the **periodontal membrane**;covering the root of the tooth assists in tooth fixation in its socket .

- There are 2 types (2 portions) of gingiva :

- (1) **Free** gingiva .
- (2) **Attached** gingiva .



- The free gingiva** (reflecting medially)surrounds the tooth and creates a **cuff or collar** of gingiva measured from the margin of the attached gingiva extending coronally about 1.5mm.

- The inner surface of the free gingiva (next to the tooth) forms the gingival wall of the **sulcus**. The healthy patient will present with a sulcus measuring approximately 1-3mm in depth .

HISTOLOGY OF THE GINGIVA :

- the tissue on the **outer** surface of the **free** gingiva, the papillae and the attached gingiva is **stratified squamous keratinized epithelium**.

- The **inner** surface of the **free** gingival margin (**sulcus**) is **stratified squamous non keratinized epithelium**.

The gingival connective tissue consists of a **dense network of collagen fibers**.

- Collagen fibers function to **provide firmness to the gingiva and to attach the gingiva to the underlying cementum and alveolar bone**. The connective tissue of the gingiva is also rich in **blood, lymphatic vessels, nerves** .

