

University of Diyala
College of Vet. Medicine
Department of Anatomy and Histology
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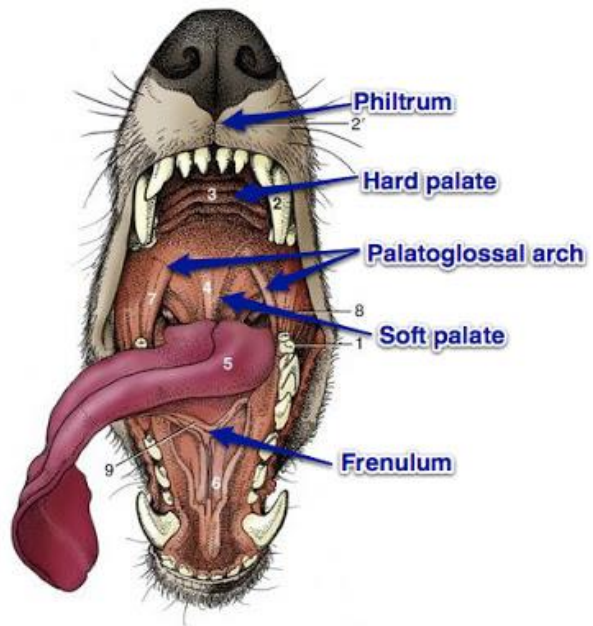
Anatomy of Digestive system (2)

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Anatomy of Lips

- They are two musculo-membranous folds which are surrounded the orifice of the mouth cavity
- its 2 parts (upper and lower lips), and meet in left and right commissures.
- Each lip is consisting of:-
 1. Skin (external surface)
 2. Muscular layer (orbicularis oris).
 3. Mucous membrane of the mouth cavity (internal surface)

- The lips have few numbers of tactile hairs on its skin.
- - The upper lip in small ruminant (sheep and goat) , and in dog and cat have median groove or furrow called *philtrum*, while in the large ruminant the upper lip has *nasolabial plate*.
- -The lower lip in all animals have round prominence called *chin* or *menta*.



Cheek

It is amusculo-membranous wall, formed the side wall of the mouth cavity and continuous cranially with the lips.

It formed from :

1. Skin.
2. Muscular layer: buccinator muscle,
 zygomaticus muscle,
 buccal salivary glands.
3. Mucous membrane of mouth cavity.

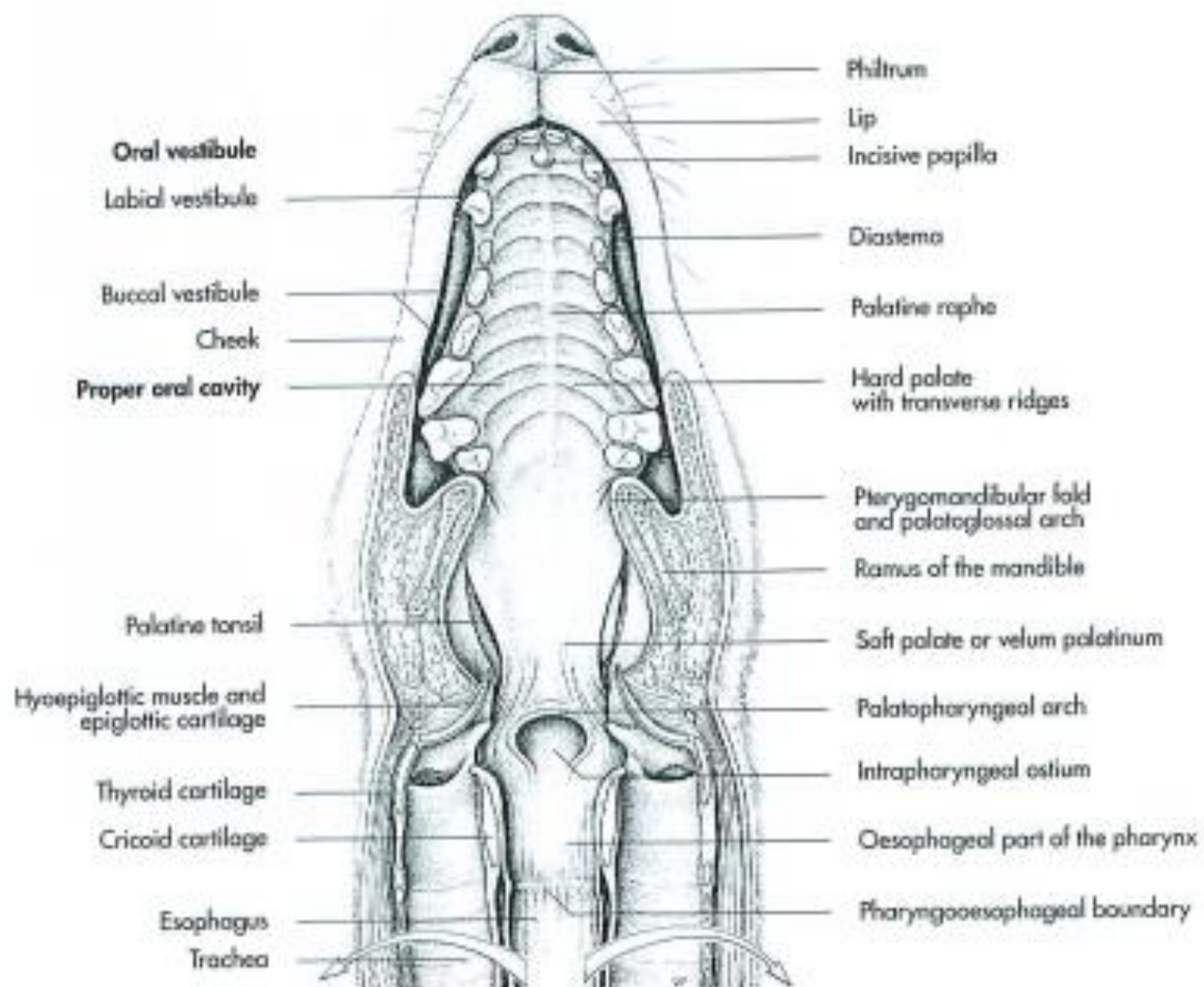
Palate

The palate is divided into two parts, osseous palate(hard) and soft palate.

Hard palate

It forms the roof of the mouth cavity and is continuous caudally with the soft palate.

- It is formed from:-
 1. Bony part: Palatine process of maxillary bone,
Palatine bone,
Palatine process of incisive bone.
 2. Venous plexus (air conditioner – thermoregulation–).
 3. Mucous membrane of mouth cavity.



Comparative of hard palate in some species:

- **Horse:-**

1. It has longitudinal raphe which is divided into two equal parts.
2. It has about 18 transverse curved ridges. Extend the whole length of the palate

- **Ruminant:-**

1. It has longitudinal raphe.
2. It has serrated transverse ridges. Extend only 2/3rds of the length of the palate, but in sheep not serrated

- **Dog:-**

1. It has longitudinal crest.
2. It has striated transverse ridges.



Soft palate

it is musculo-membranous fold which is separated digestive and respiratory passage.

- The cranial end of the soft palate is attached with hard palate end while the caudal end is free.

The soft palate is attached with tongue by the palatoglossal arch and attached with the pharynx by palatopharyngeal arch

- The soft palate consists of:
 1. Mucous membrane of the mouth cavity (covered the ventral surface of soft palate
 2. Thick layer of palatine salivary gland.
 3. Aponeurosis.
 4. Muscular layer.
 5. Mucous membrane of respiratory system (covered the dorsal surface of soft palate).
- **Muscle of soft palate :**
 1. Palatine muscle.
 2. Levator veli palatine muscle.
 3. Tensor veli palatine muscle.
- The soft palate in horse, so long is about 15 cm in length.