

# Oral cavity, pharynx

Dr. L. Kiss Anna

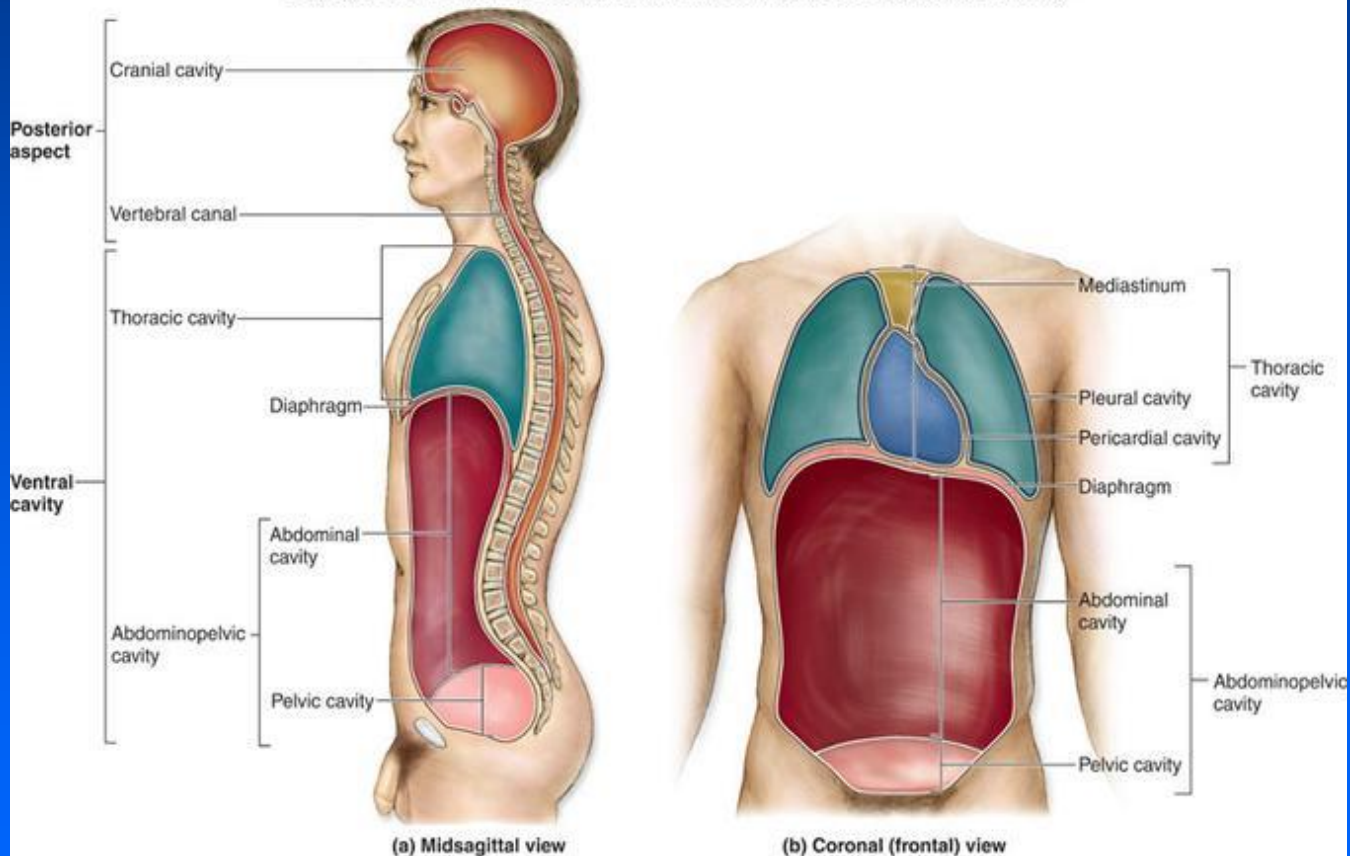
Department of Anatomy, Histology and  
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Semmelweis University

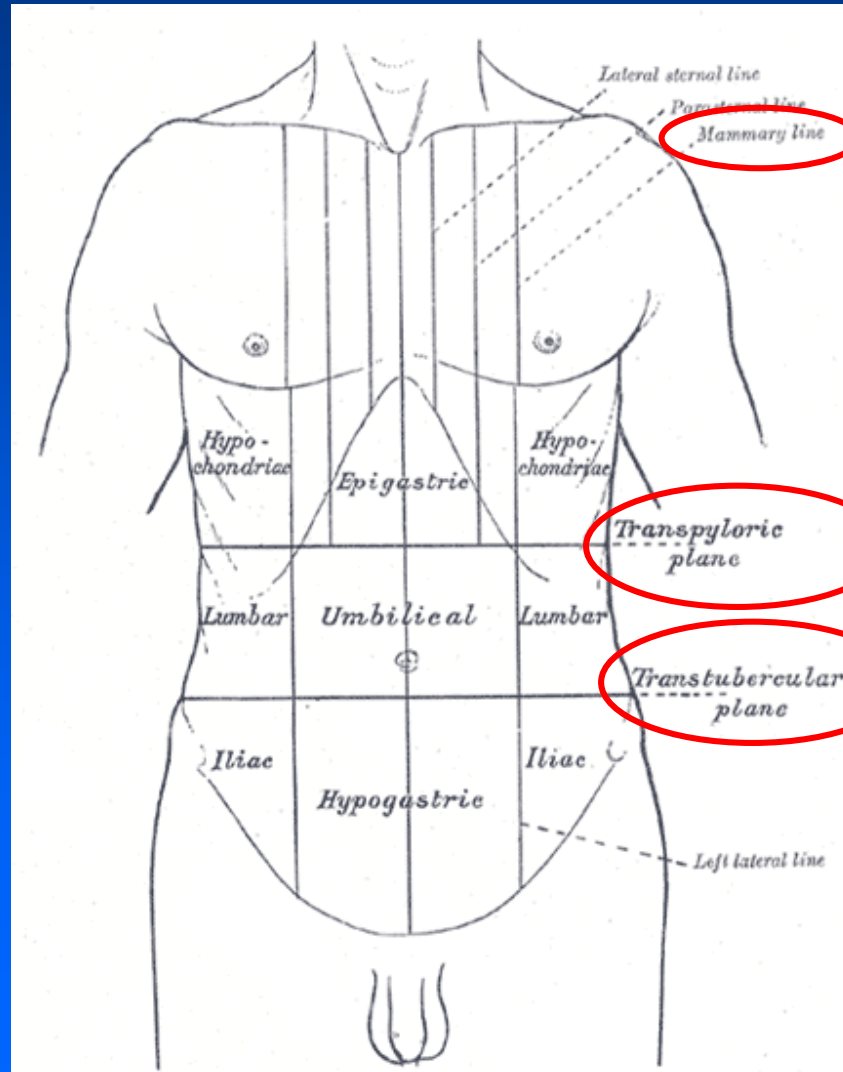
2021.

# Parts of the body

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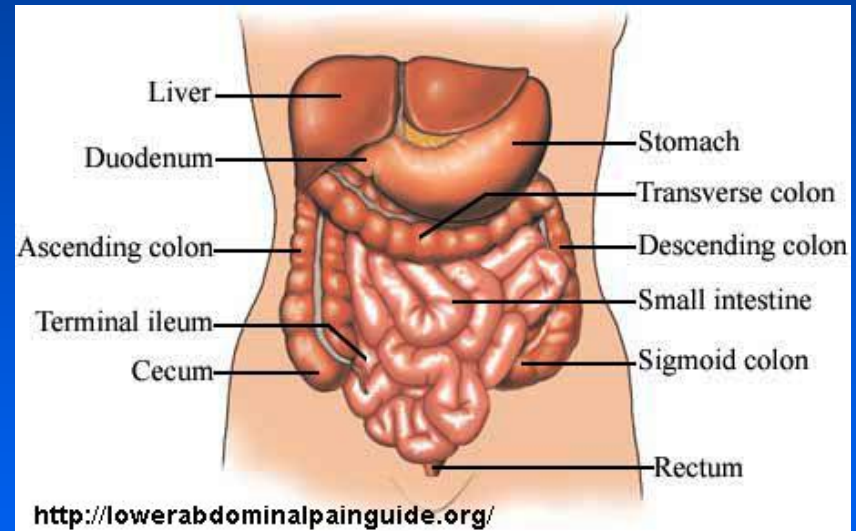
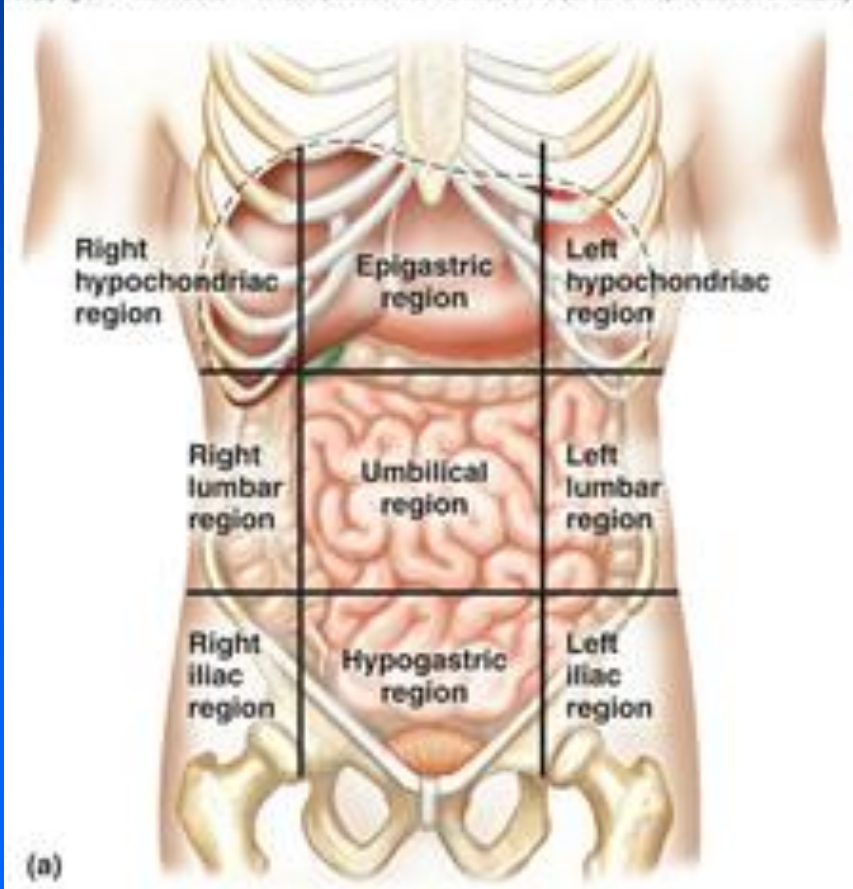
# Regions



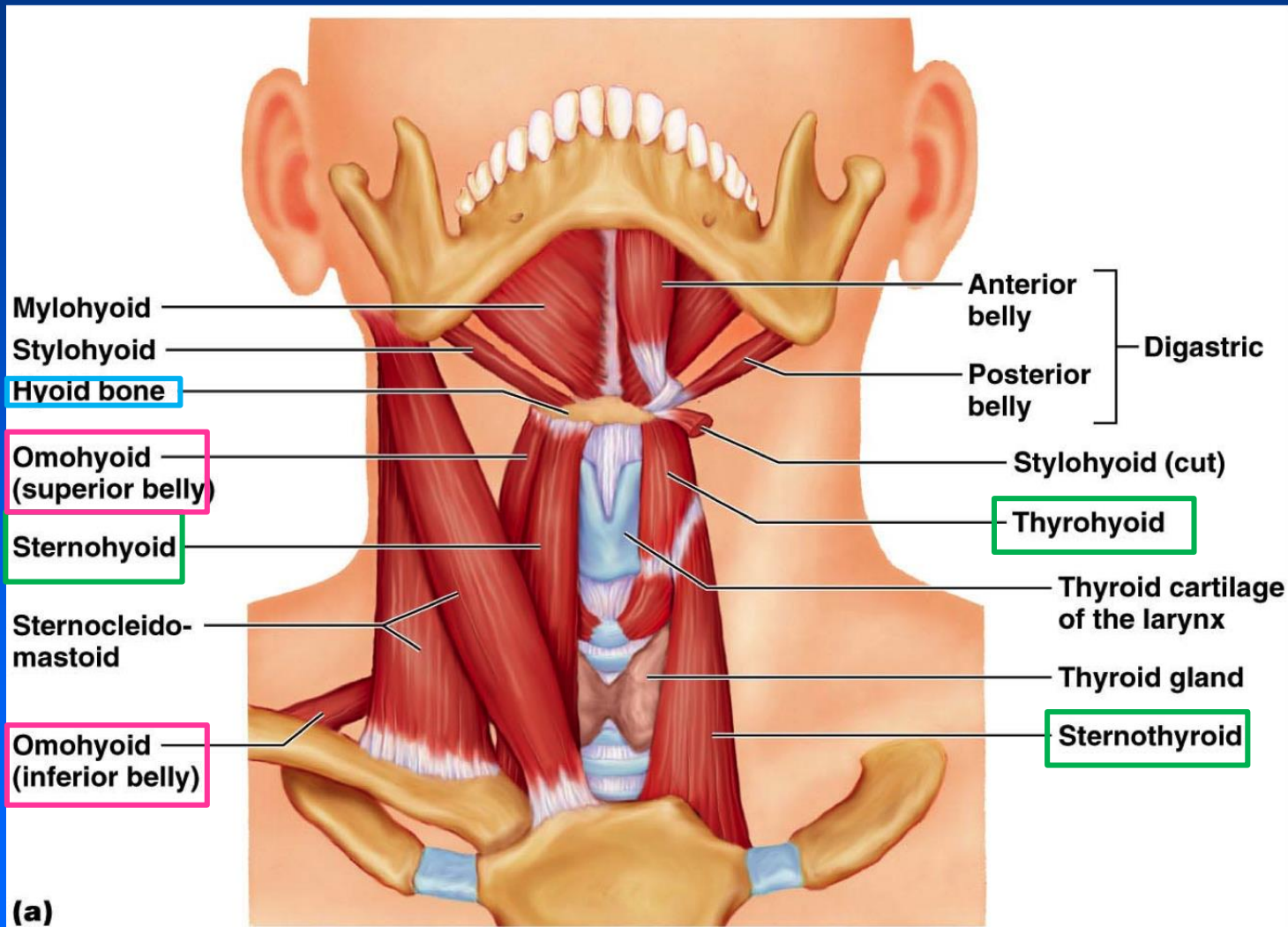
Th12/L1

# Regions

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# Supra- and infrahyoid muscles



# Cervical trigone

Submental trigone: lymph nodes

Submandibular trigone: submandibular gland

lateral groove of the tongue (nerves)

Carotid trigone: carotid sheath (common carotid artery

internal jugular vein

vagus nerve)

Supraclavicular trigone: 2 parts:

omotrpezoid trigone: cervical plexus

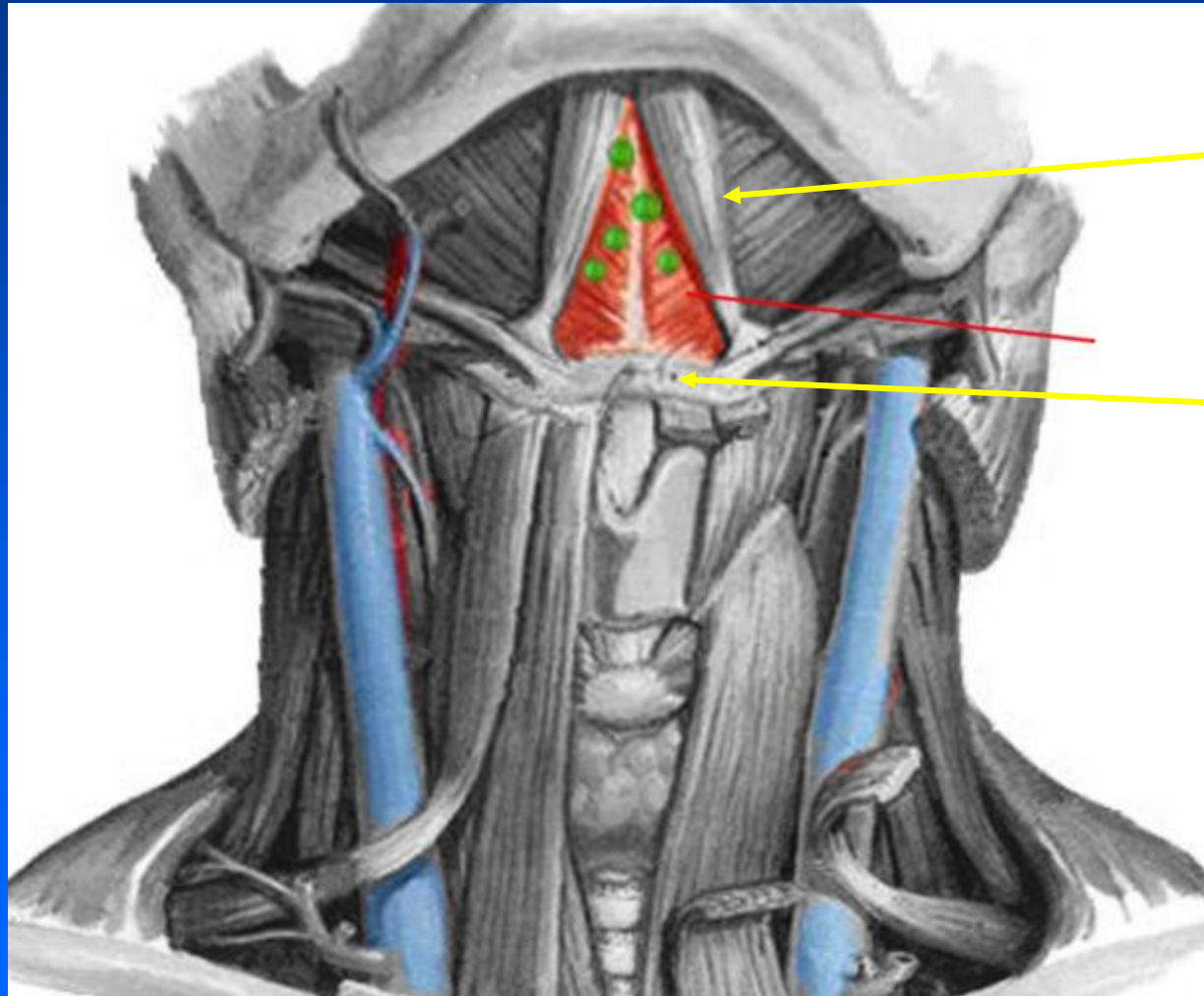
omoclaviculer trigone:

brachial plexus

subclavian art.

apex of the lung

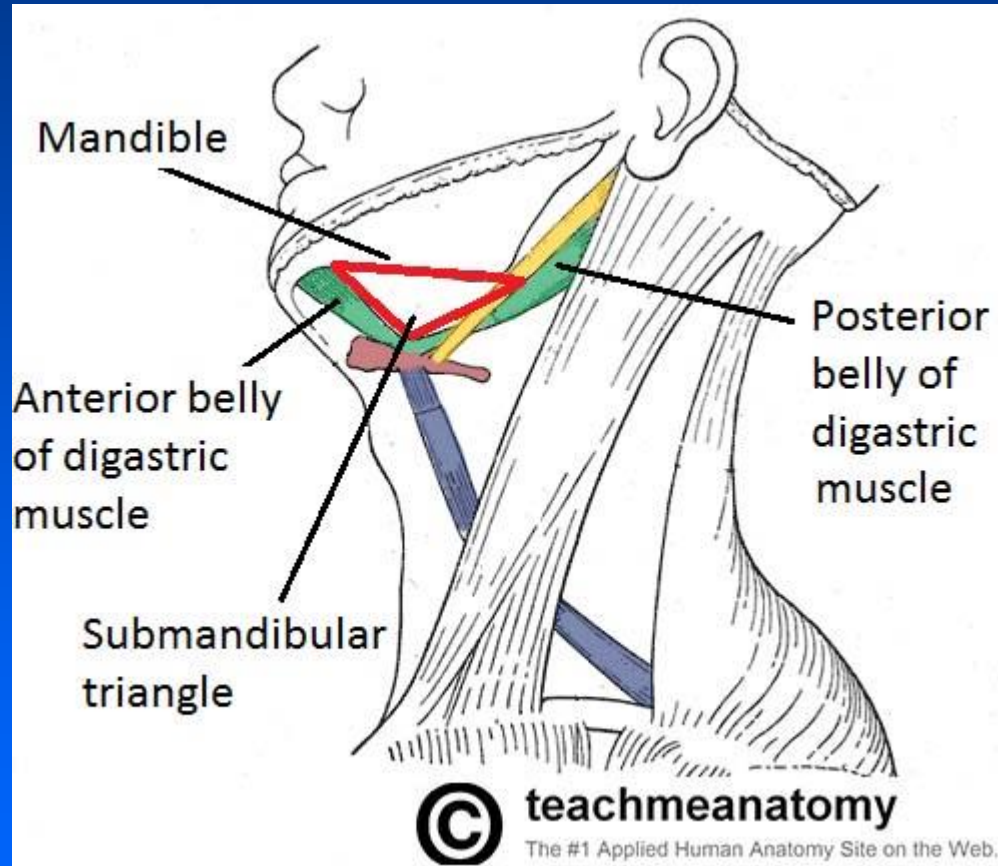
# Submental trigone



ant. belly of the digastric m.

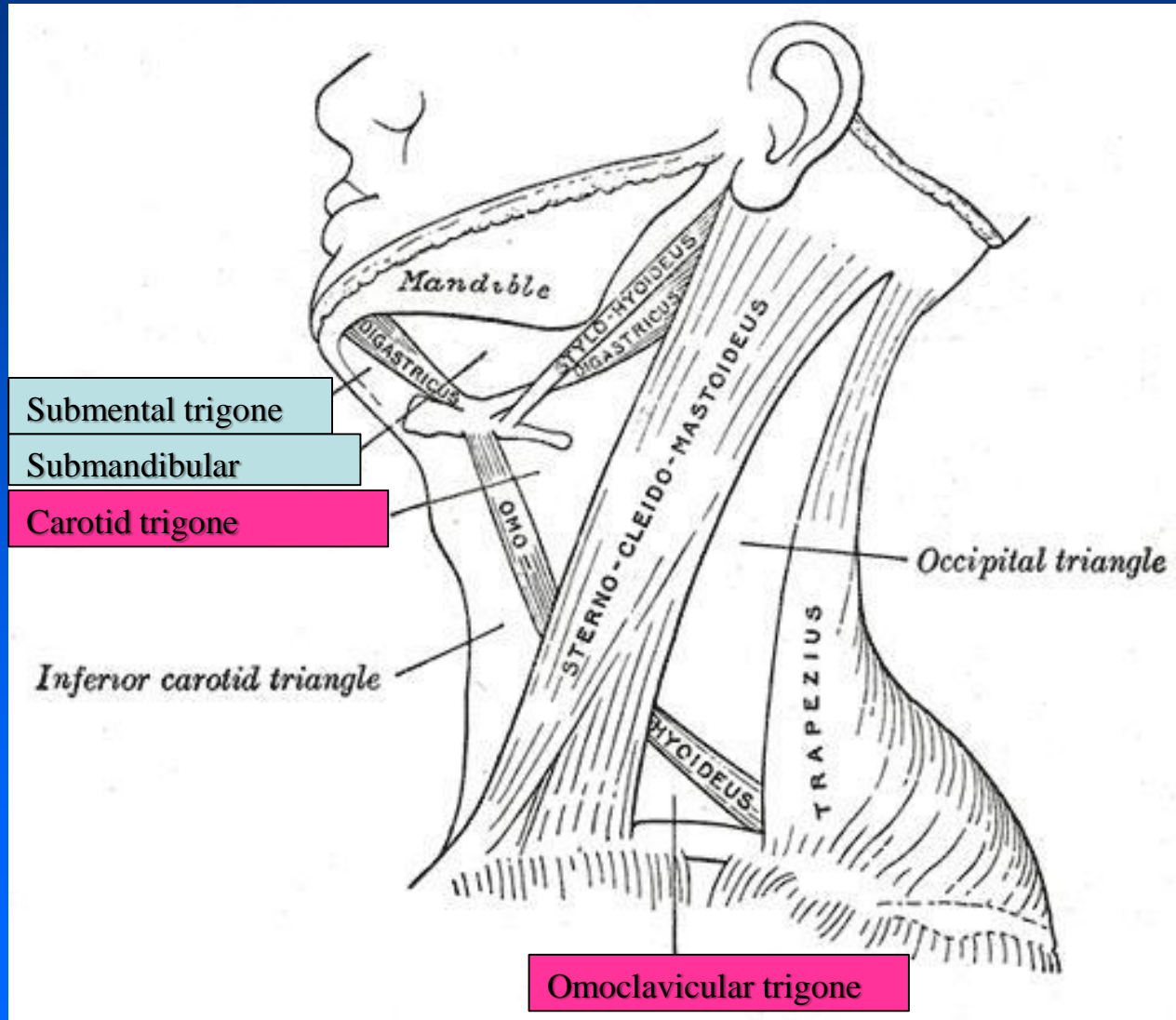
hyoid bone

# Submandibular trigone

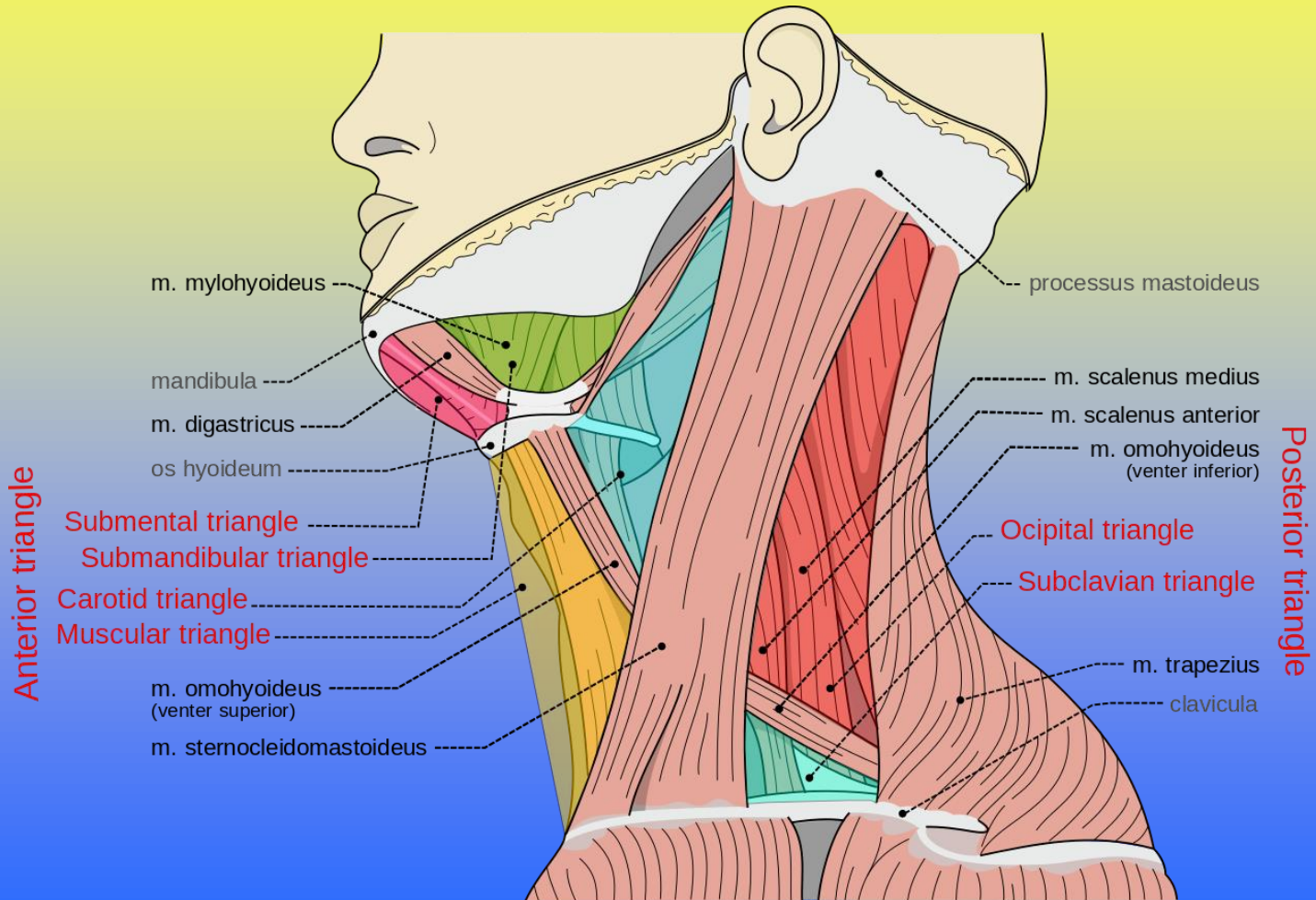




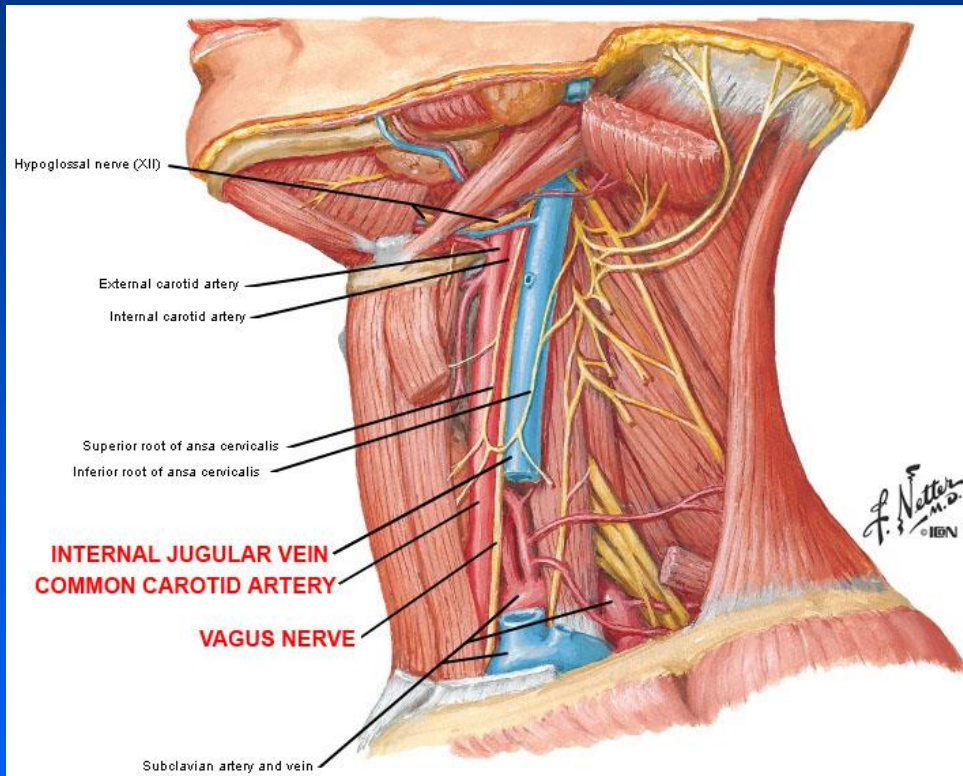
# Cervical trigone



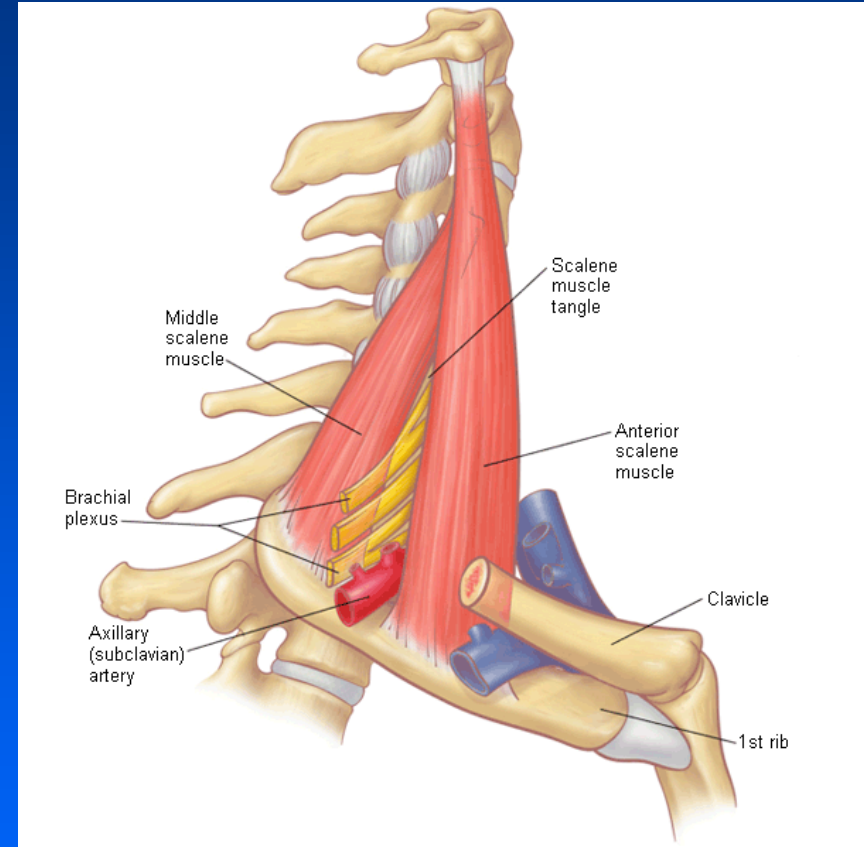
# Cervical trigones



# Cervical trigones



**carotid trigone**



**omoclavicular trigone:**  
**brachial plexus**  
**subclavian art. and vein.**  
**apex of the lung**

# Oral cavity:

Anterior border: lips

Roof: hard and soft palate

Floor: mylohyoid muscle

Lateral border: cheeks (buccinator muscle)

Isthmus faucium: exit toward the pharynx

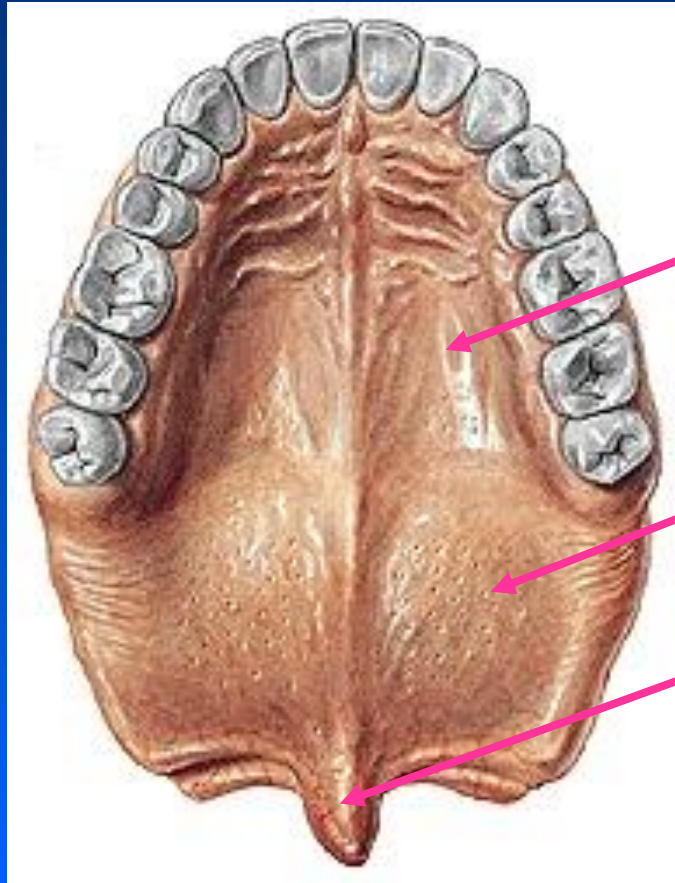
2 parts: oral cavity proper+vestibulum

*Vestibulum*: slitlike space between the lips, cheeks and teeth

Oral cavity proper: tongue  
teeth

salivary glands



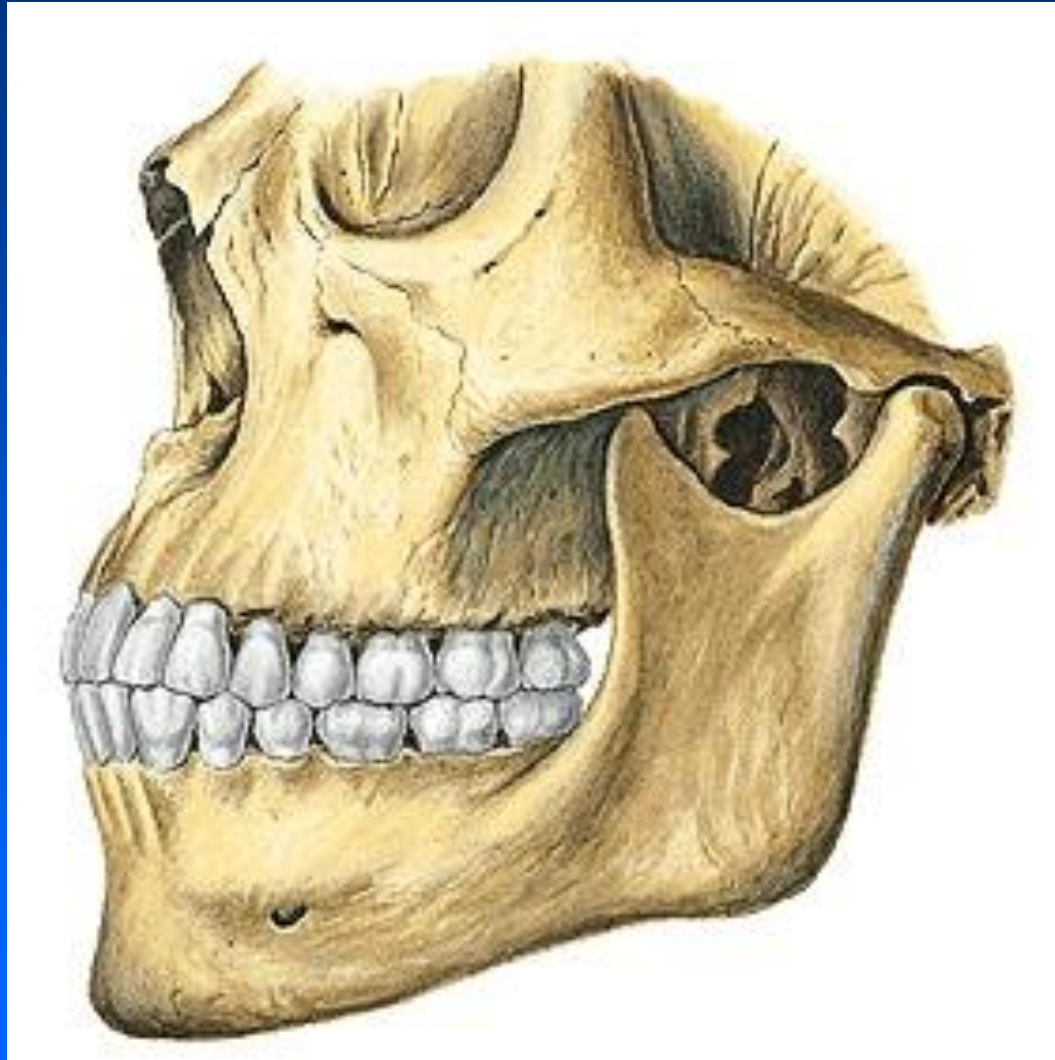


hard palate

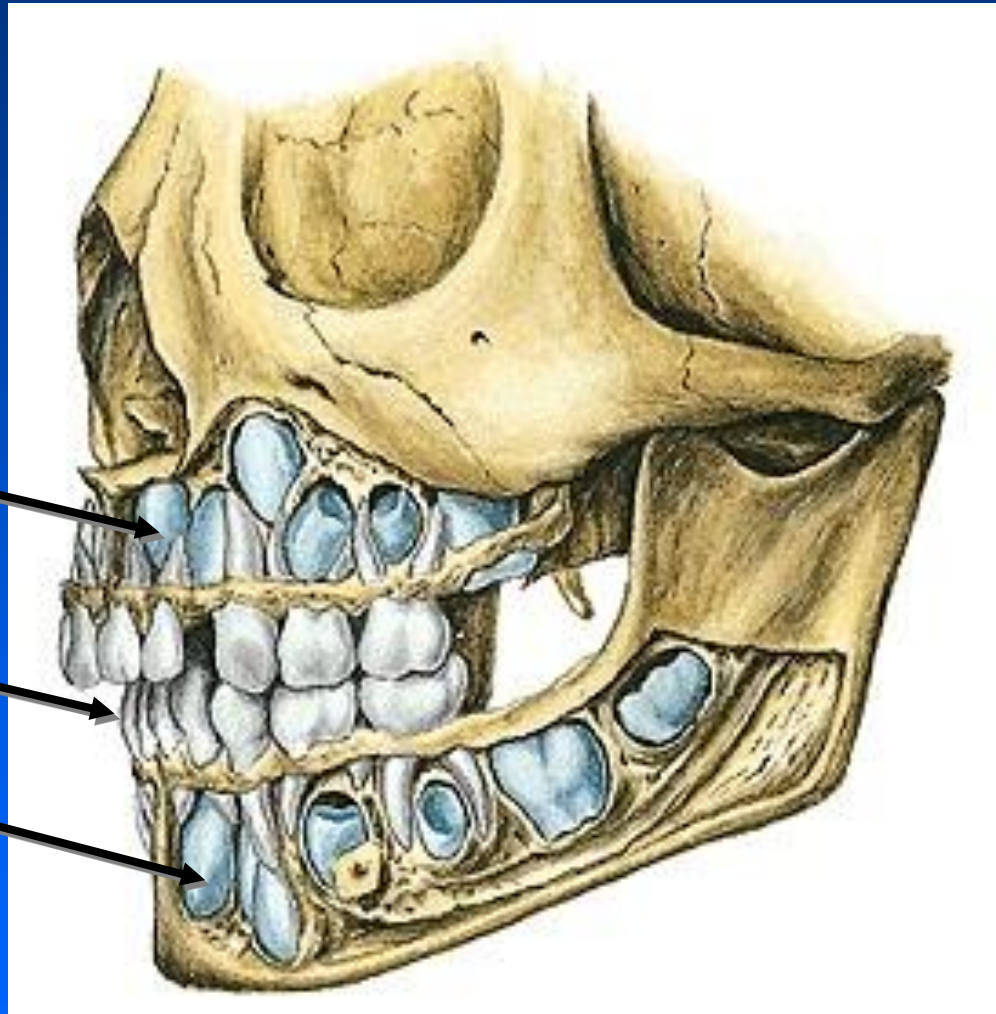
soft palate

uvula

# Teeth



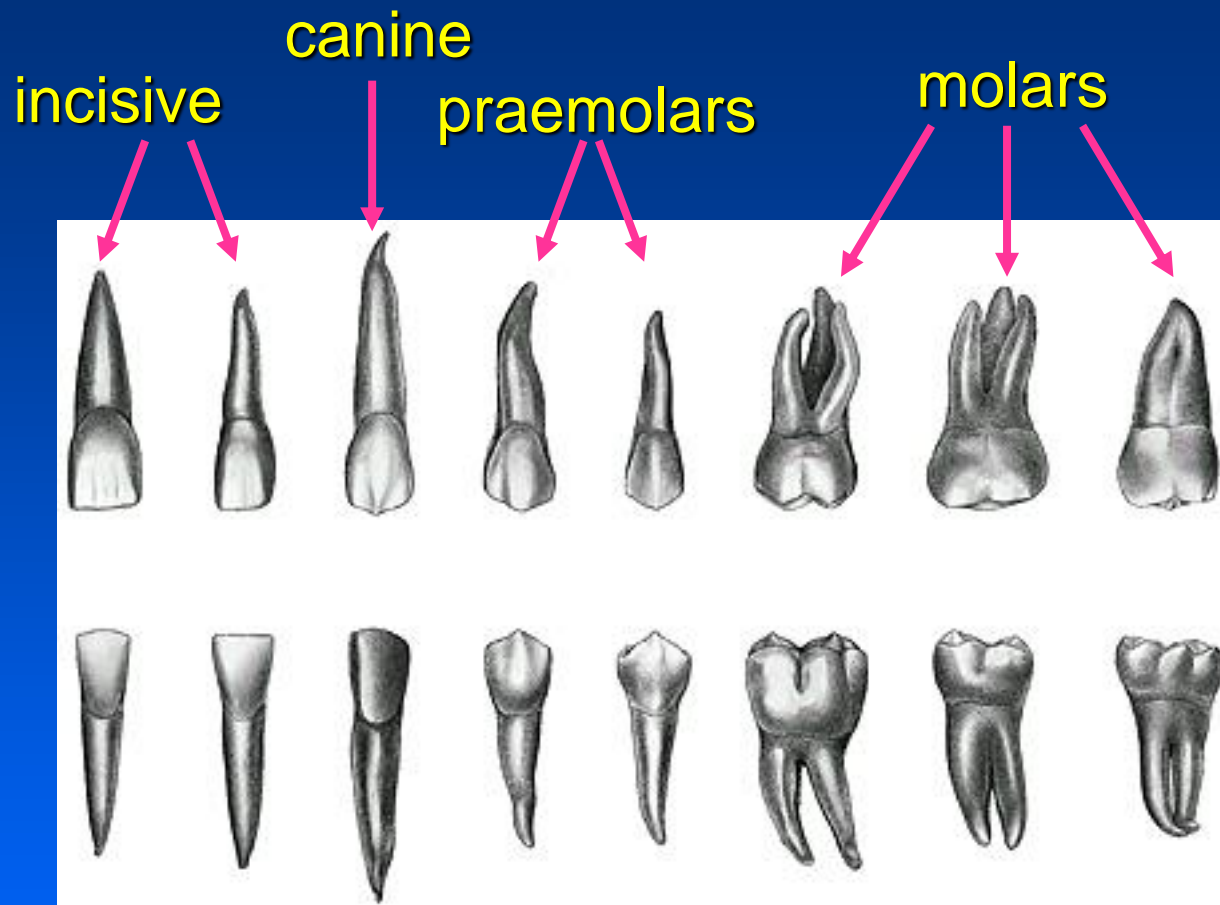
# Teeth



dentes  
permanentes

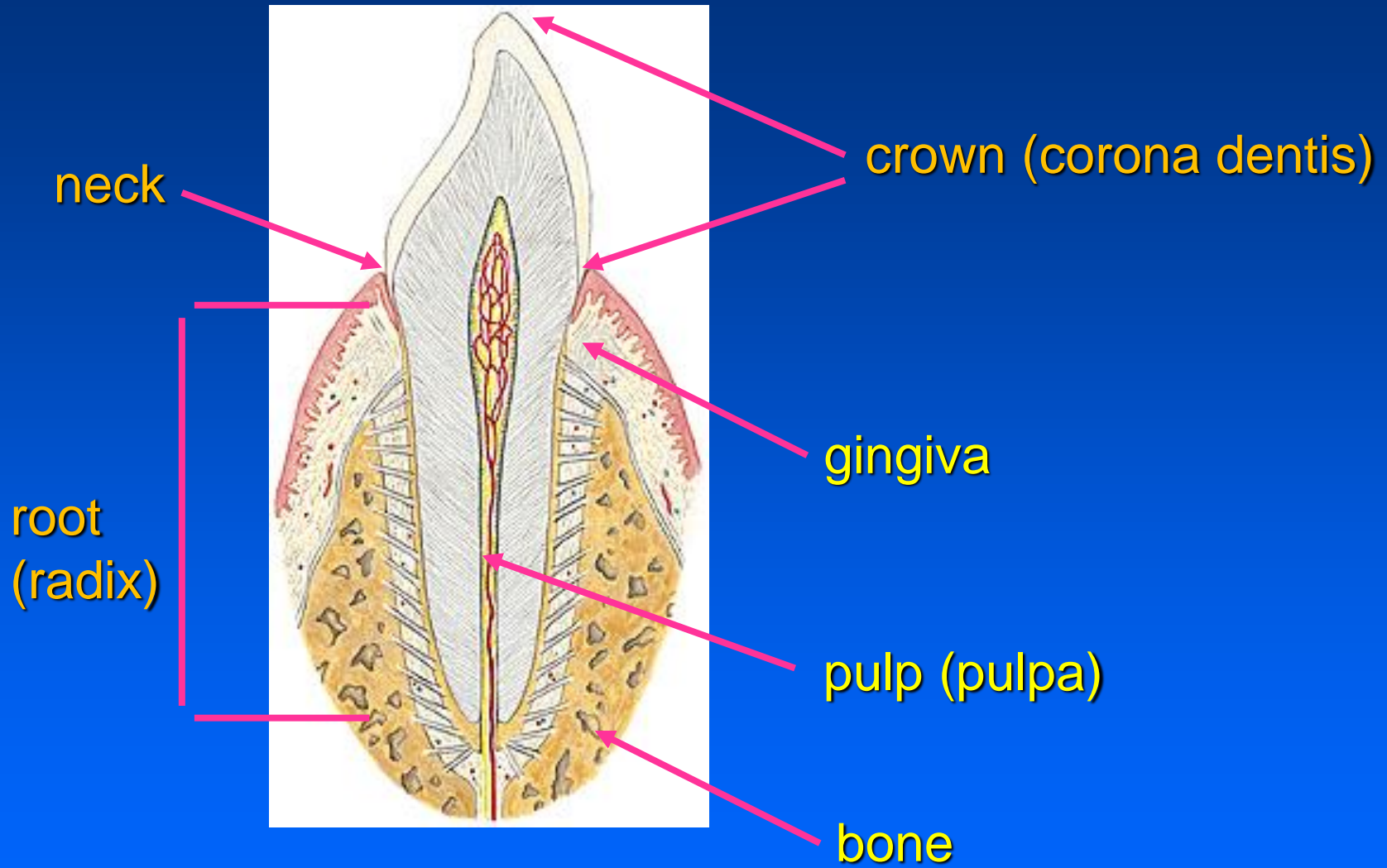
dentes decidui  
(20)

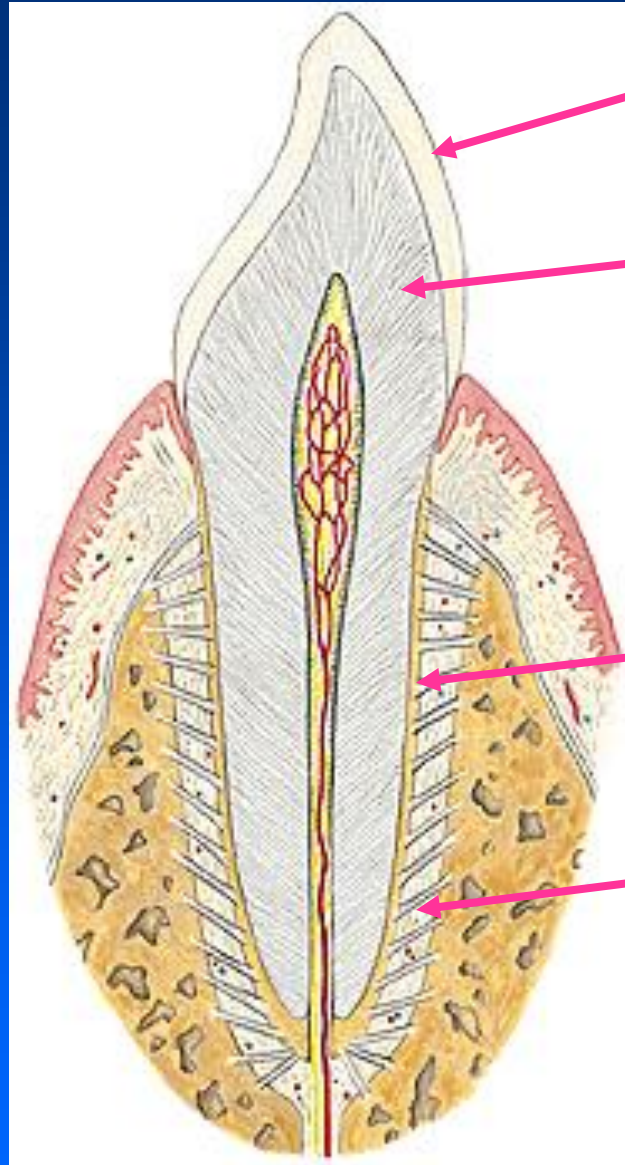
dentes  
Permanentes  
(32)



**Dentes permanentes**







enamel

dentine

cementum

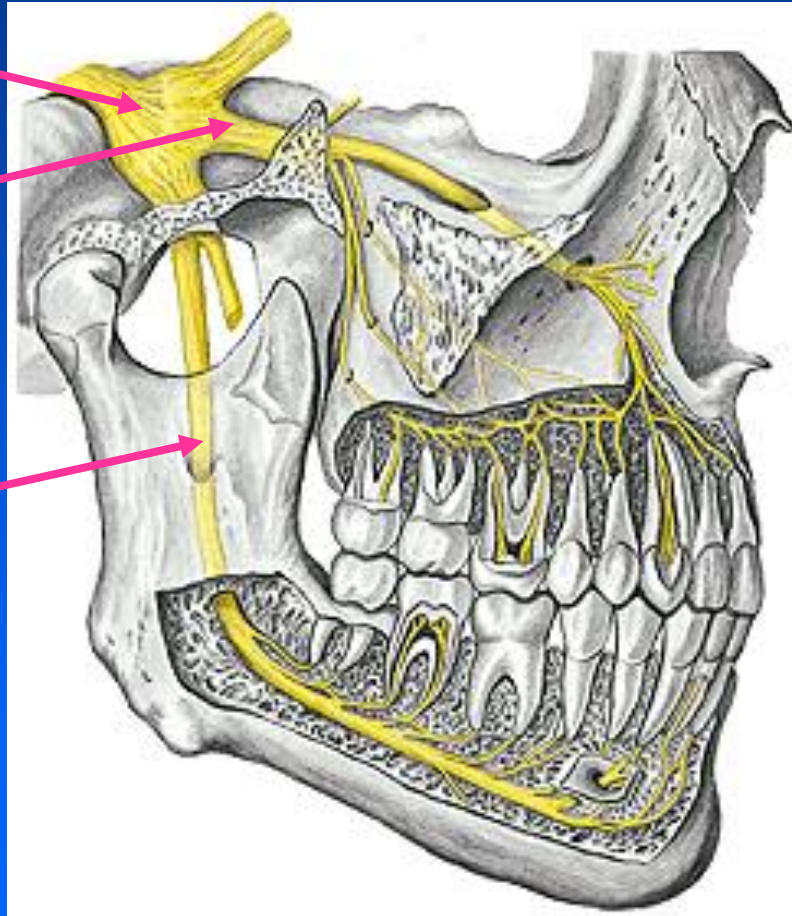
periodontum

# Innervation of the teeth: trigeminal (V/5) nerve

Trigeminal ganglion

Maxillary nerve

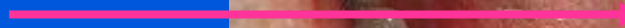
Inf. alveolar nerve  
(mandibular n.)



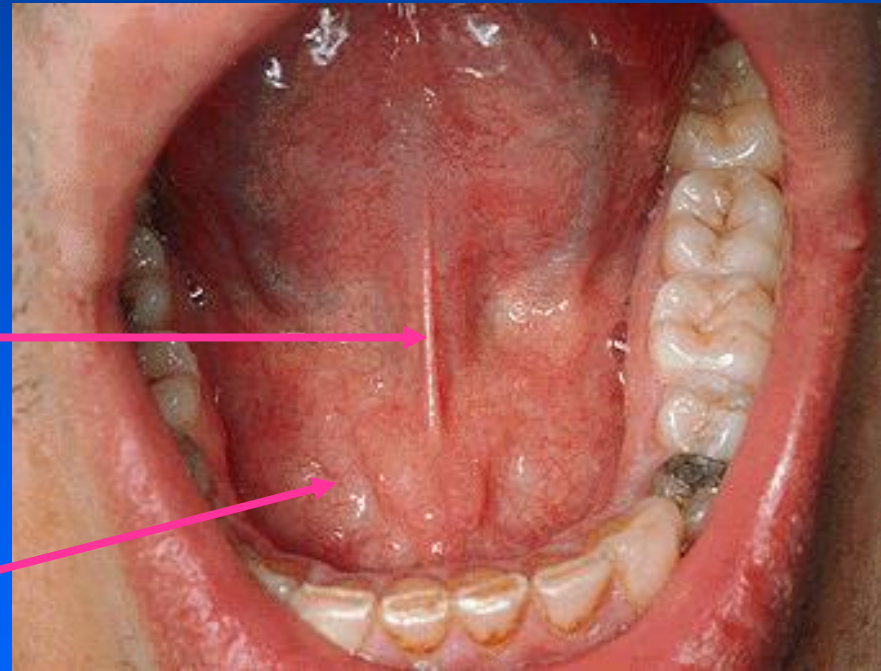
# Tongue



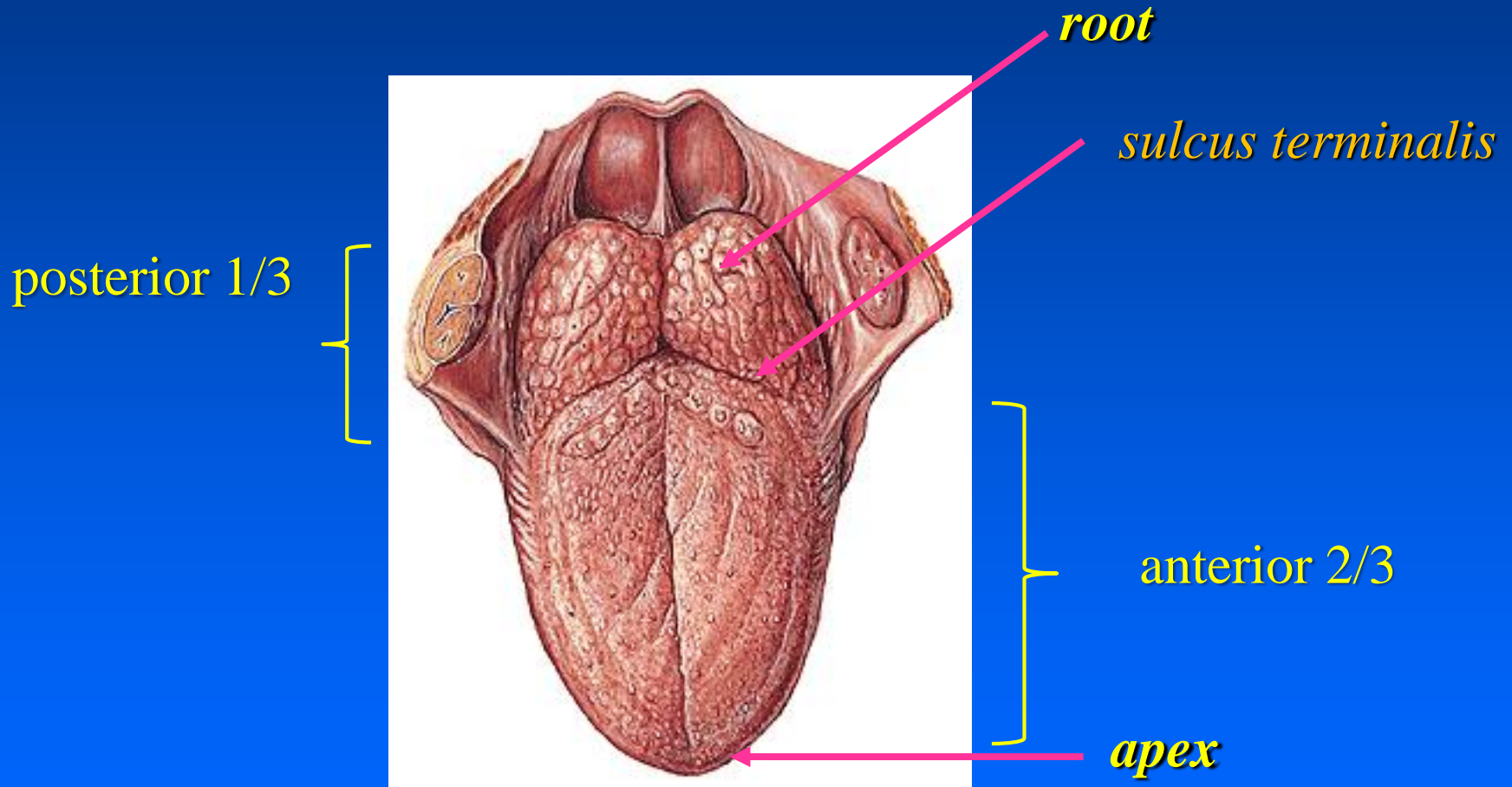
frenulum of the tongue



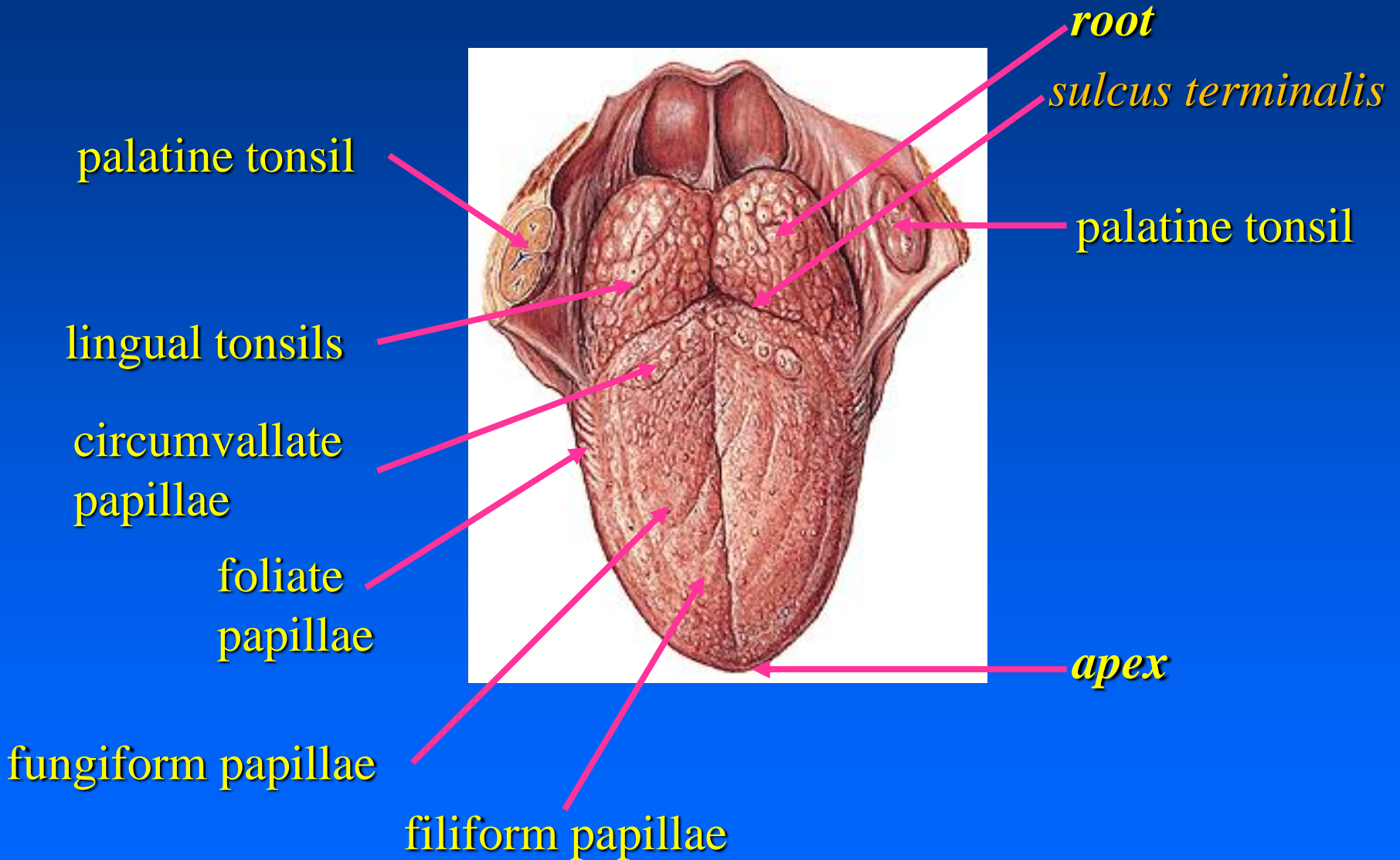
sublingual gland



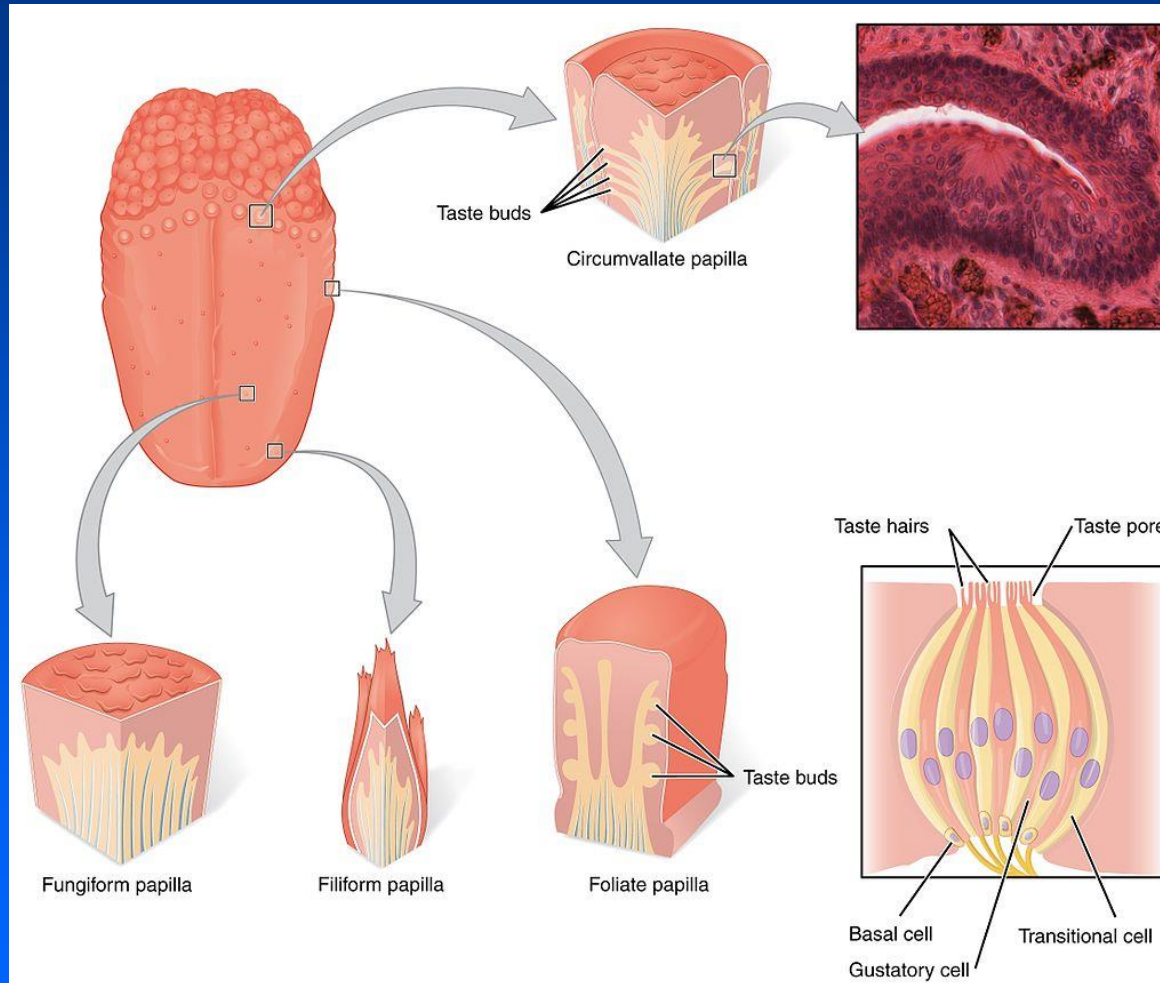
# Tongue



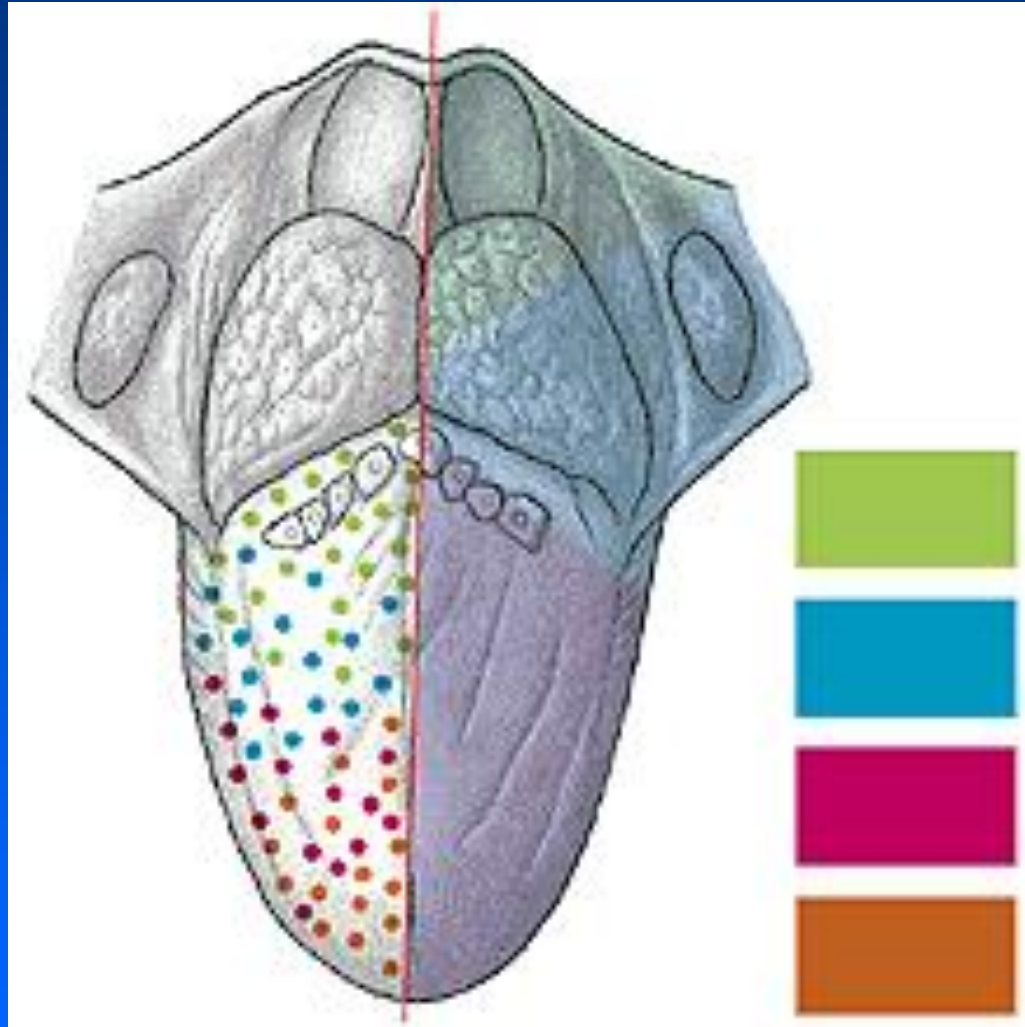
# Tongue



# Papillae/taste buds



# Taste sensation



green: bitter

blue: sour

red: salty

orange: sweet



# Innervation of the tongue

## ***Sensory innervation:***

*general:* lingual n. (V./3) – anterior 2/3

glossopharyngeal n. (IX.) – posterior 1/3

vagus n. (X.) – the most posterior part

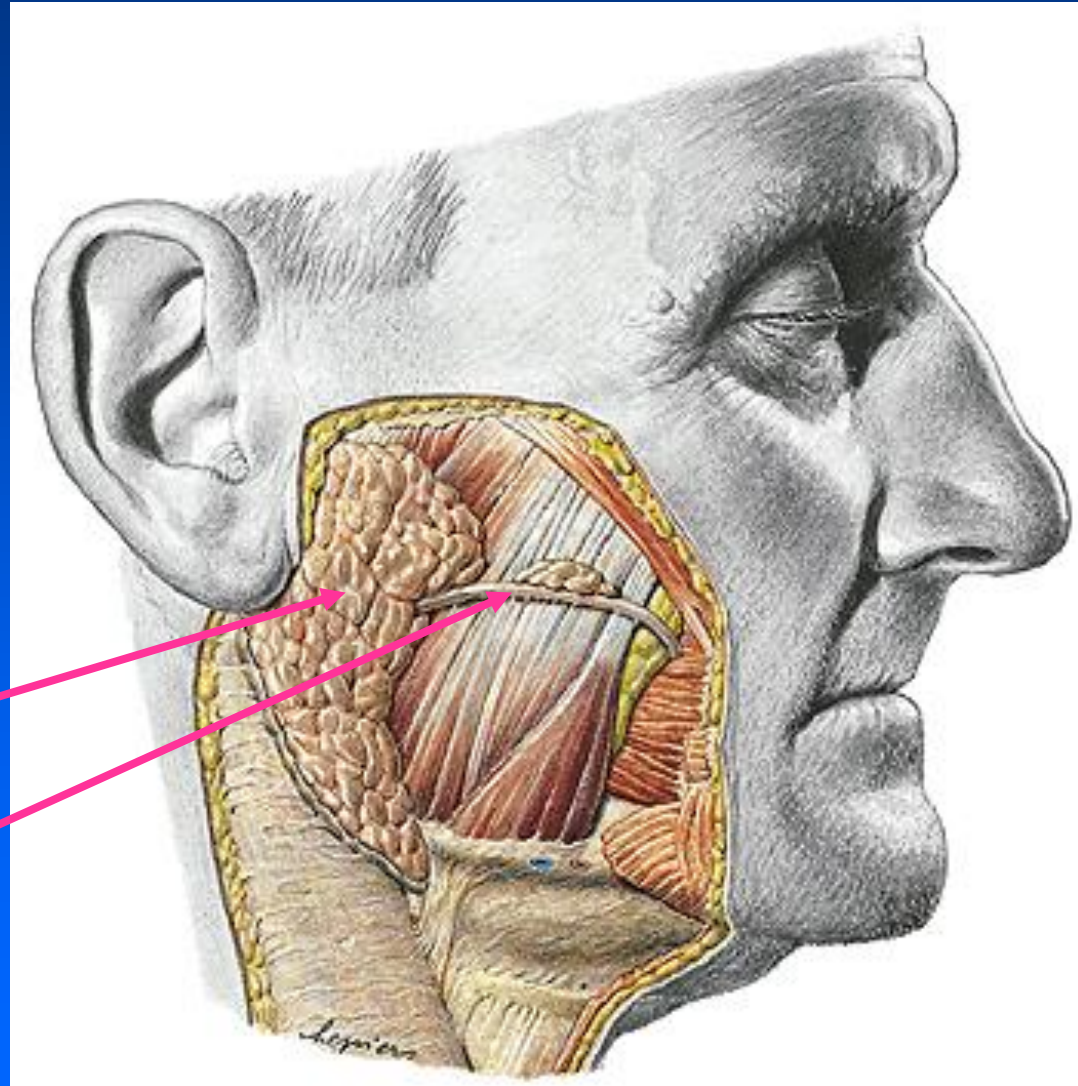
*taste:* chorda tympani (VII.) – anterior 2/3

glossopharyngeal n.(IX.) – posterior 1/3

## ***Motory innervation:***

hypoglossal n. (XII.)

# Salivary glands I.

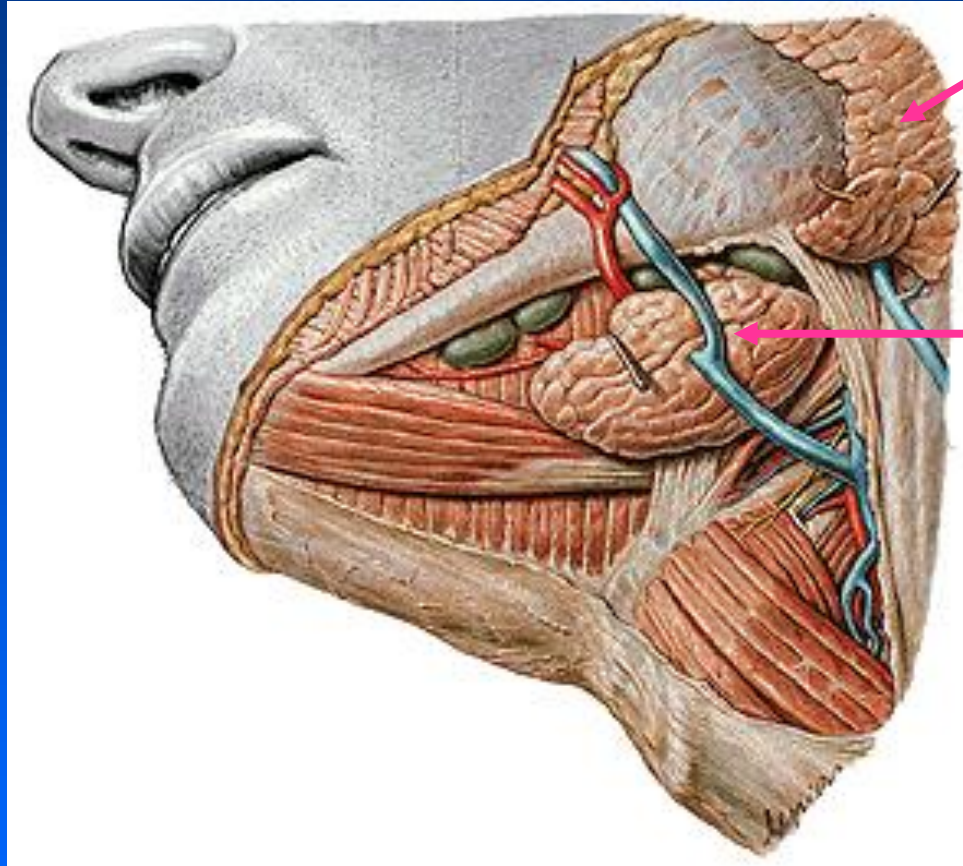


parotis

parotid duct

Opens: vestibule,  
upper row of the  
teeth (2nd molar)

# Salivary glands II.

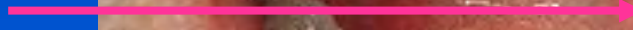


parotis

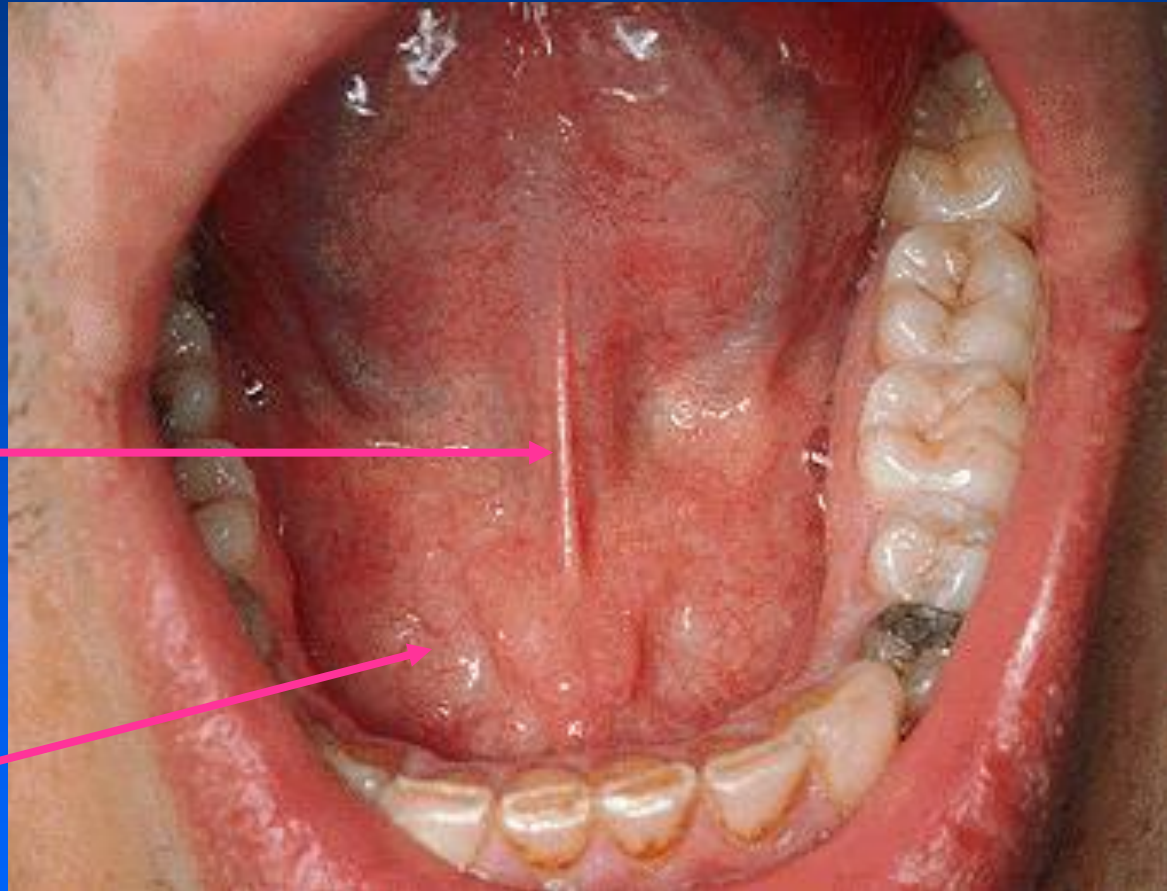
submandibular  
gland

# Sublingual region

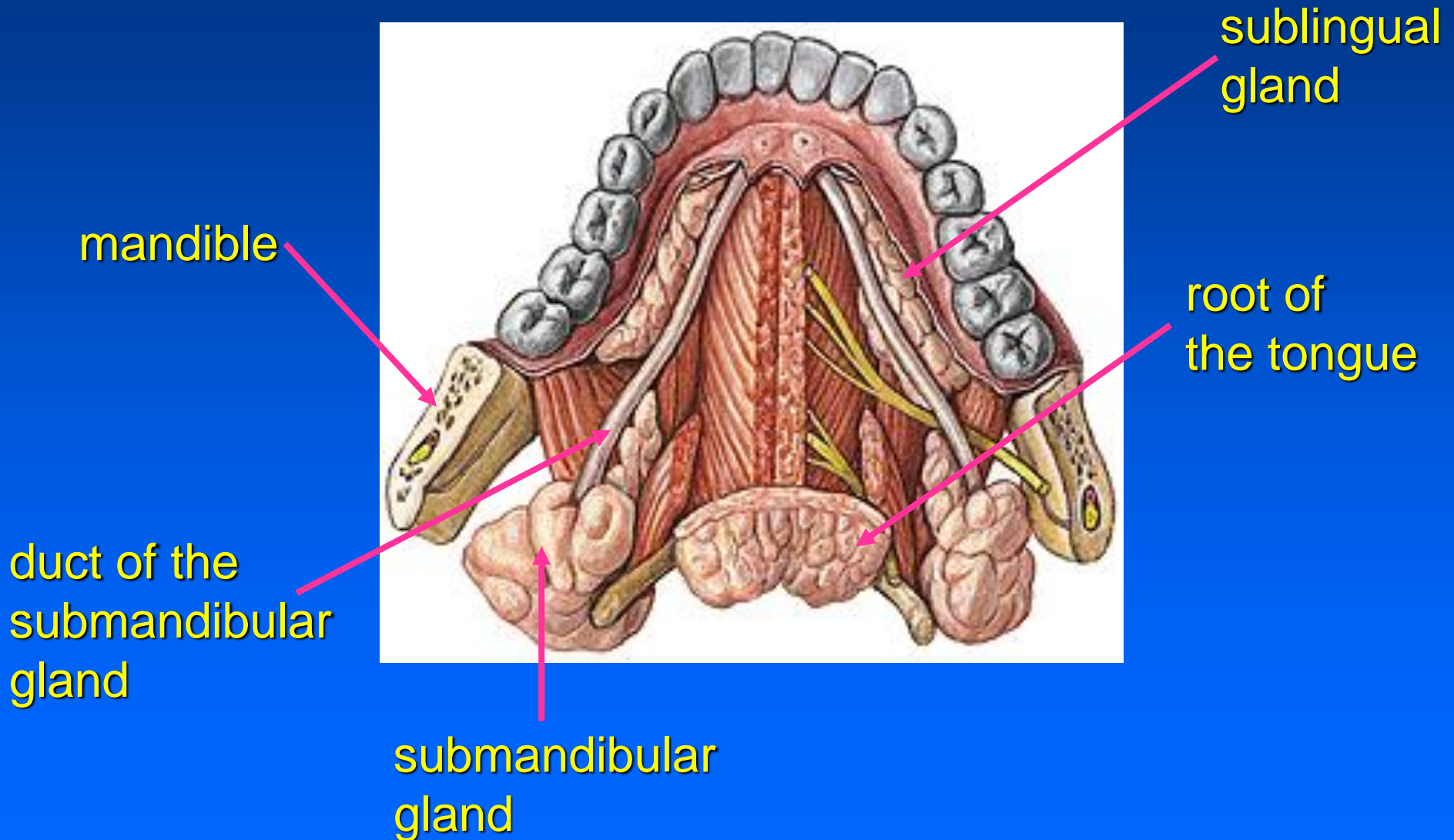
frenulum of  
the tongue



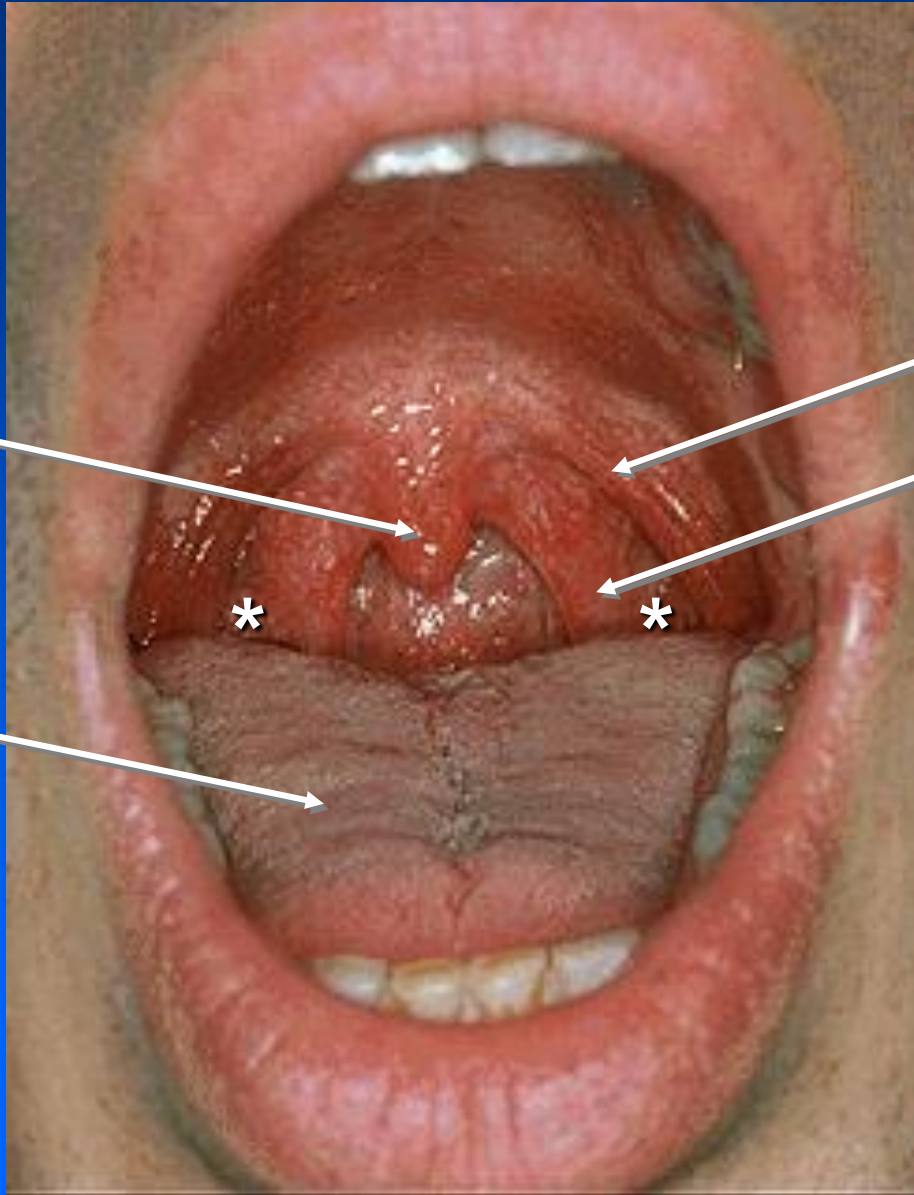
sublingual  
gland



# Salivary glands III.



# Isthmus faucium



uvula

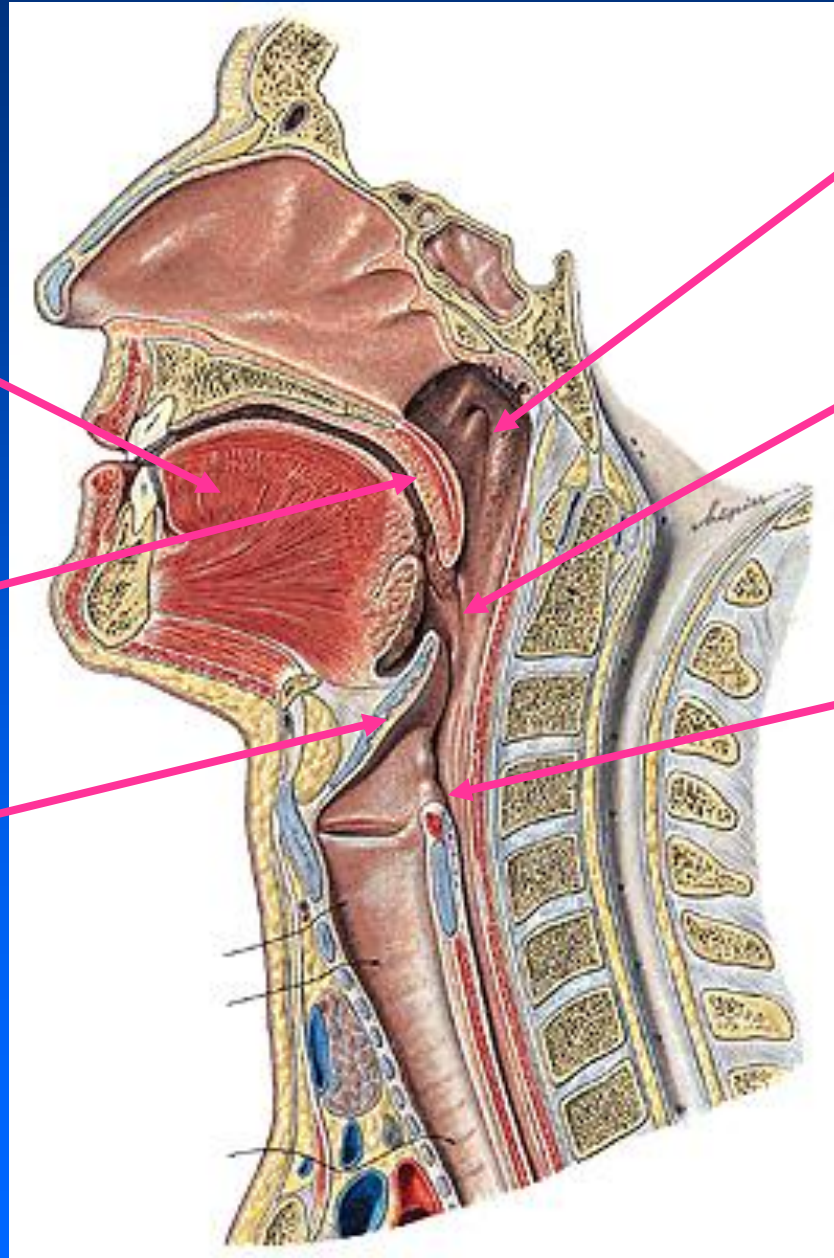
tongue

arcus  
palatoglossus

arcus  
palatopharyngeus

\*: tonsilla palatina

# Pharynx



tongue

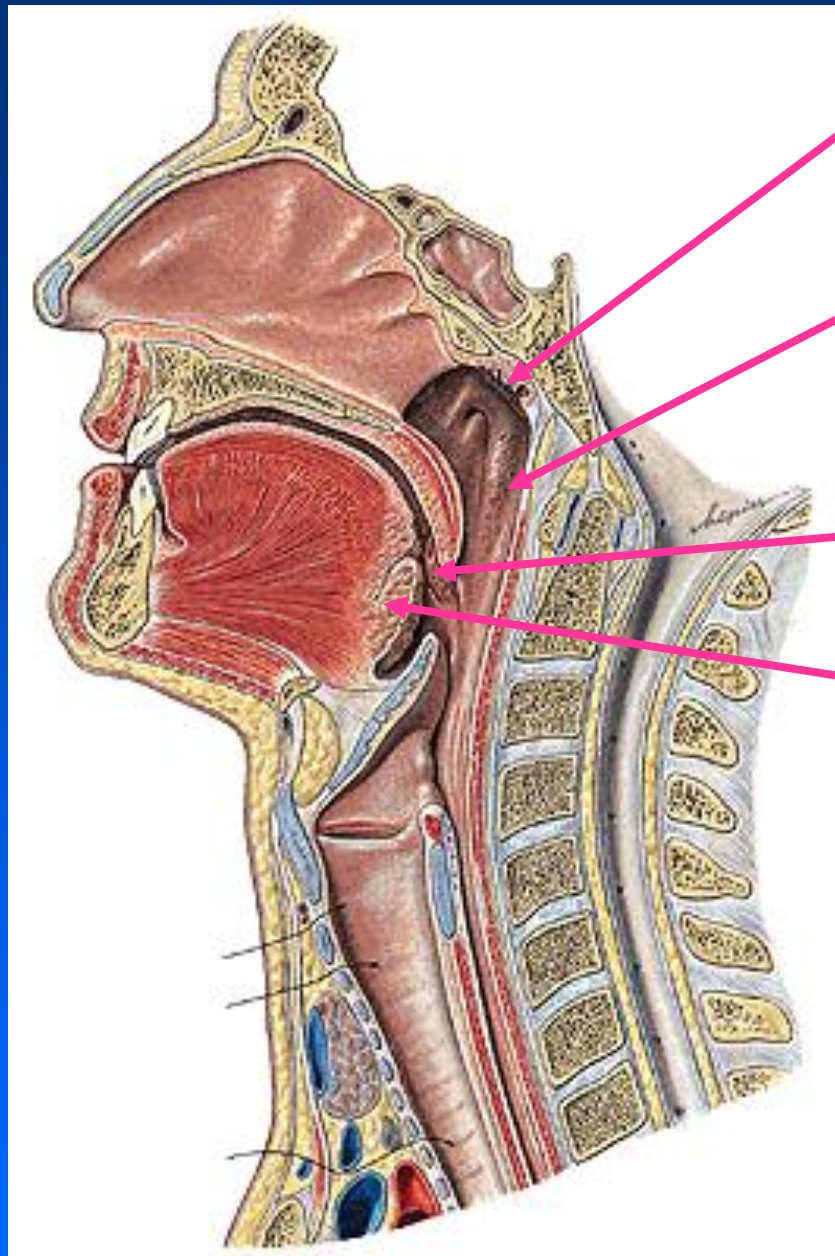
soft palate

epiglottis

nasopharynx

oropharynx

laryngopharynx



pharyngeal tonsil

tubarian tonsils

palatine tonsils

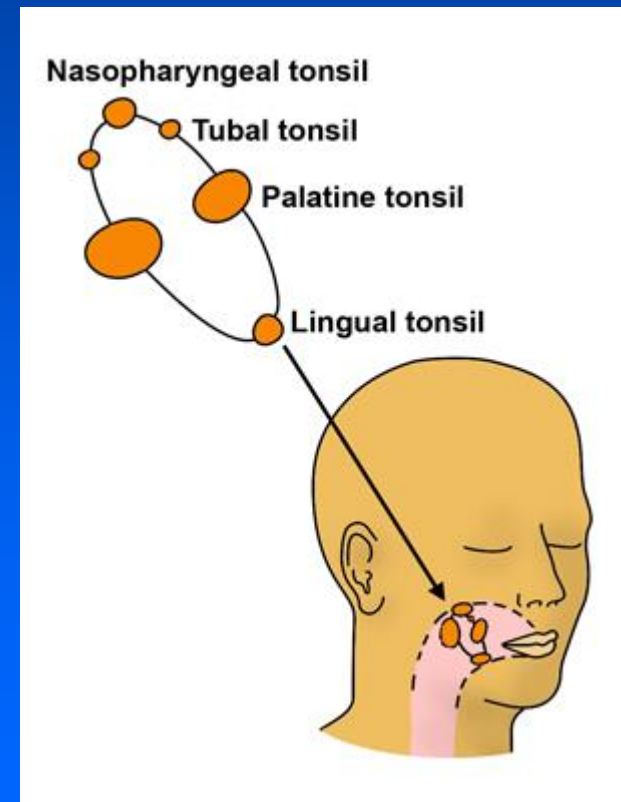
lingual tonsils



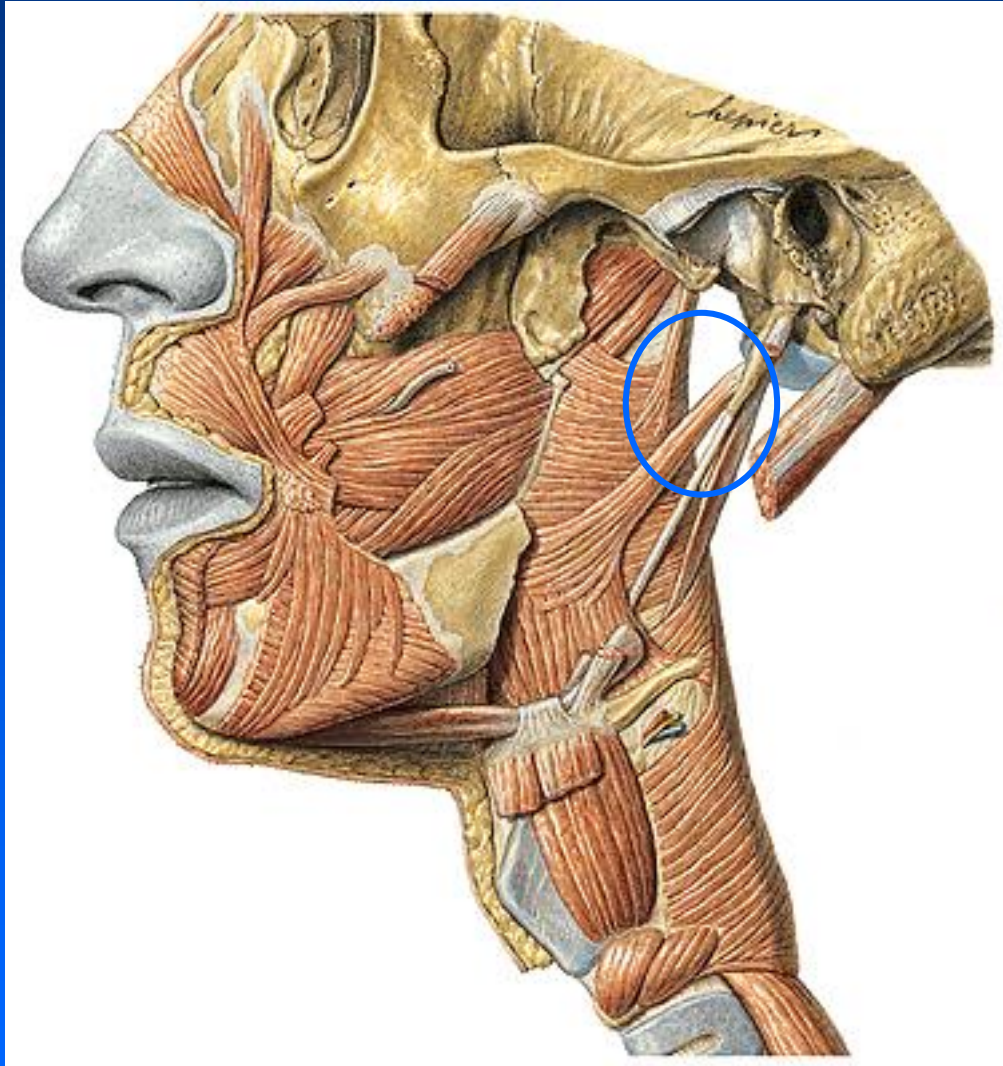
# Waldeyer's lymphatic ring

Tonsils present in the isthmus faucium:

- tonsilla pharyngea
- tonsillae tubariae
- tonsilla palatina
- tonsilla lingualis



# Muscles of the pharynx: elevators

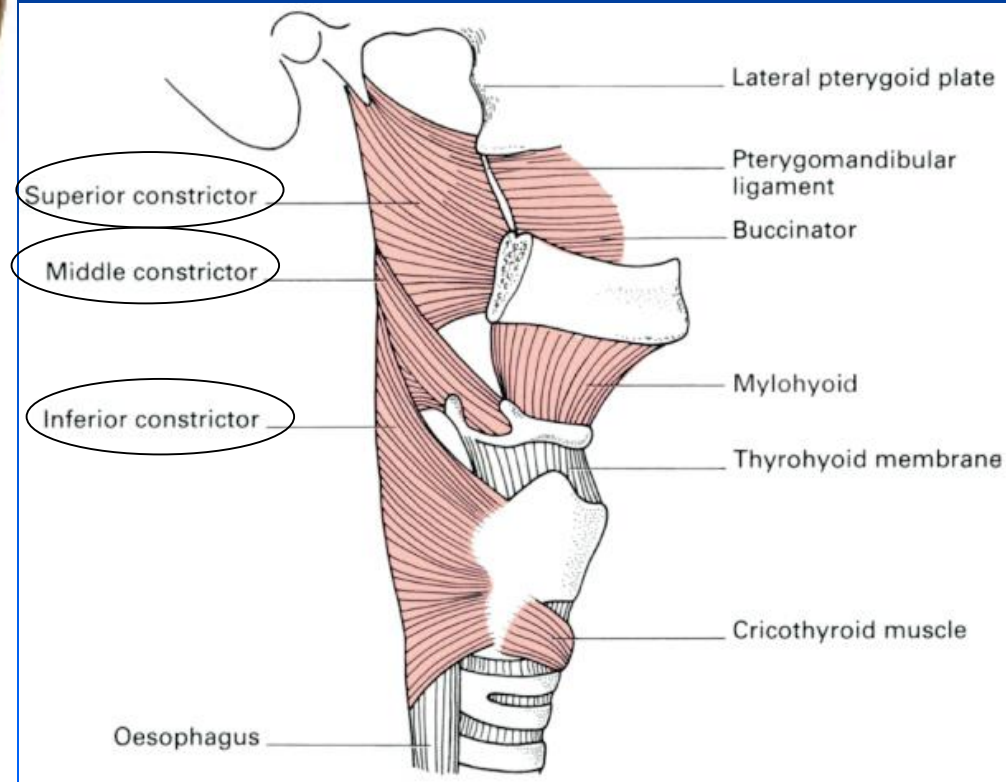
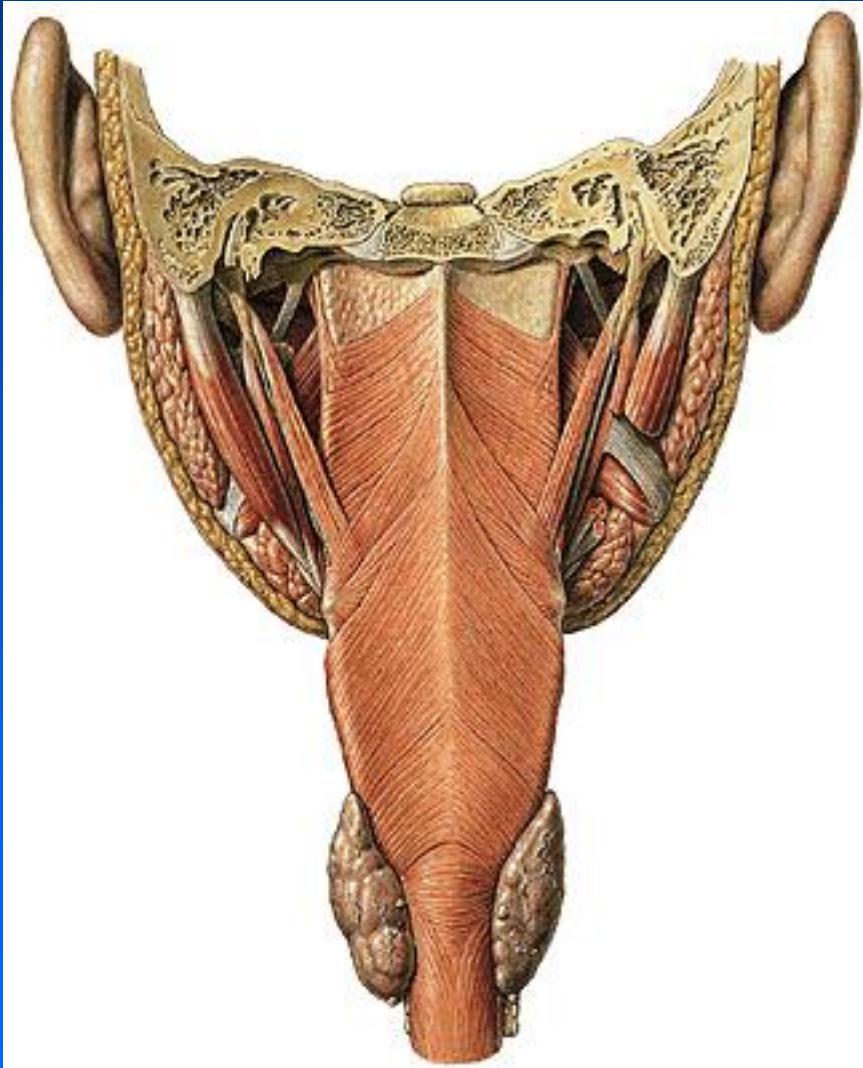


stylopharyngeal m.

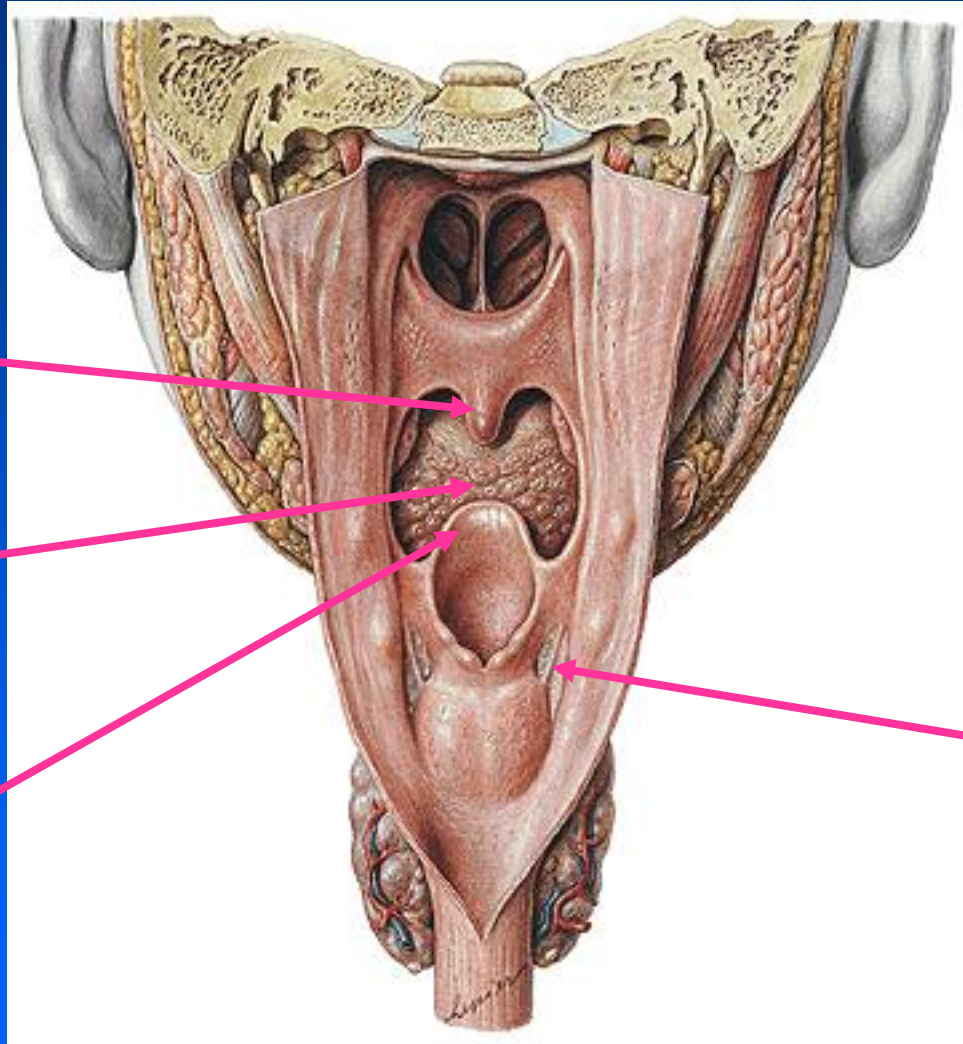
salpingopharyngeal m.

palatopharyngeal m.

# Muscles of the pharynx: constrictors



# Pharynx



uvula

root of  
the tongue

epiglottis

piriform recess

# Esophagus



1.) *p. cervicalis*: 6. cervical vertebra, lower surface of the cricoid cartilage

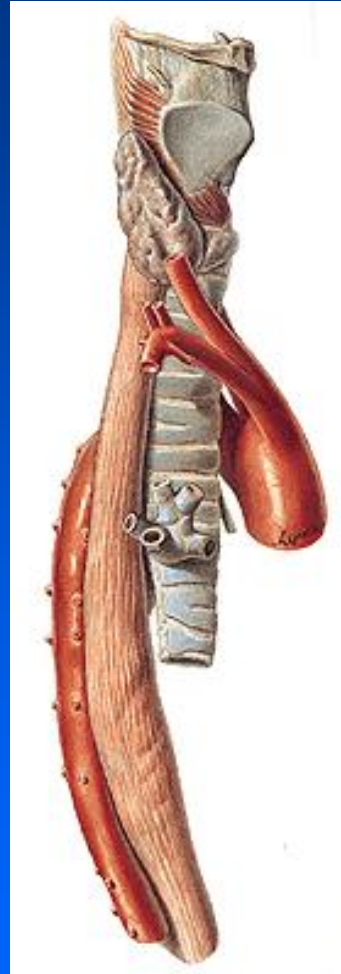
2.) *p. thoracalis*: post. mediastinum → hiatus esophageus

(10. thoracal vertebra)

3.) *p. abdominalis*



# Esophagus



Runs down in the posterio  
mediastinum

# Esophagus

## Physiological narrowing of the esophagus:

- A.) 15 cm from the teeth row: pharynx-esophagus transition – cricoid cartilage
- B.) 24 cm from the teeth row: aortic arch, left principal bronchus
- C.) 40 cm from the teeth row: at the cardia (sphincter)

