

PHARYNX-I

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Lesson Plan

- ❖ Introduction
- ❖ Boundaries
- ❖ Subdivisions
- ❖ Nasopharynx:
 - Location.
 - Communications.
 - Pharyngeal Isthmus.
 - Features.
 - Applied Aspects.

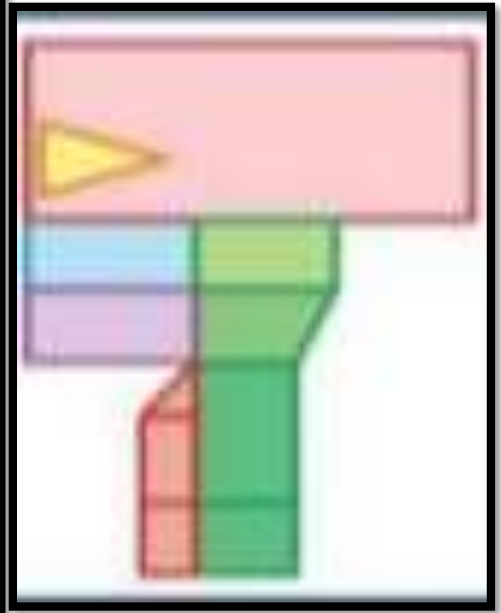
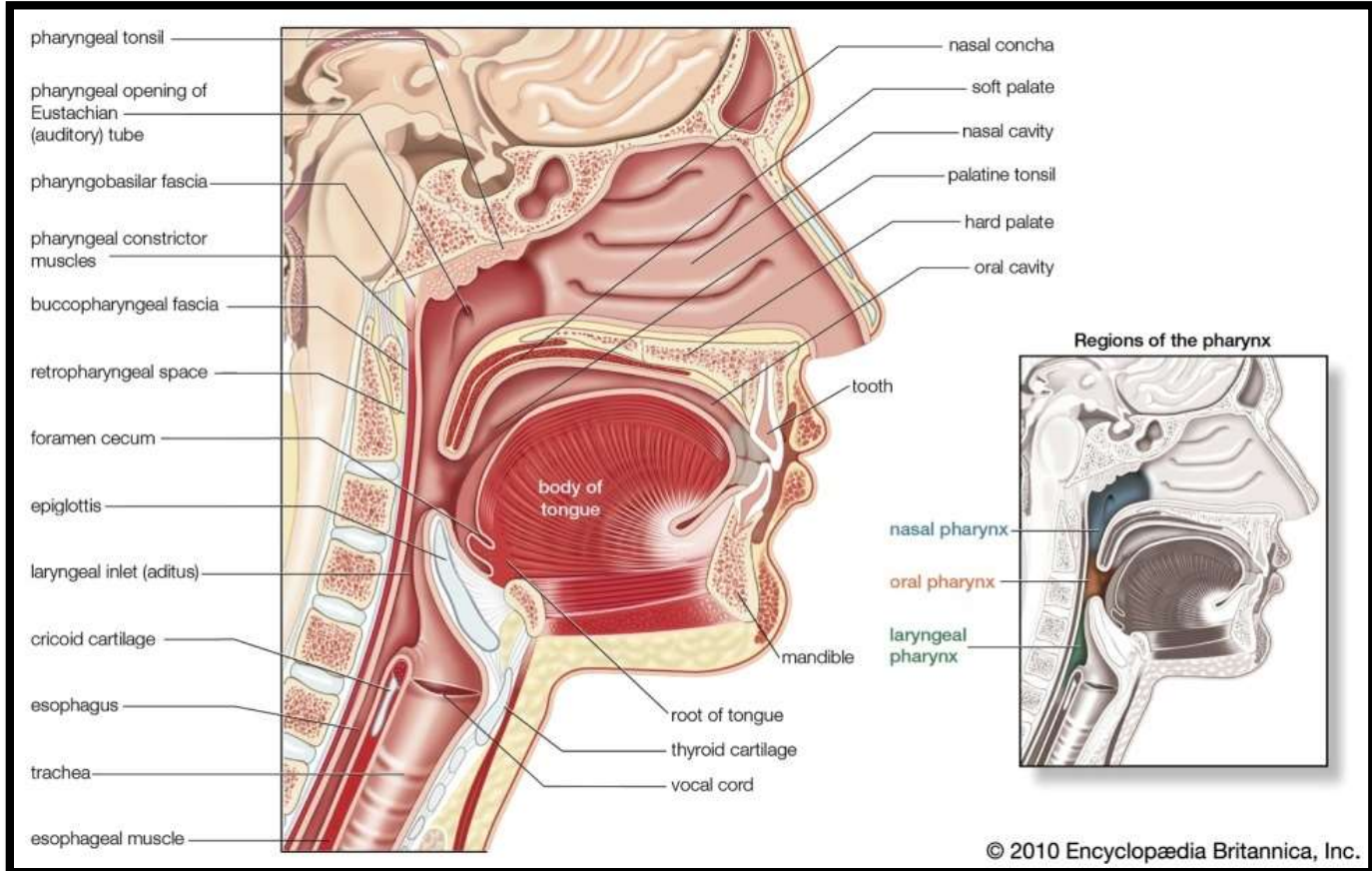
Introduction

- Pharynx is a fibromuscular tube.
- It is a common channel for both food and air.

Location- Behind the cavities of nose, mouth and the larynx.

Shape - funnel shaped.

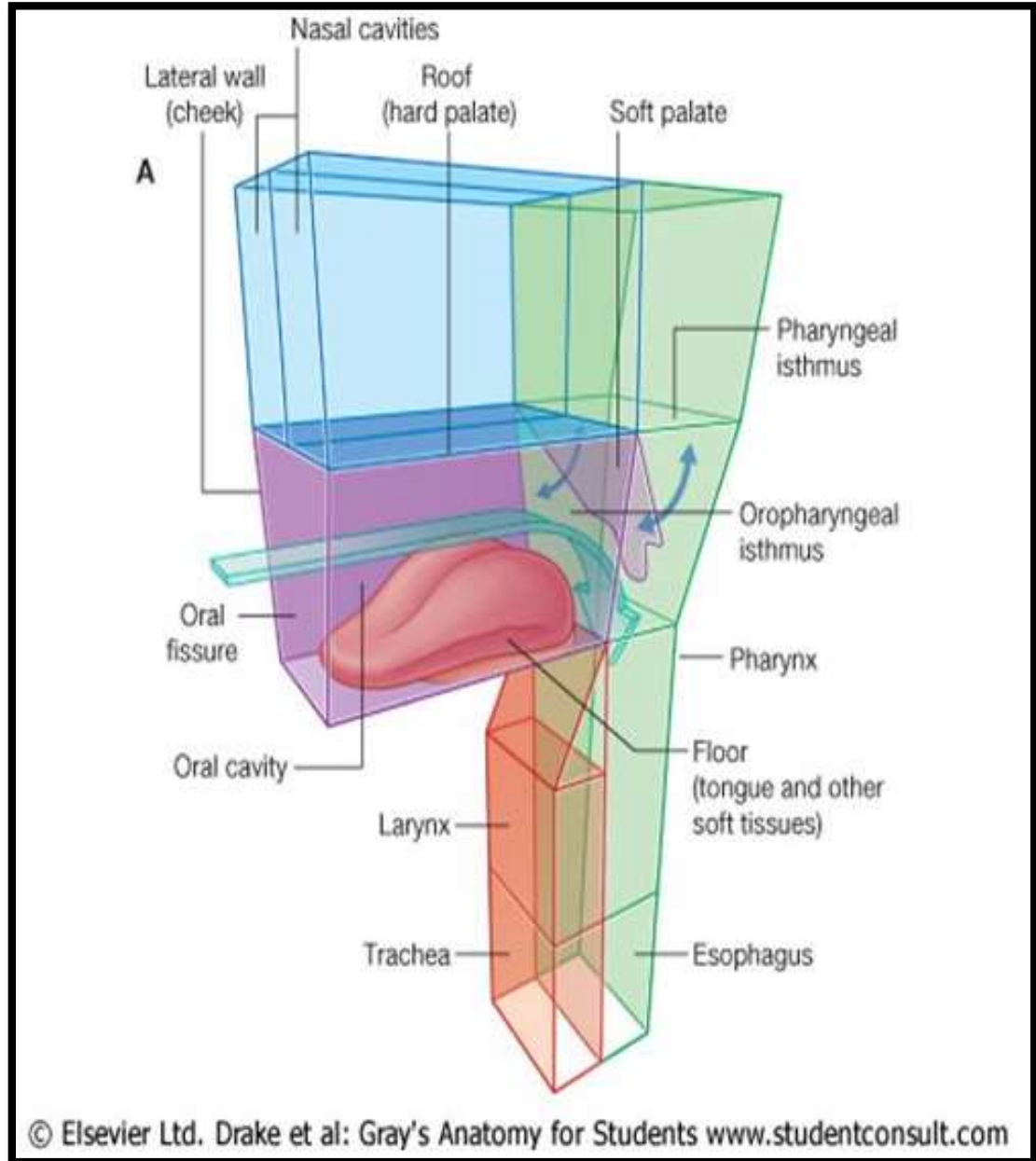
Extent- From the base of the skull to the esophagus.



Introduction contd...

Dimensions-

- ❖ Length- 12-14 cm
- ❖ Width-
 - At base- 3.5 cm
 - At pharyngo-esophageal junction- 1.5 cm



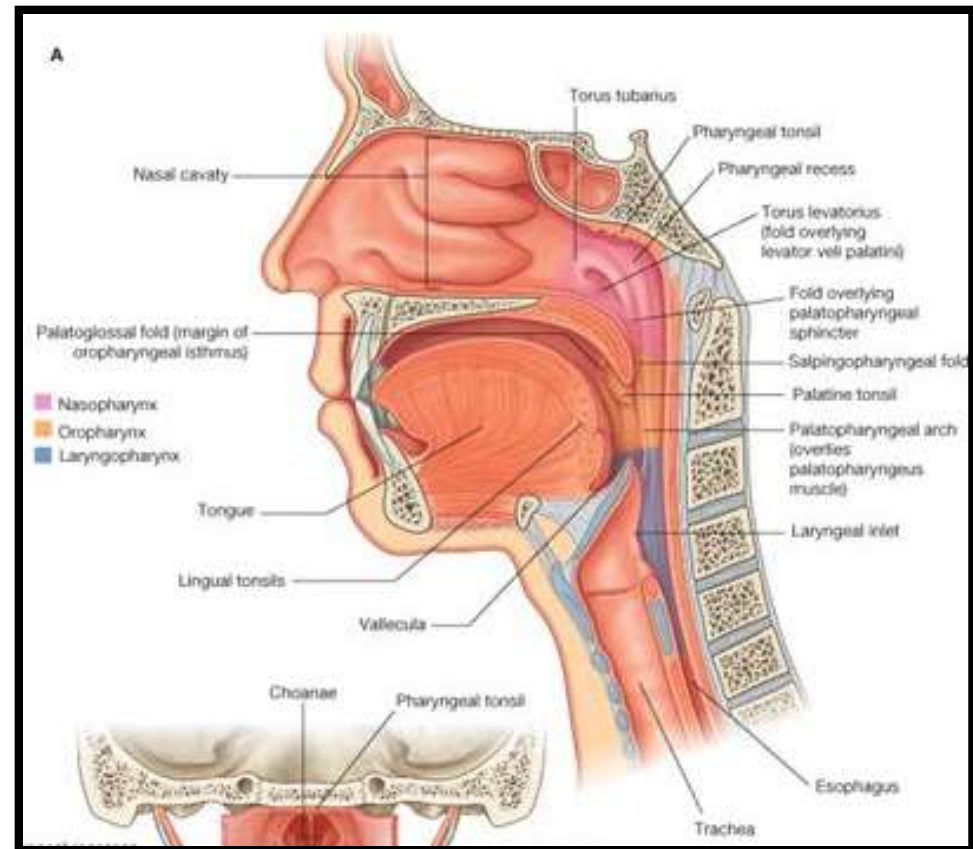
Boundaries

Superior-

- **Base of skull** [posterior part of body of Sphenoid & Basilar part of Occipital bone in front of pharyngeal tubercle.

Inferior-

- Continuous with esophagus at the level of **lower border of cricoid cartilage** anteriorly and **lower border of C6 vertebra** posteriorly



Boundaries contd...

Posterior-

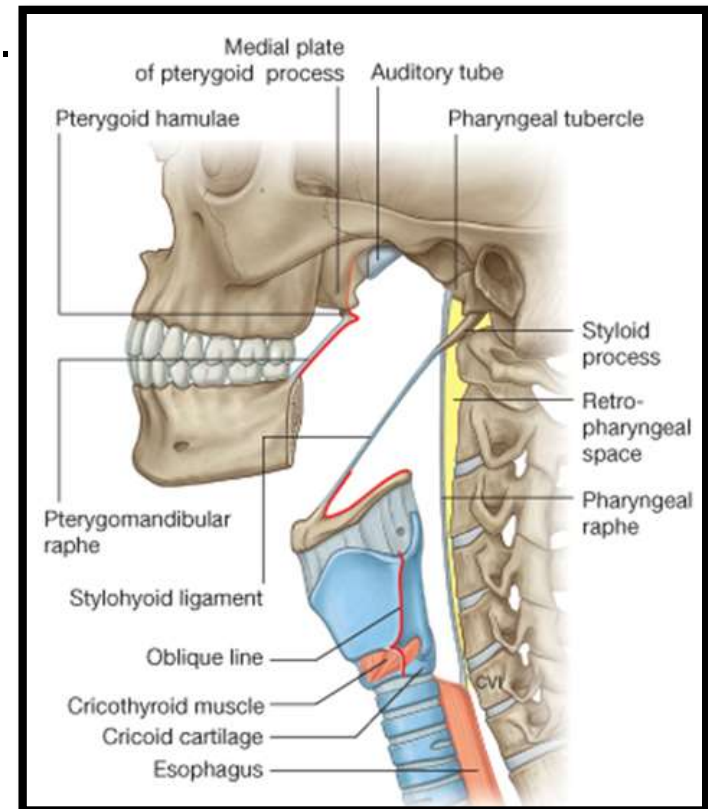
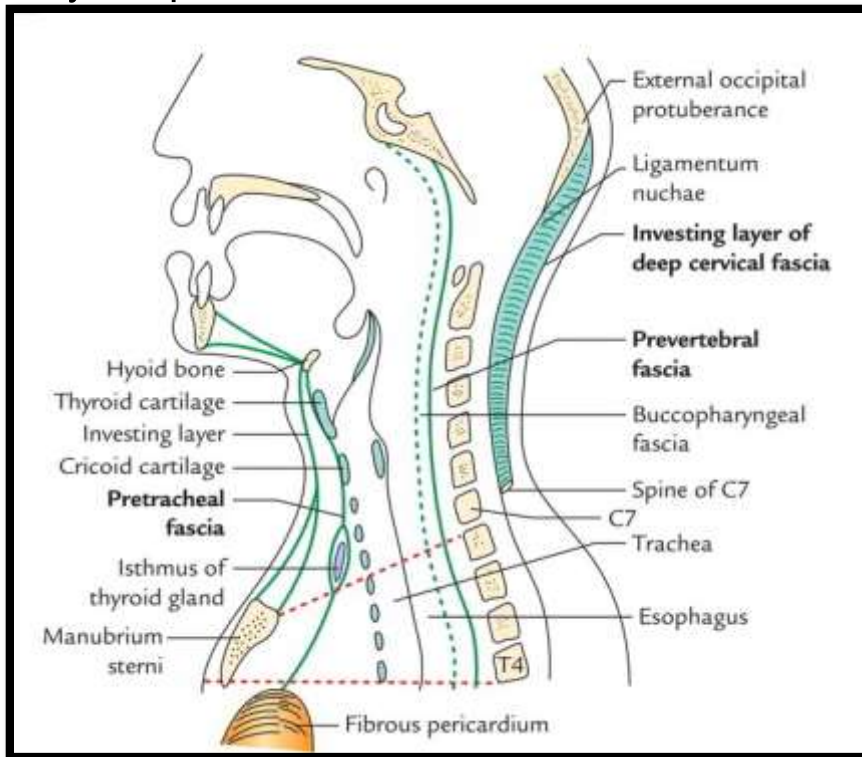
- Prevertebral fascia.

Anterior-

- Opens into cavities of nose, mouth and larynx.

Lateral-

- Neurovascular bundle of neck.
- Styloid process with its attached muscles and ligaments.

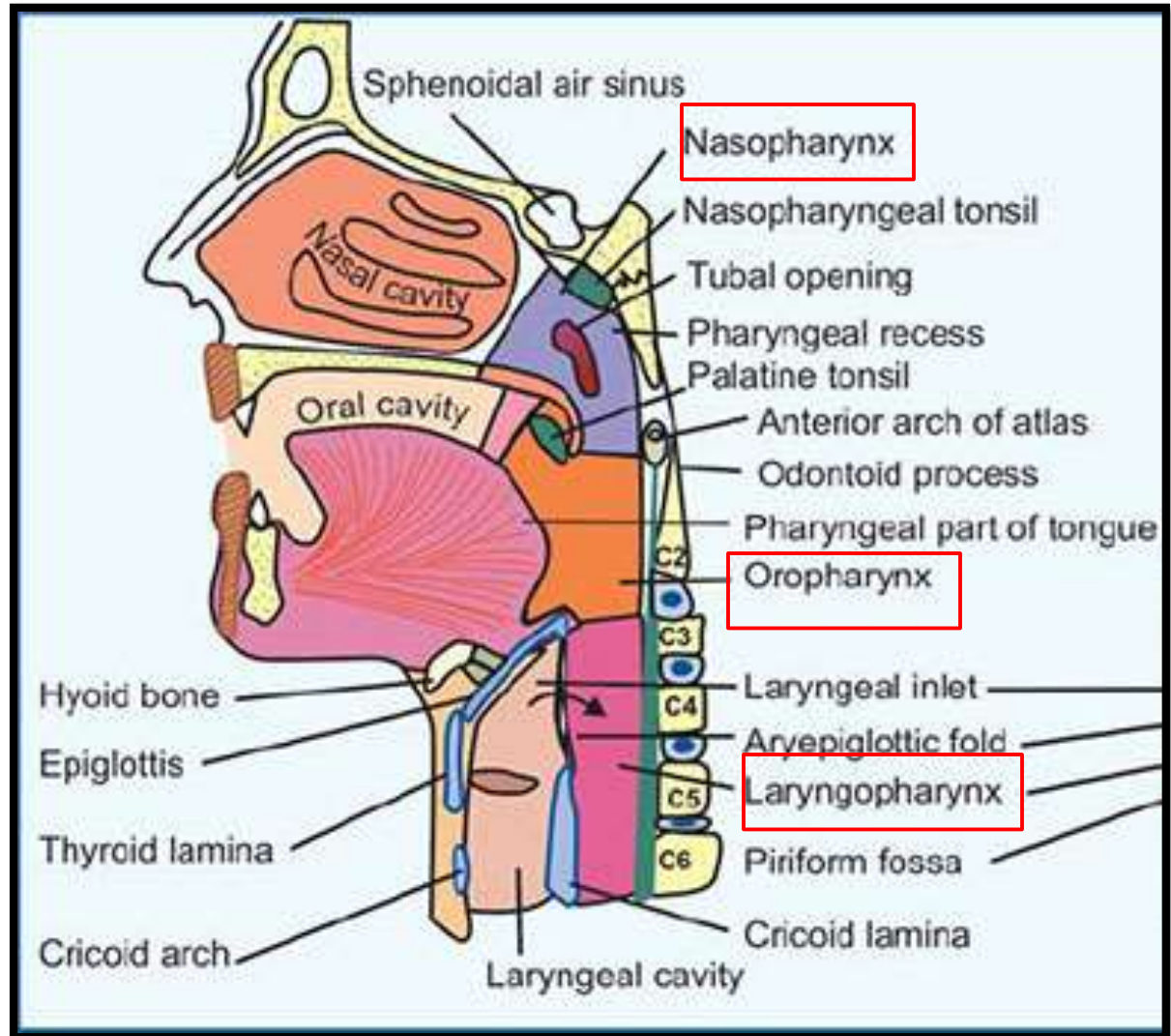


Subdivisions

❖ 3

❖ From above downwards:

- Nasopharynx.
- Oropharynx.
- Laryngopharynx.



Nasopharynx

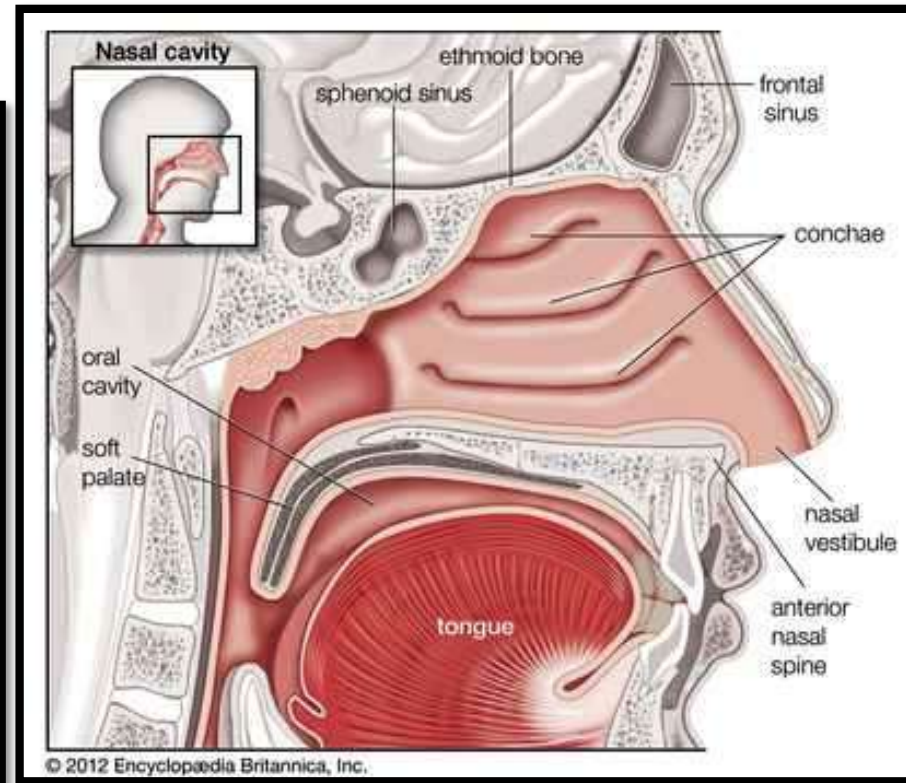
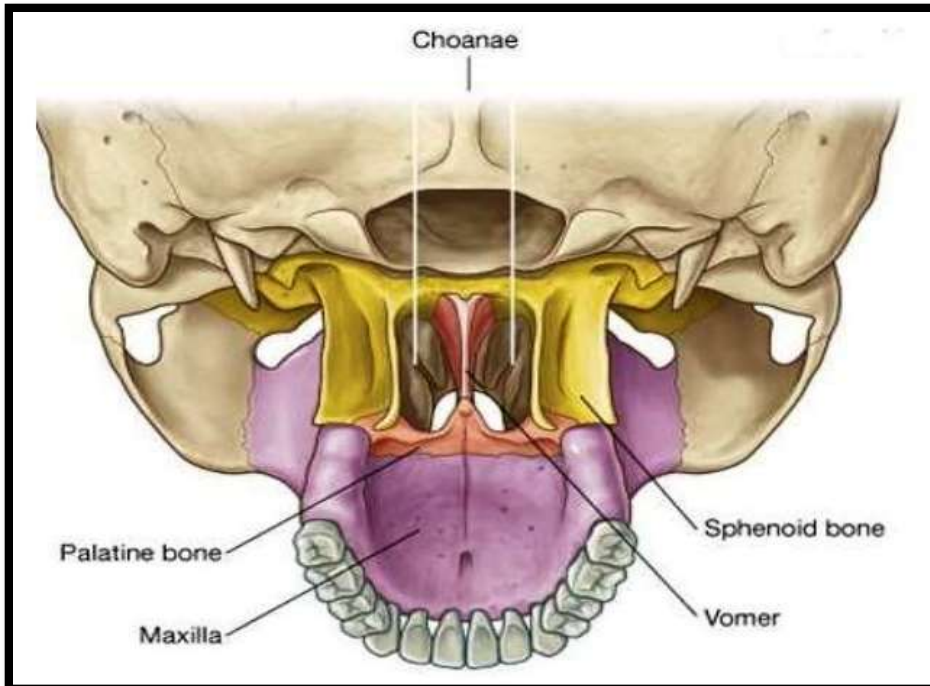
Location-

- Behind choanae (posterior nasal apertures) and above soft palate.

Communications-

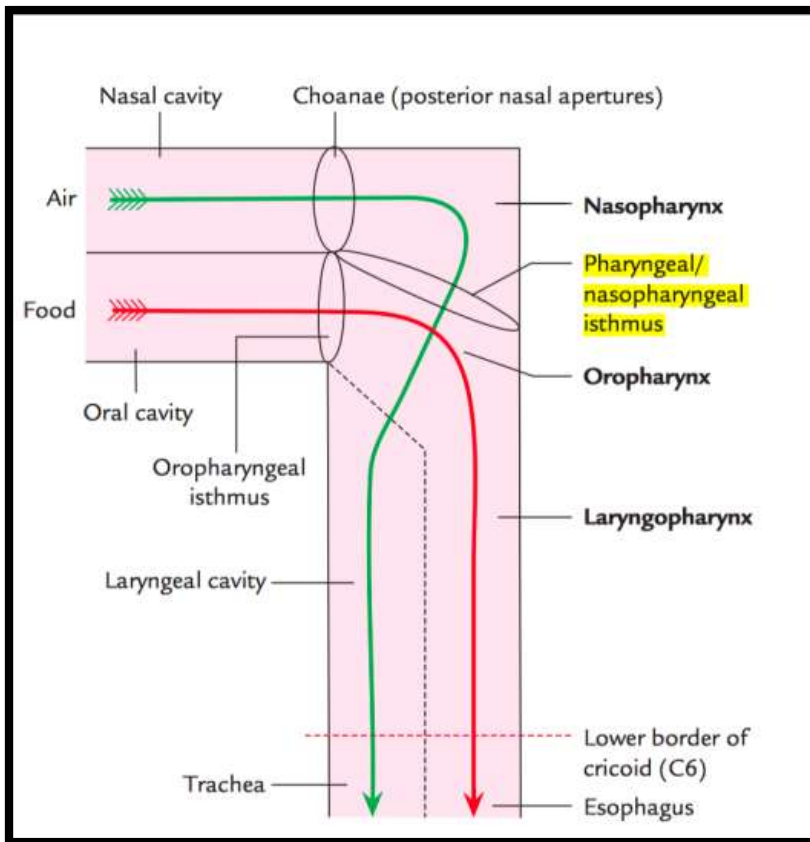
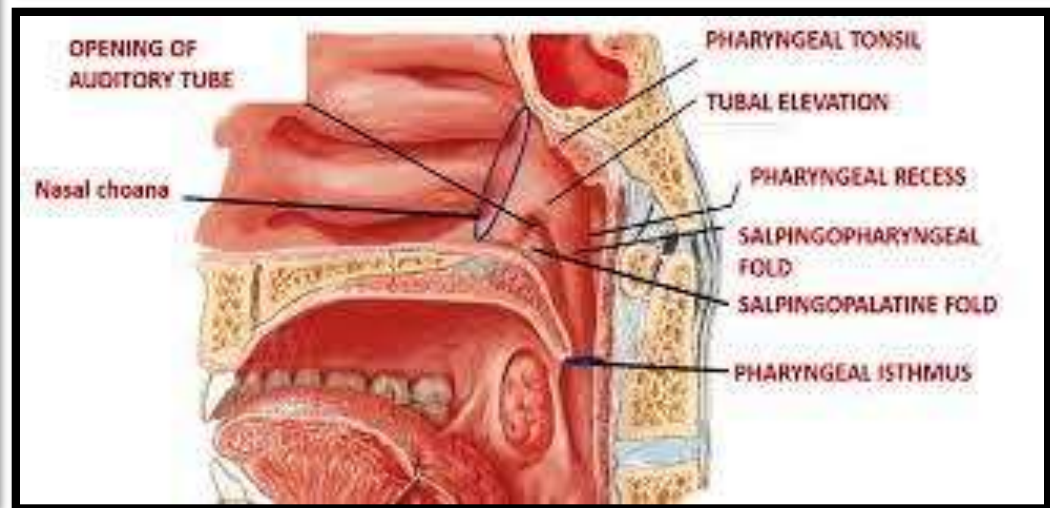
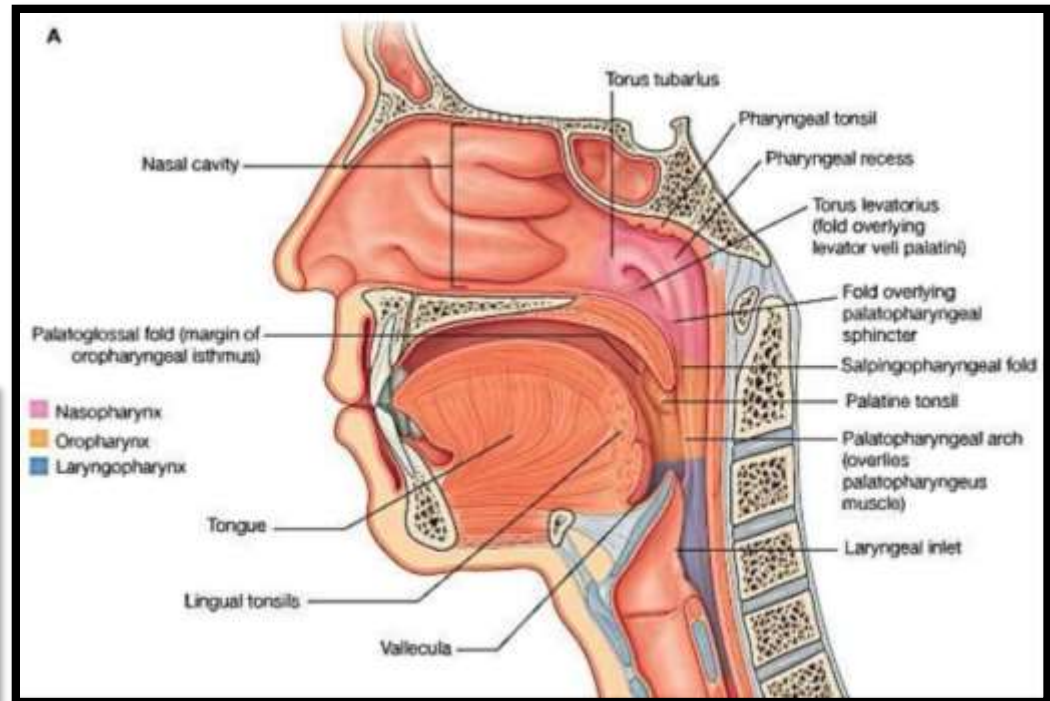
Anteriorly- with nasal cavities.

Inferiorly- with oropharynx.



Pharyngeal Isthmus [Nasopharyngeal Isthmus]

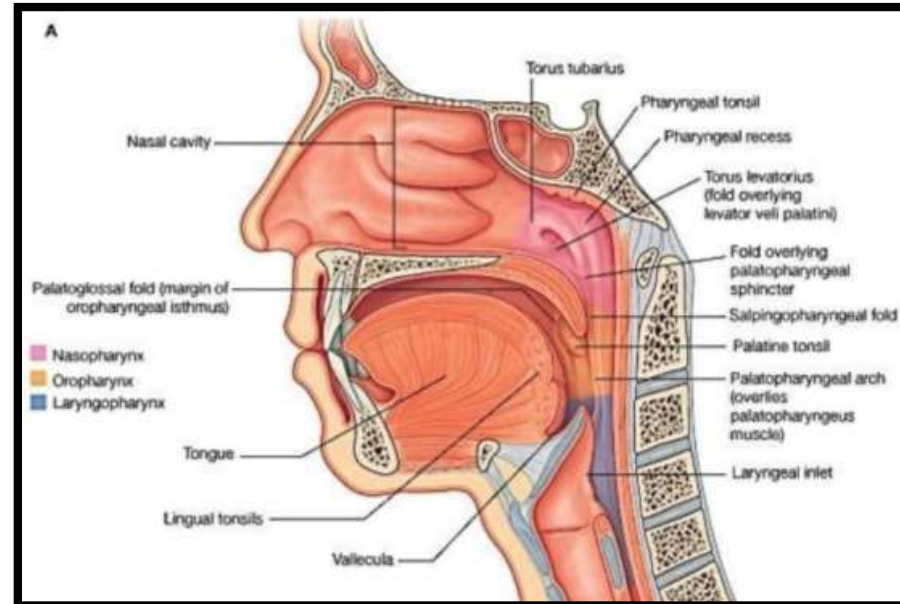
- An opening bounded anteriorly by the soft palate and posteriorly by the posterior wall of pharynx (**Passavant's ridge**).



Nasopharynx contd...

Features:

- Nasopharyngeal (Pharyngeal) Tonsil).
- Orifice of Pharyngo-tympanic tube (Auditory tube or Eustachian tube).
- Tubal elevation.
- Tubal tonsil.
- Salpingopharyngeal fold.
- Salpingopalatine fold.
- Pharyngeal recess (Fossa of Rosenmüller).



Nasopharyngeal (Pharyngeal) Tonsil [Adenoids]-

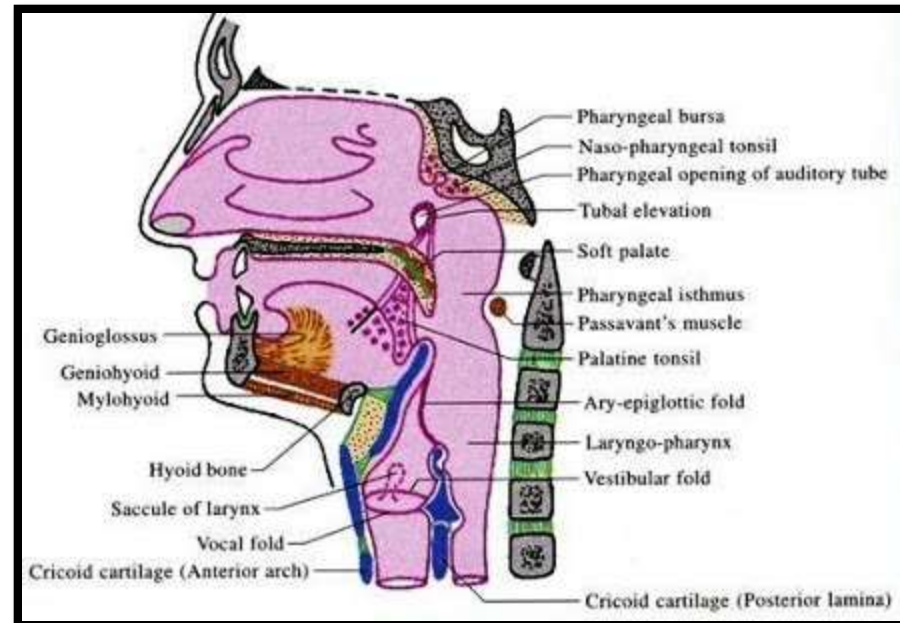
- A collection of lymphoid tissue.

Location- At the junction of roof and posterior wall of nasopharynx.

- Contains nasopharyngeal bursa.

Nasopharyngeal (Pharyngeal) bursa [Pouch of Luschka]-

- A mucous diverticulum which extends upwards into the substance of pharyngeal tonsil from its apex.
- It is developed due to adhesion of notochord to the dorsal wall of pharyngeal part of foregut.



Nasopharynx contd...

Orifice of Pharyngo-tympanic tube (Auditory tube or Eustachian tube)-

Location-

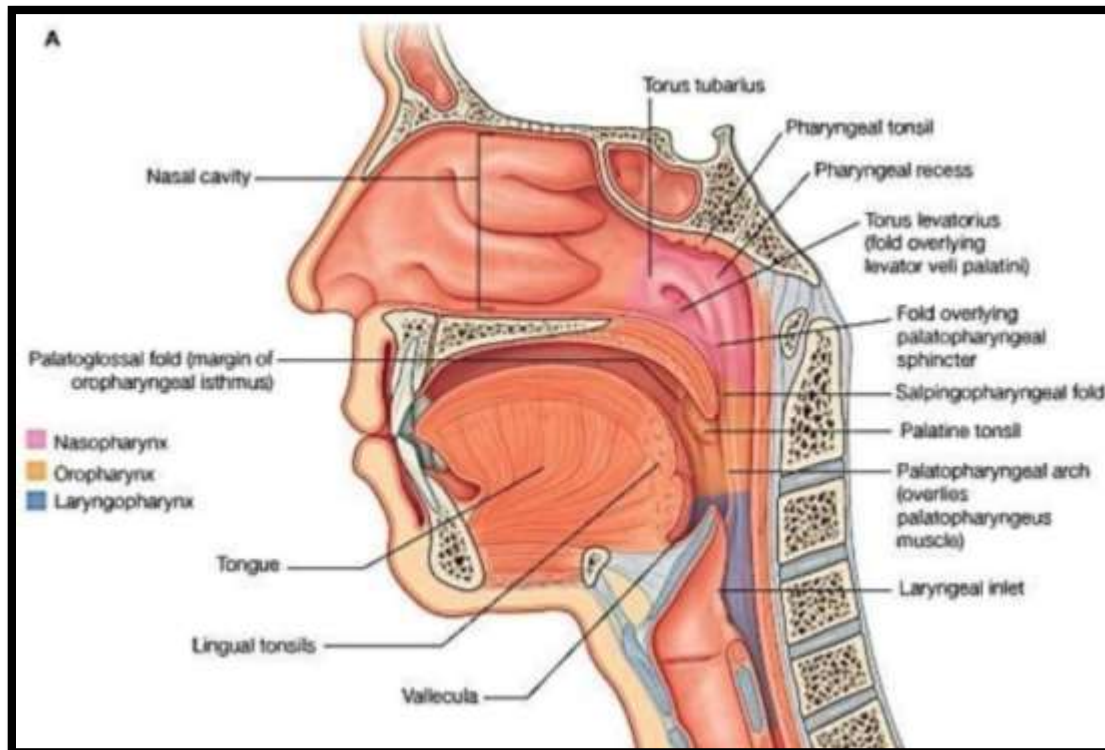
- On lateral wall of nasopharynx, approximately **1.25 cm** behind inferior nasal concha.

Tubal elevation-

- Upper and posterior margins of orifice of eustachian tube are elevated due to collection of lymphoid tissue.
- These elevated margins are known as tubal elevation.

Tubal tonsil-

- Collection of lymphoid tissue in tubal elevation is known as tubal tonsil.



Nasopharynx contd...

Salpingopharyngeal fold-

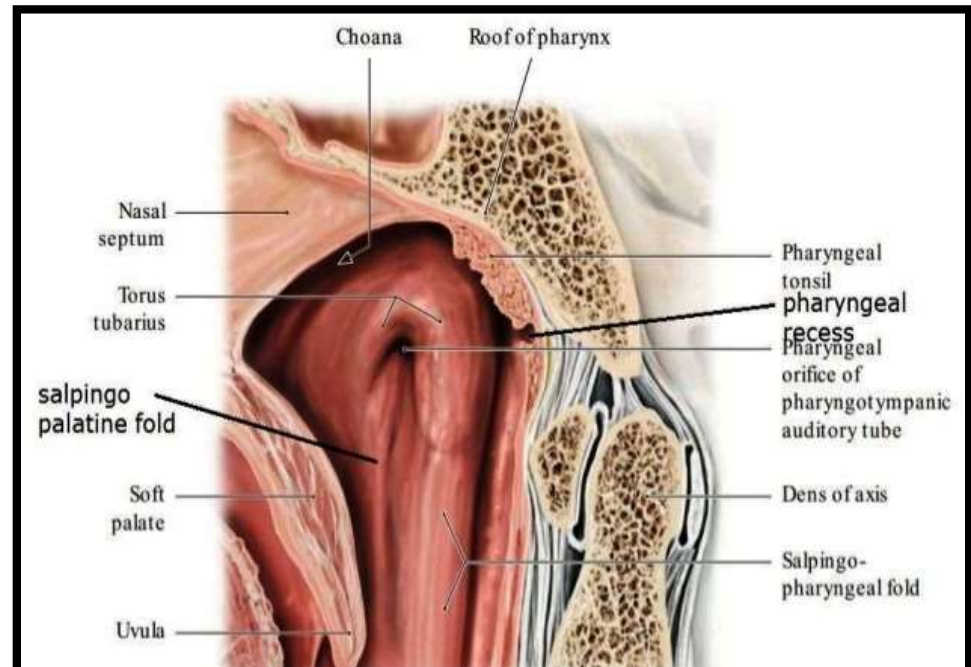
- A mucous fold which extends vertically downwards on the side wall of pharynx from tubal elevation.
- It contains **Salpingopharyngeus** muscle.

Salpingopalatine fold-

- A mucous fold which extends downwards and forwards to the soft palate from tubal elevation.
- It contains **Levator Palati** muscle.

Pharyngeal recess (Fossa of Rosenmüller).

- It is a deep depression behind the tubal elevation.



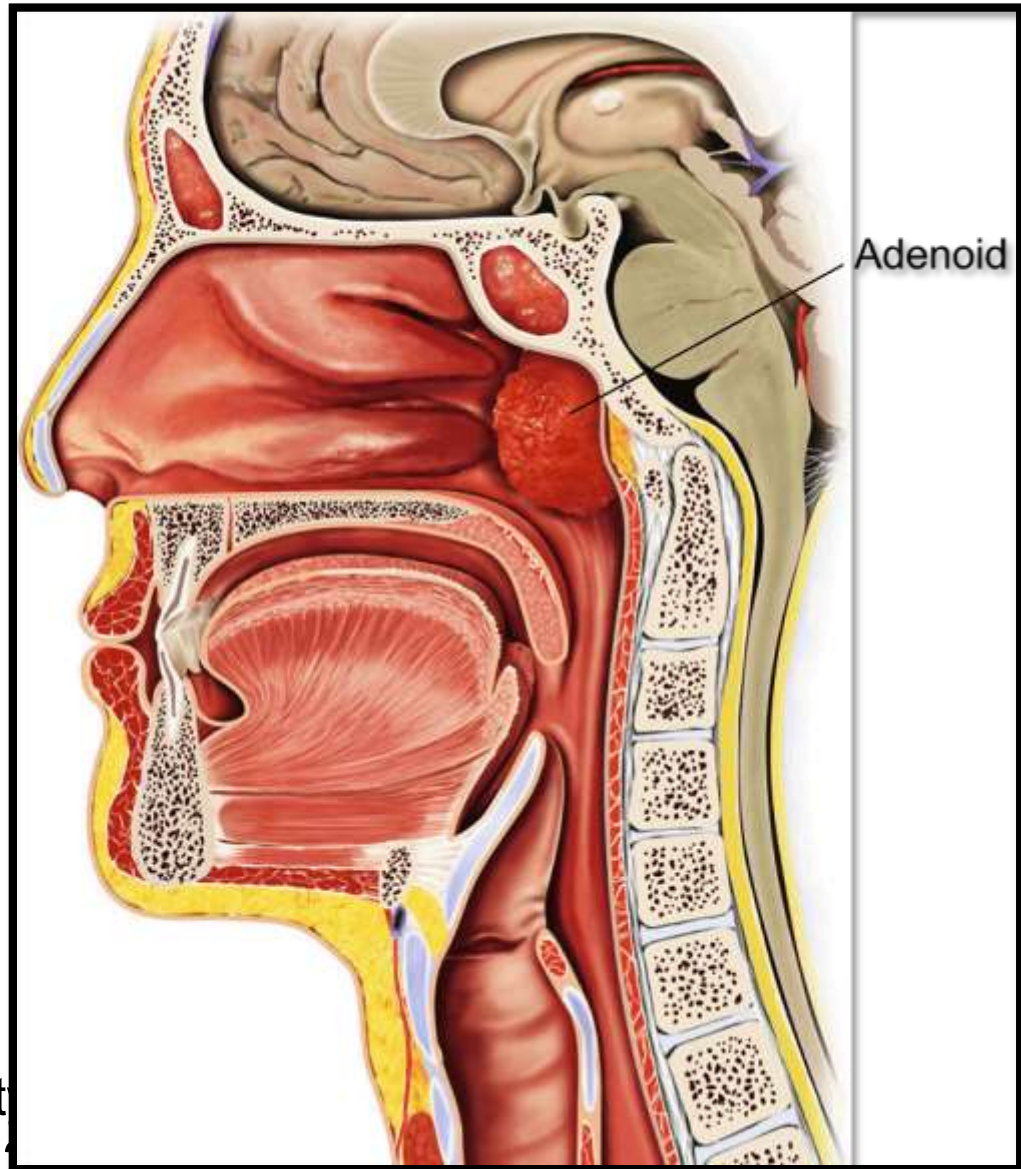
Applied Aspects

Adenoids-

- Enlarged nasopharyngeal tonsils due to infection.
- Block the posterior nares.

Clinical Features-

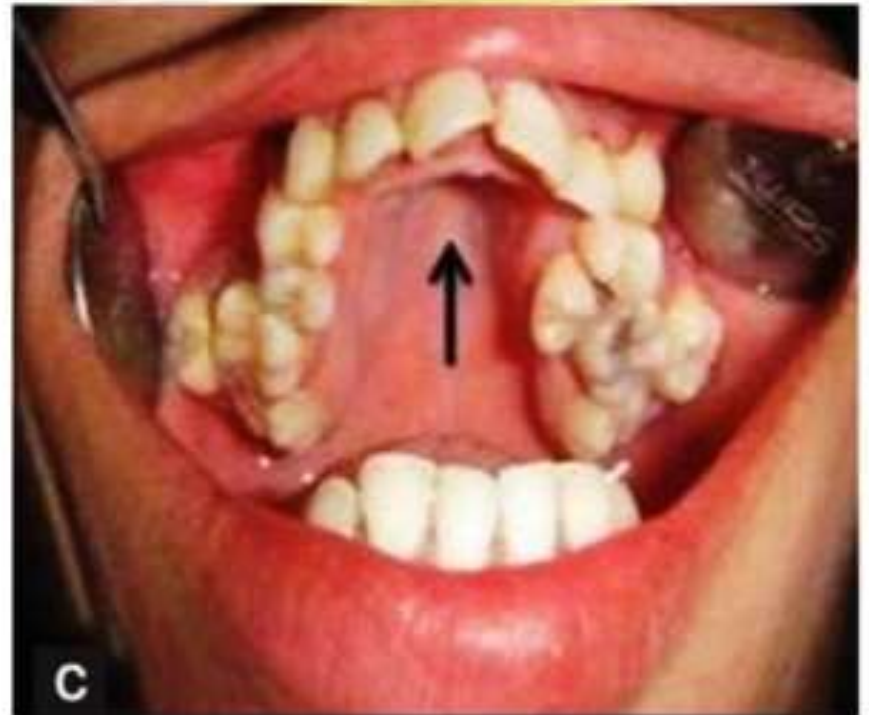
- Nasal obstruction.
 - Nasal discharge.
 - Mouth breathing.
 - Snoring.
 - Protrusion of tongue.
 - Toneless voice
 - Small nose.
 - Epistaxis (Nose Bleeding).
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- ❖ Nasopharyngeal tonsils are prominent in children up to the age of 6 years.
 - ❖ They gradually undergo atrophy at puberty.
 - ❖ They completely disappear by the age of 10 years.



Adenoid Facies [Long Face Syndrome]

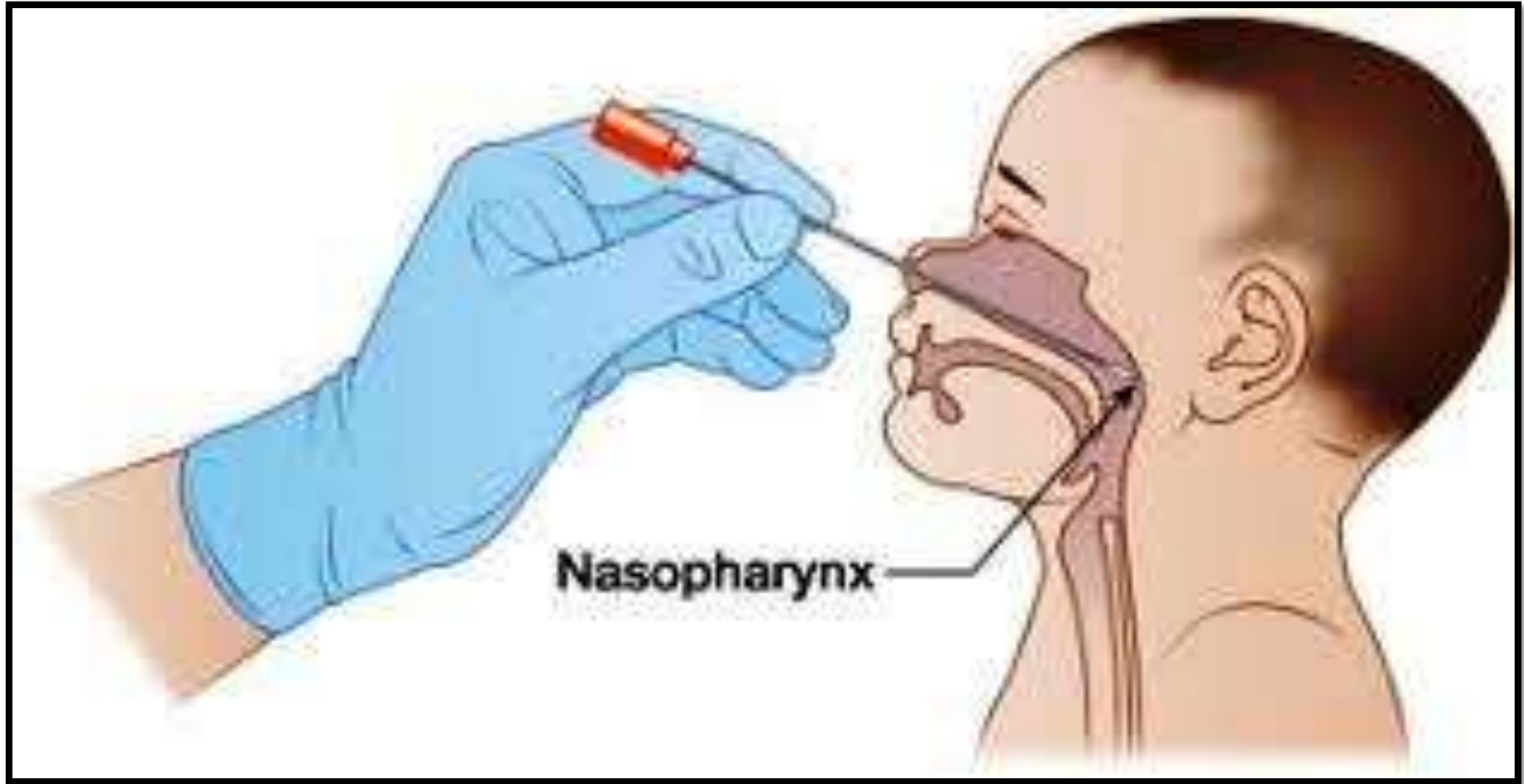
- ❖ Long, open-mouthed face of children with adenoid hypertrophy.
- ❖ These children are 'Obligatory Mouth Breathers'.
- ❖ Persistent mouth breathing may be associated with development of craniofacial anomalies.
- ❖ The **characteristic facial appearance** consists of:
 - Underdeveloped thin nostrils
 - Short upper lip
 - Prominent upper teeth
 - Crowded teeth
 - Narrow upper alveolus.
 - High-arched palate
 - Hypoplastic maxilla





High arched palate and crowded teeth

Nasopharyngeal Swab





*Thank
You*