



EMERALD

CHORAL ACADEMY

VOCAL ANATOMY 104: THE PHARYNX

Saturday, May 21, 2022

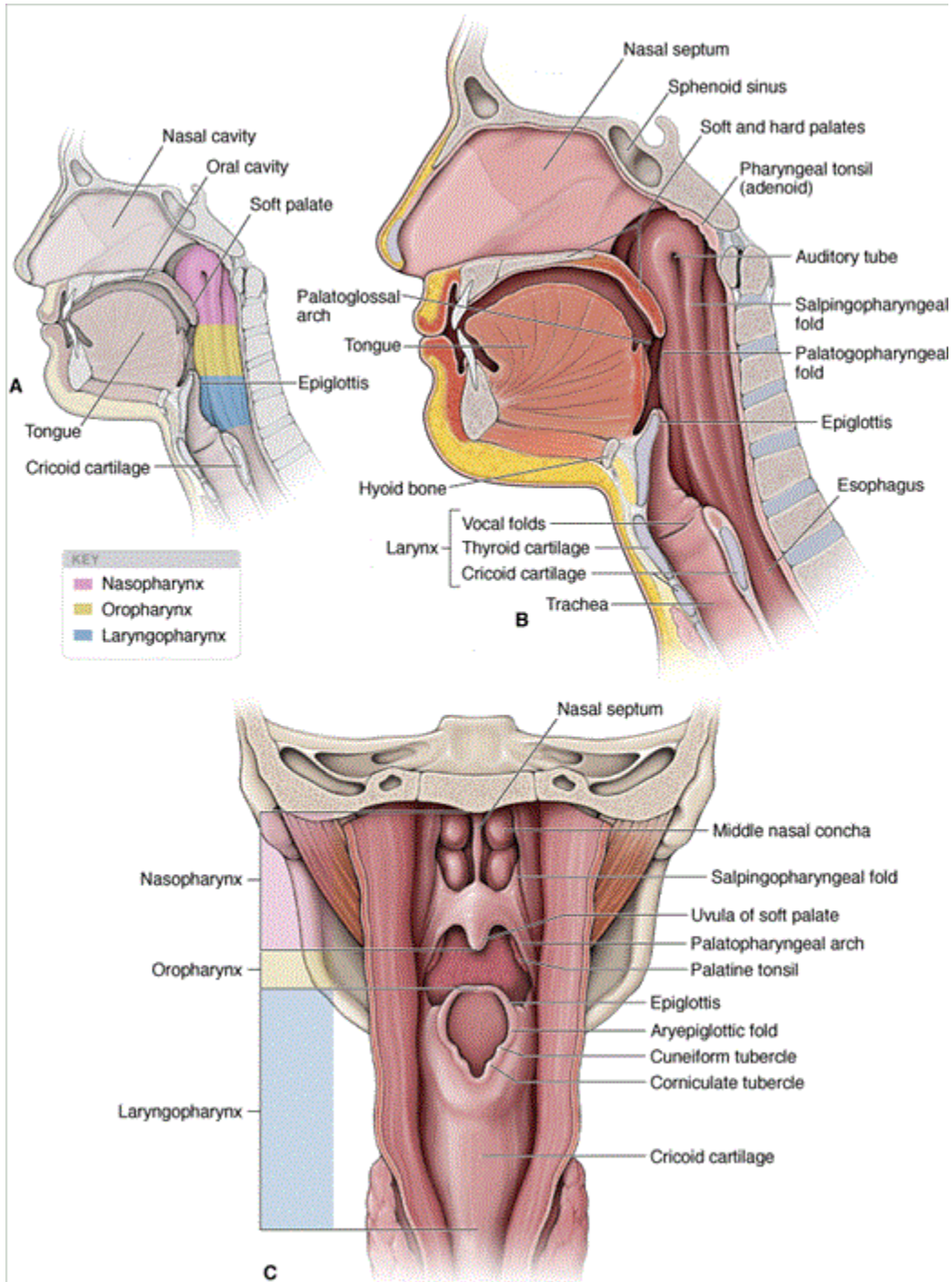
11:00am

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PHARYNX FACTS

- the pharynx is a funnel-shaped, muscular tube that extends from the base of the skull to the cricoid cartilage
- posterior to the oral and nasal cavities, anterior to cervical vertebrae
- it is divided into three main sections - 1) nasopharynx 2) oropharynx 3) laryngopharynx
- technically belongs to both the respiratory and digestive systems
 - no digestion occurs in the pharynx; food is mechanically moved, constrictor muscles contract to help swallow
 - the reflex to swallow comes from the medulla in the brain, and the following steps happen:
 - pharynx is constricted
 - breathing ceases
 - soft palate is elevated and blocks nasal passages
 - larynx elevates and epiglottis closes (prevents food from going “down the wrong pipe”)
 - peristalsis of esophagus (food is moved toward stomach)
- the larynx is the *SOURCE* of vocal sound, the pharynx is the *FILTER* (resonance ‘system’ of the voice)
- when the vocal folds vibrate, they generate a spectrum of frequencies based on length/tension of the folds and air pressure provided
 - sound waves travel above and below folds to spaces we call **RESONATORS**
 - seven vocal resonators; all are “air-filled” spaces
 - Chest
 - Trachea
 - Laryngeal vestibule (piriform sinus)
 - Pharynx (three parts)
 - Oral cavity
 - Nasal cavity
 - Sinus cavities
 - some resonators are **FIXED**, some are **MOVABLE**

- Resonance is the enhancement or amplification of specific frequencies



Source: Morton DA, Foreman KB, Albertine KH: *The Big Picture: Gross Anatomy*: www.accessmedicine.com
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