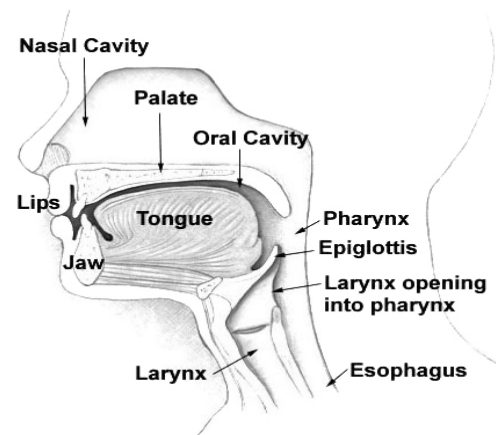


## Lesson 05:

## The Resonating Cavities

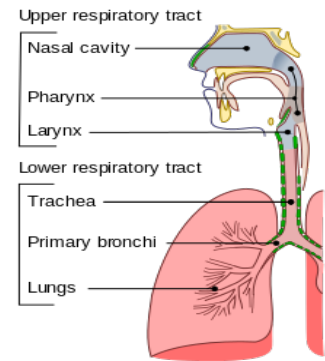
**Objectives:** By the end of this lesson, learners should feel the role of these cavities in modifying the evacuated air stream, and distinguish between nasal sounds and oral ones.

When the air stream is pumped up from the lungs, it rises into the windpipe. As it reaches above the glottis, it will be affected by the three resonating cavities: the pharyngeal, the nasal, and oral cavities (Reed & Levis, 2015).



- 1. The Pharynx, the pharyngeal cavity:** This refers to the passage that extends from the top of the larynx and esophagus to the uvula, or to the point where the oral and nasal cavities meet. The volume of the pharyngeal cavity can be modified by the constrictive actions of the larynx muscles, by the movement of the soft palate, and the parts of the tongue.
- 2. The Nasal Cavity:** The nasal cavity modifies speech sounds in two ways. Of course, this is related to the position of the velum. When the latter is lowered with a total closure at the level of the oral cavity, the airstream escapes from the nose producing nasal sounds (/m/ /n/ /ŋ/). The other type of sound modification can occur when the velum position is in midway between high and low, allowing the air to pass through the mouth and nose such as in French nasalized sounds (en/ on/).
- 3. The Oral Cavity:** The oral cavity refers to the passage which boundaries are constrained by the teeth and lips in the front; the hard palate in the upper part; and the pharyngeal wall in the rear. The other remaining parts are movable articulators such as the tongue, the lower jaw, the lower lip, the soft palate, and the uvula. What distinguishes the oral cavity is its involvement in the production of the vast majority of speech sounds.

4. **The Trachea** (or windpipe) is a wide, hollow tube that connects the larynx (or voice box) to the bronchi of the lungs. It is an integral part of the body's airway and has the vital function of providing airflow to and from the lungs for respiration. The trachea begins at the inferior end of the larynx in the base of the neck and extends inferiorly into the thorax posterior to the sternum.



## **Lesson 06:           How sounds are produced**

**Objectives:** By the end of this lesson, learners can feel the different stages that the air stream goes through to be transformed into speech sounds.

Before it becomes a sound, the air stream undergoes a number of modifications in the upper stages of the respiratory system. First, the air rises up from the lungs into the trachea until the glottis. If the vocal cords are tightly closed, the airstream cannot pass. If they are set wide apart, the air rises unimpeded, causing sounds to be voiceless. If the folds are set loosely together, the rising air vibrates them (or they vibrate), causing sounds to become voiced. However, for glottal stops articulation, the cords close and open promptly. Then, the airstream rises into the pharynx. If the uvula moves up to block the nasal passages, the air escapes through the oral cavity producing oral sounds. If the uvula moves down, the airstream can pass through the nasal cavity producing nasal sounds (Gimson, 1980; the International Phonetic Association [IPA], 1999; Jenkins, 2000).