

ANATOMY



The respiratory system is responsible for the exchange of gases between the body and the environment. It consists of the trachea, bronchi, bronchioles, and alveoli. The trachea is the windpipe, and the bronchi are the main airways that branch out to the lungs. The bronchioles are smaller airways that lead to the alveoli, where the exchange of oxygen and carbon dioxide occurs.

The process of breathing involves the contraction and relaxation of the diaphragm and the intercostal muscles. When the diaphragm contracts, it moves down, increasing the volume of the thoracic cavity and drawing air into the lungs. When it relaxes, it moves up, decreasing the volume and pushing air out of the lungs.

Structure	Function
Trachea	Carries air from the larynx to the bronchi.
Bronchi	Main airways that branch out to the lungs.
Bronchioles	Smaller airways that lead to the alveoli.
Alveoli	Small air sacs where the exchange of oxygen and carbon dioxide occurs.
Diaphragm	Muscle that contracts and relaxes to facilitate breathing.
Intercostal muscles	Muscles between the ribs that contract and relax to facilitate breathing.