

Respiratory System

Cells need food and oxygen to function. They produce carbon dioxide as a waste product. This process is called Cellular respiration.

The oxygen and carbon dioxide are transported in the blood stream and the gas exchange occurs in the alveoli of the lungs.

Alveoli are tiny air sacs one cell thick.

Carbon dioxide diffuses out of the blood and into the lungs.

Oxygen diffuses out of the lungs and into capillaries (bloodstream) that are one cell thick.

The gases diffuse into red blood cells that are responsible for the transport of the oxygen and the carbon dioxide

Breathing maintains the high concentration of oxygen in the lungs and also maintains the low concentration of the carbon dioxide in the lungs every time you breathe in and out.

Parts and Functions of the respiratory system

Nasal Cavity - Hairs and mucus trap dirt and bacteria

Sinuses - produce mucus

Adenoids and Tonsils - immune system - help fight off infections

Oral cavity - mouth

Pharynx - where the nasal cavity and the oral cavity meet

Larynx - voice box - vocal cords

Trachea - rigid tube - windpipe - covered in hairs and mucus to trap dirt and particles

Bronchi - major tubes of the lungs

Bronchiole - minor tubes of the lungs

Alveoli - tiny sacs at the end of the bronchioles where gas exchange occurs

Diaphragm - muscle layer that expands your lungs when flexed (contracted)