

# Chapter 22: Respiratory System

Functions & Processes

# Function of the Respiratory System

- Supply the body with oxygen and dispose of carbon dioxide

# Four Process of Respiration

- Pulmonary ventilation
- External respiration
- Transport of respiratory gases
- Internal respiration

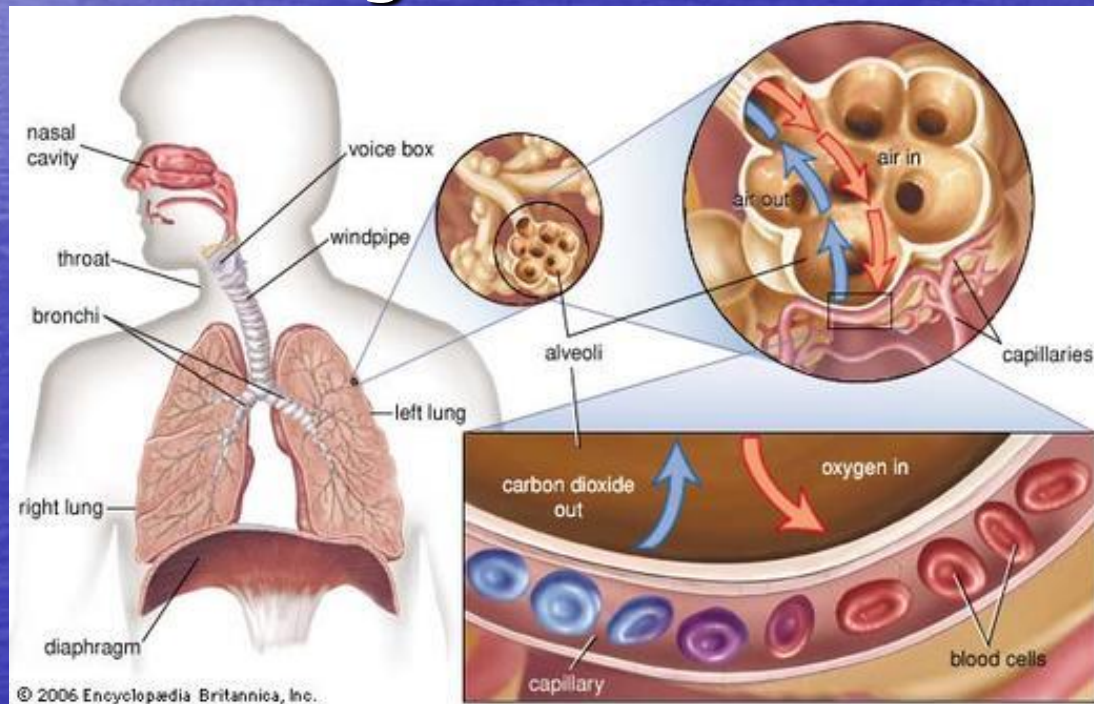
# Pulmonary Ventilation

- Movement of air into and out of lungs so that the gases are constantly being exchanged and refreshed.
- Commonly known as breathing.



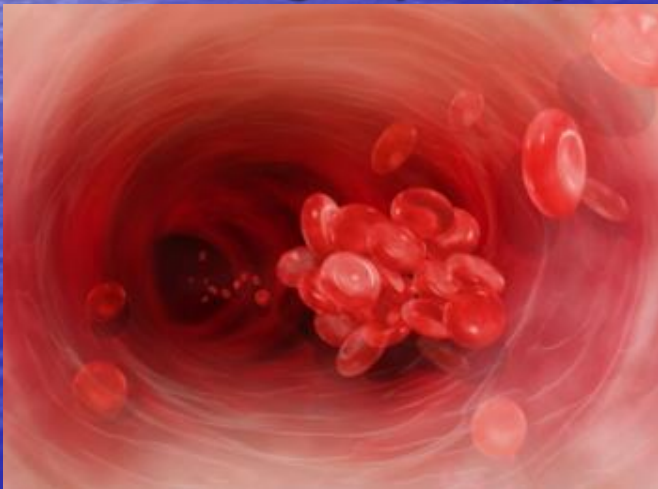
# External Respiration

- Movement of oxygen from the lungs to the blood and of carbon dioxide from the blood to the lungs



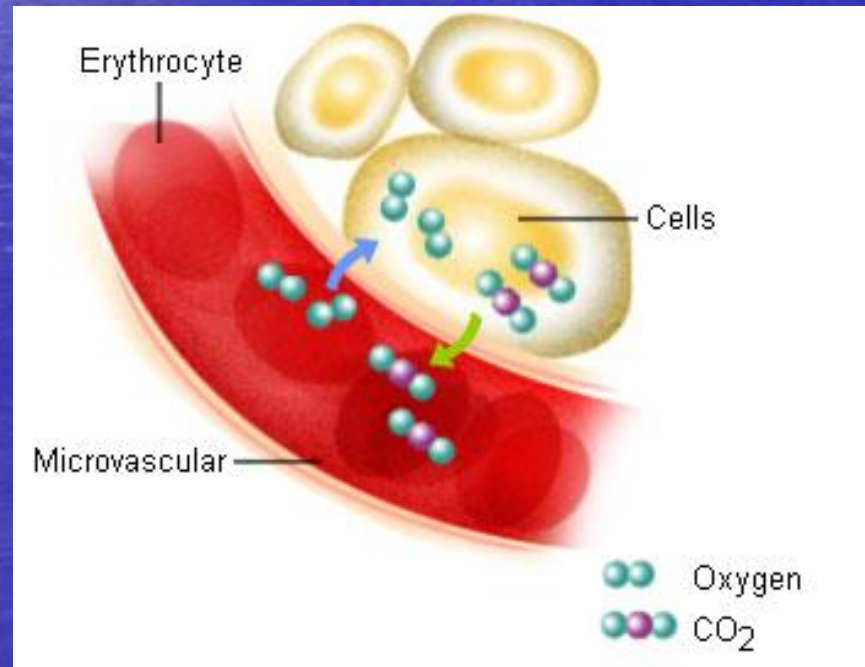
# Transport of Respiratory Gases

- Transportation of oxygen and carbon dioxide in the body.
  - Oxygen from the lungs to the capillaries (cells)
  - Carbon dioxide from the capillaries to the lungs (cells)



# Internal Respiration

- Movement of oxygen from the blood to the tissue cells and of carbon dioxide from the tissue cells to the blood.



# Respiration

- Only the first two processes are the actual responsibility of the respiratory system, but it can't accomplish its primary goal unless the 3<sup>rd</sup> and 4<sup>th</sup> processes are also occurring!
- The respiratory and circulatory systems are closely coupled!