



The Respiratory System

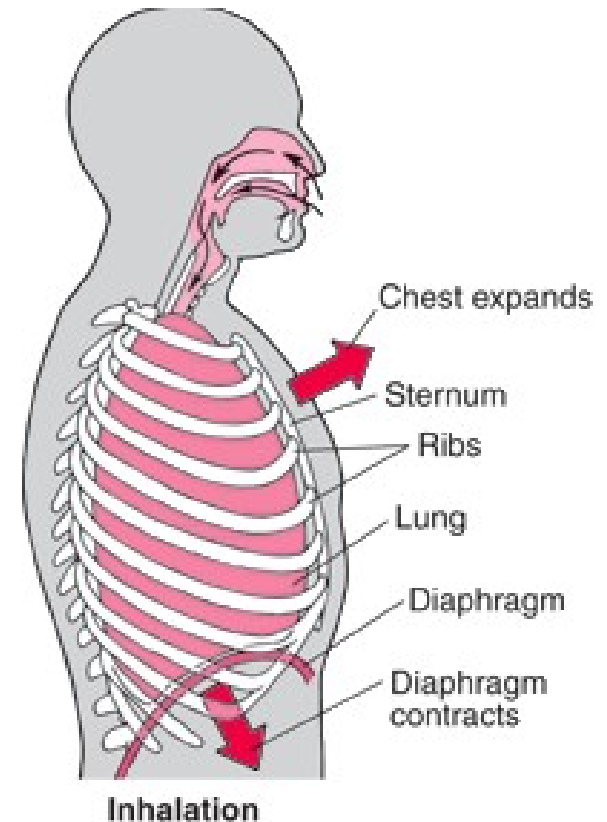
SNC2P

Breathing

Breathing is an involuntary mechanical action, triggered by an increased level of carbon dioxide in the blood.

The Diaphragm

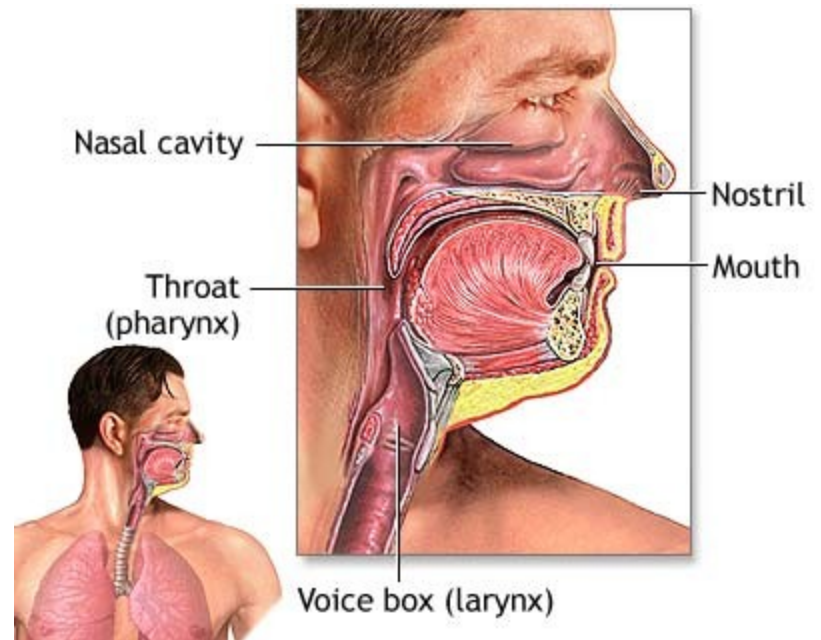
When you inhale, your rib muscles move out and a muscle called the diaphragm moves down to draw air into the lungs.



The Mouth and Nose

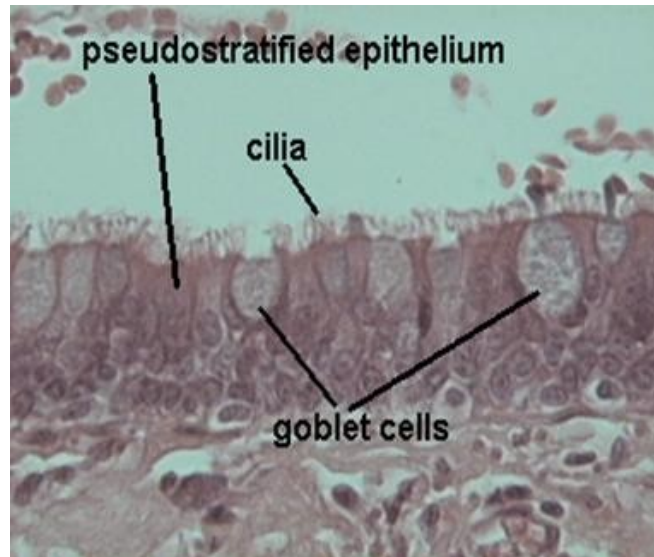
Air is drawn in through the mouth and nose.

The inside of the nose is lined with hairs to filter out dust and pollen and mucus to trap germs (usually bacteria).



The Trachea

The air then enters the windpipe, or trachea, which is also lined with mucus and with microscopic hairs, which sweep in an outward direction.



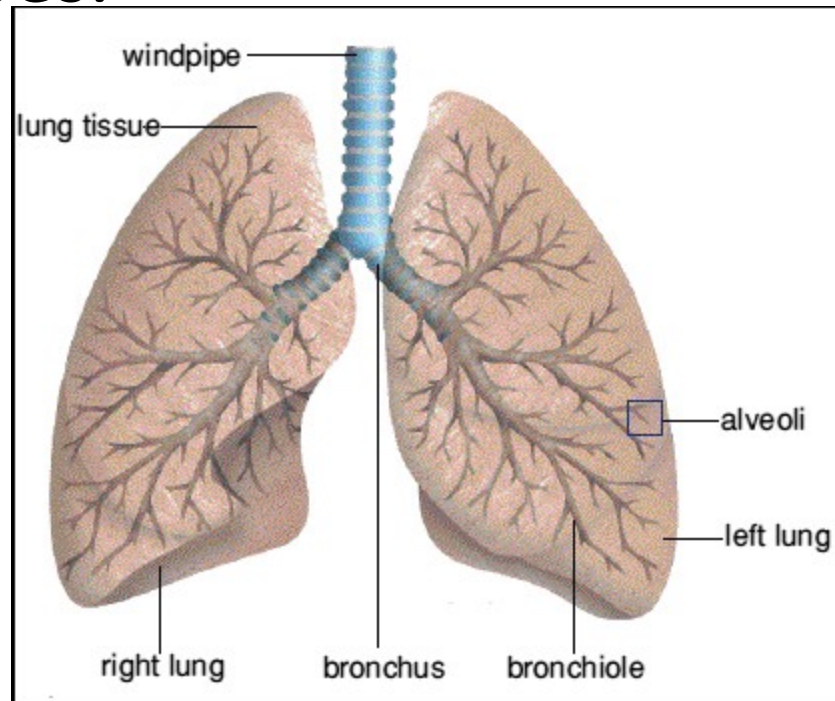
Coughing and Sneezing

Any harmful substances that make it past the hairs and mucus may be forced from the system by the gusts of air produced by coughing or sneezing.



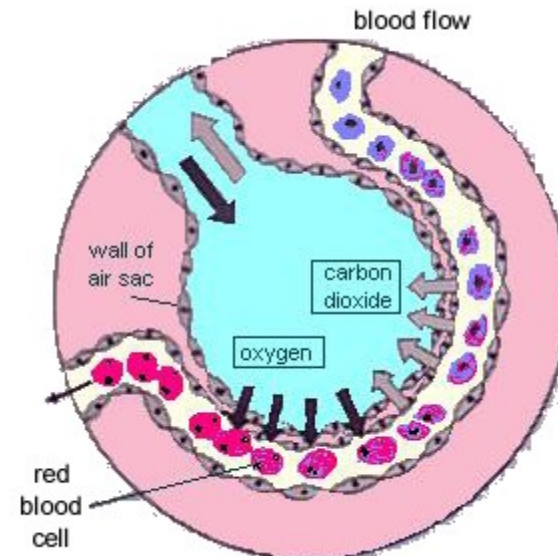
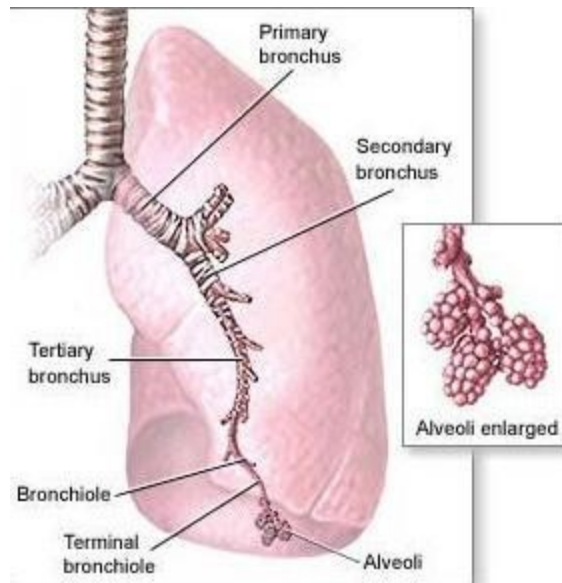
Bronchi

The trachea branches into two tubes called bronchi, which branch into smaller and smaller tubes.



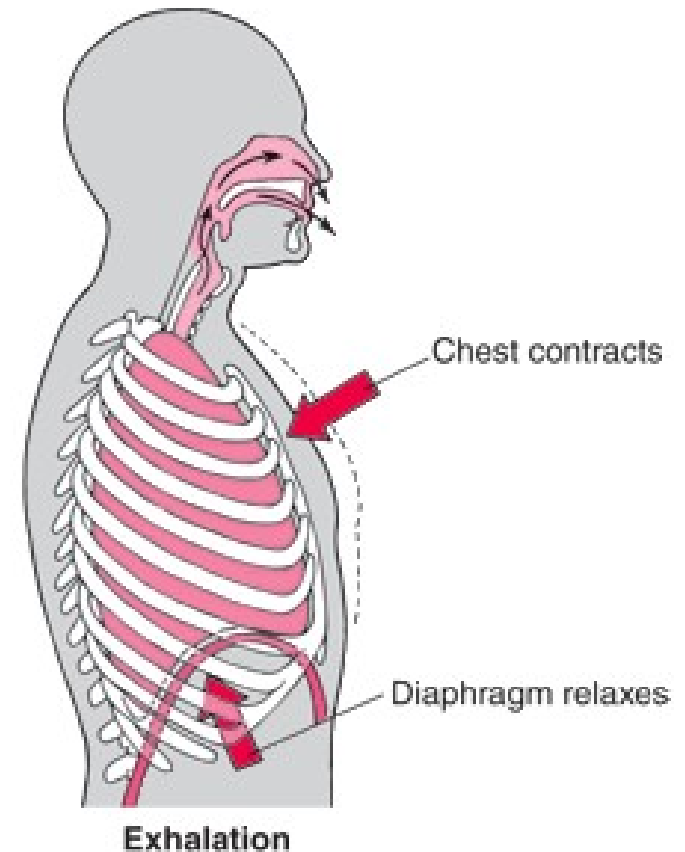
Alveoli

These tubes end in air sacs called alveoli.
Surrounding the air sacs are capillaries. The blood in the capillaries absorbs some of the oxygen in the air and releases carbon dioxide.



Exhaling

The rib muscles then move inward and the diaphragm relaxes and the carbon-dioxide-enriched air is expelled from your lungs.



Respiration

The oxygen-enriched blood returns to the heart to be pumped to all the cells of the body so that they can perform cellular respiration.

Gas Exchange in the Body Tissues

