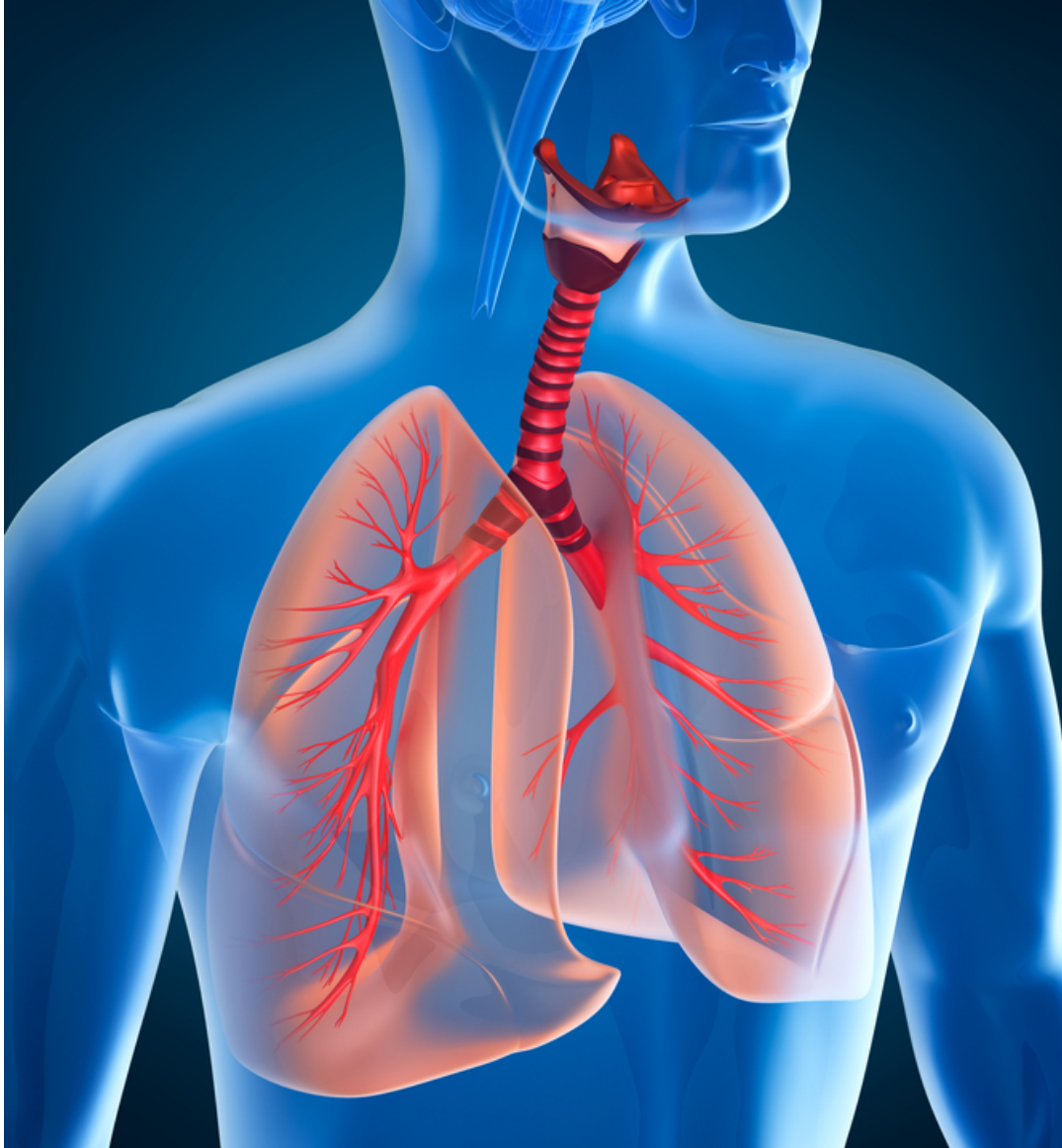




The Respiratory System

Study*ladder*

The Respiratory System



The respiratory system is the group of organs in your body that allow you to breathe.

This includes your airways, your lungs, and the blood vessels and muscles attached to them.

What does the respiratory system do?

The respiratory system's main function is to supply oxygen to all the parts of your body.

It does this through breathing.

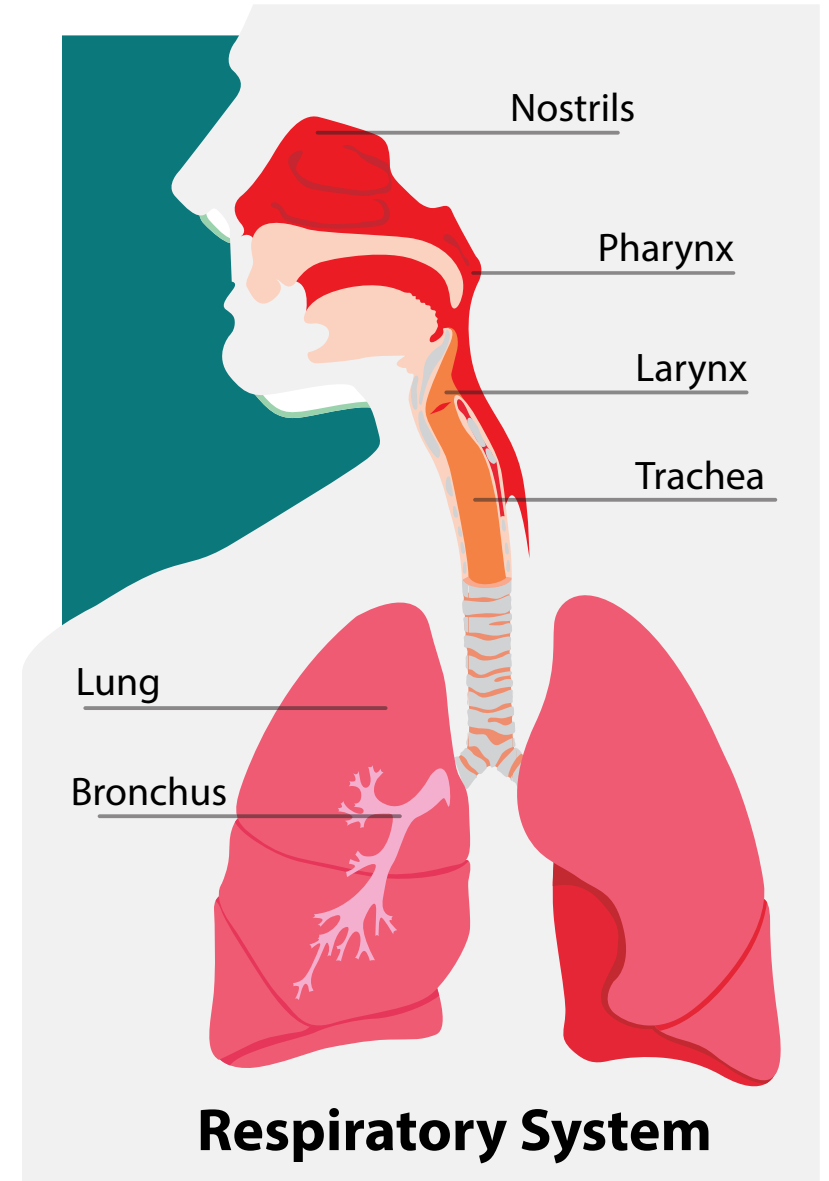
You inhale oxygen and exhale unwanted carbon dioxide.



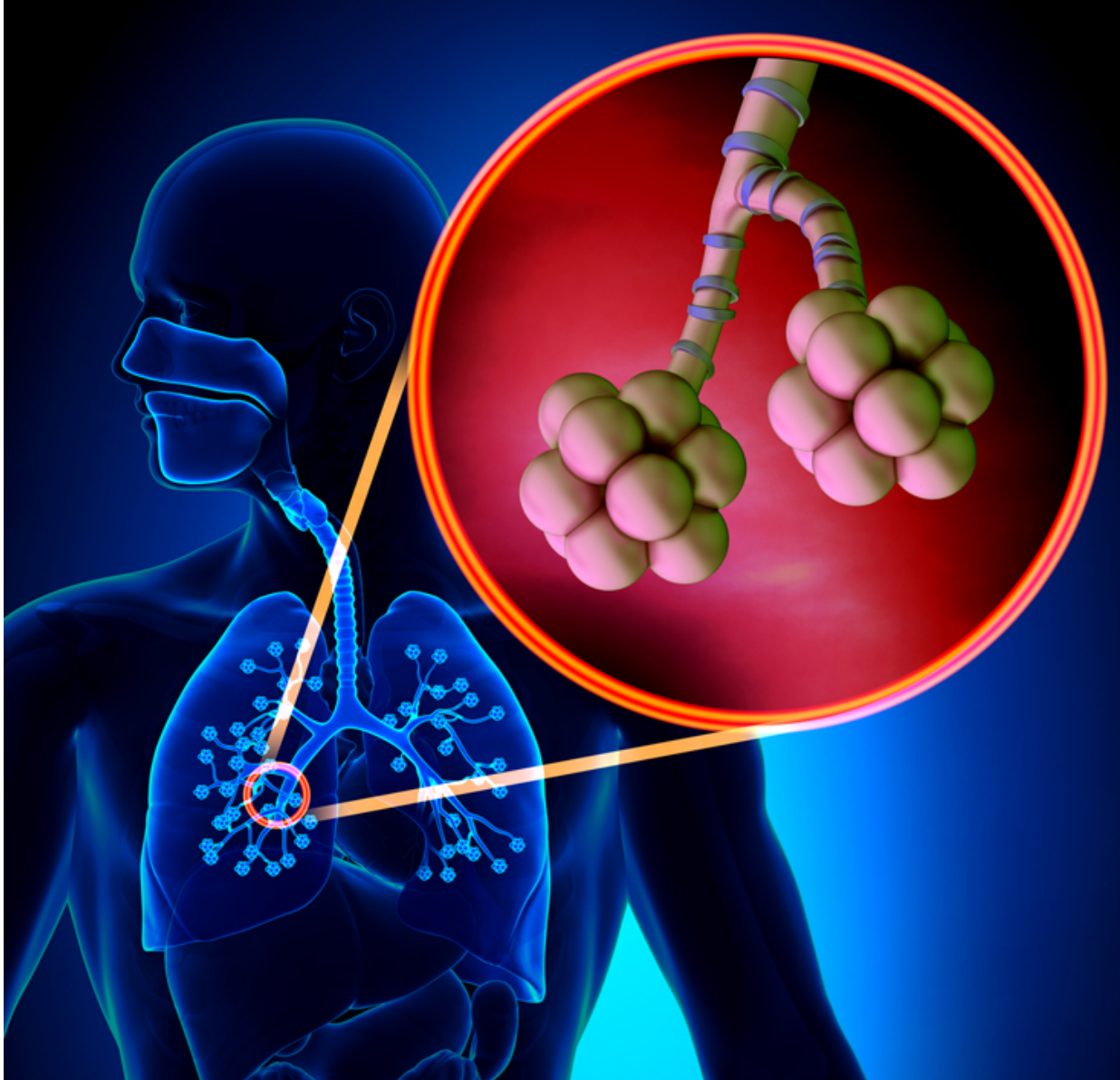
How does the respiratory system work?

You breathe air in through your nose and mouth.

Then the air travels through your voice box, down your windpipe, and through two bronchial tubes into your lungs.



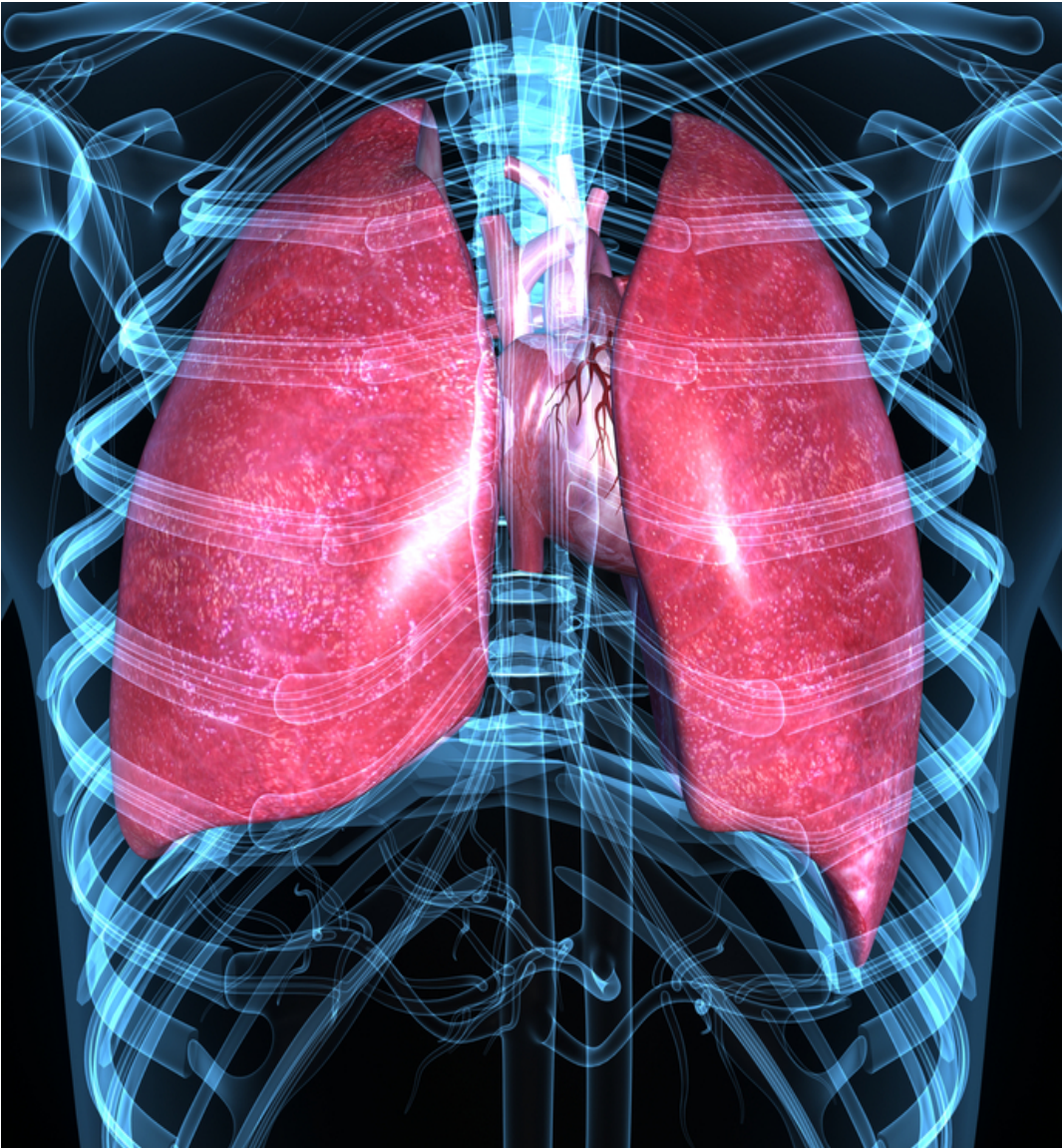
Alveoli



At the end of the smallest branches of the bronchi are tiny air sacs called alveoli.

Alveoli allow oxygen from the air to pass into your blood.

Oxygen



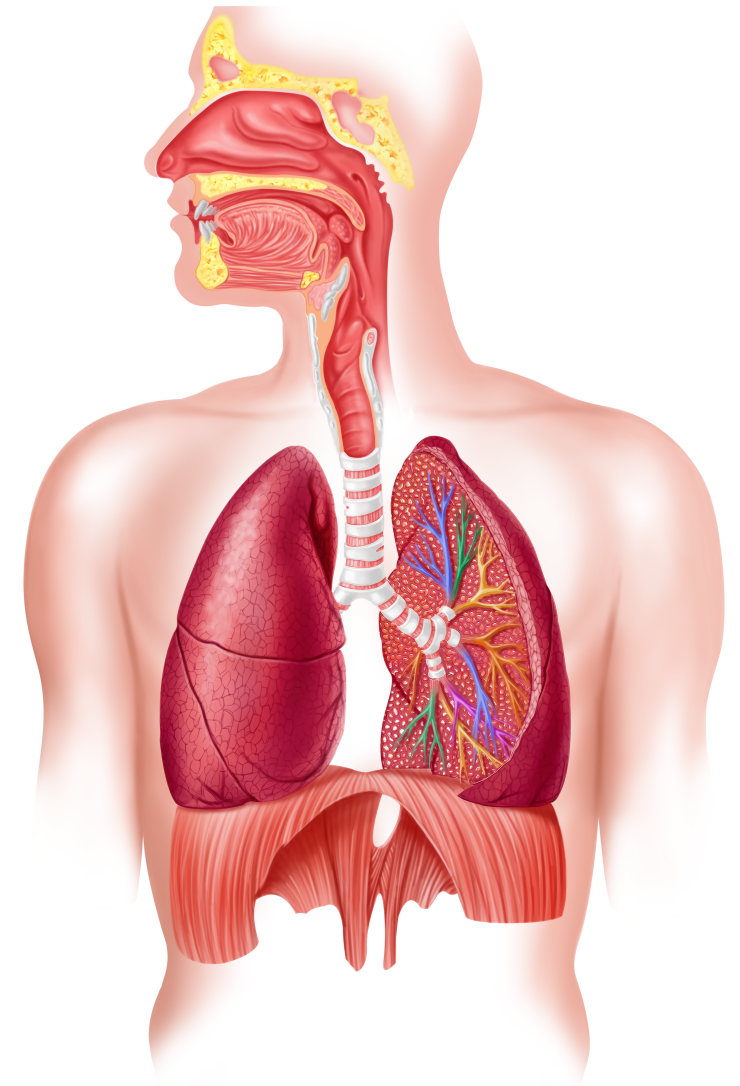
Blood that is circulating around the walls of your lungs is rich in oxygen. It is carried back to the heart where it can circulate to the rest of your body.

The diaphragm

The diaphragm helps your lungs expand and contract so you can inhale and exhale.

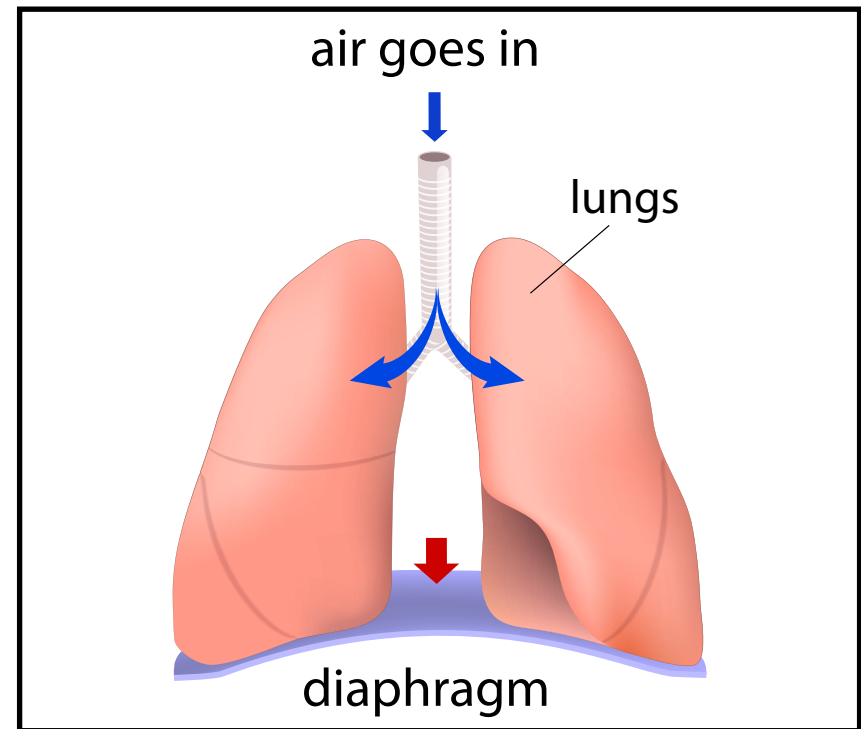
The diaphragm muscles lie across the bottom of the chest cavity.

The diaphragm helps pump the carbon dioxide out of the lungs and pull the oxygen into the lungs.



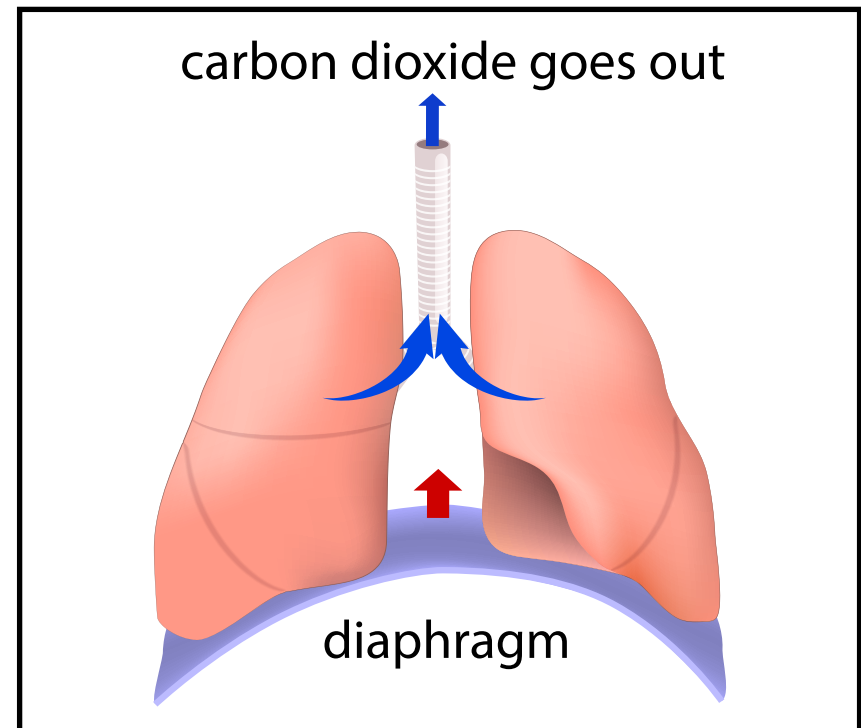
Breath in (inhale)

As the diaphragm pulls down, air is dragged into your lungs.

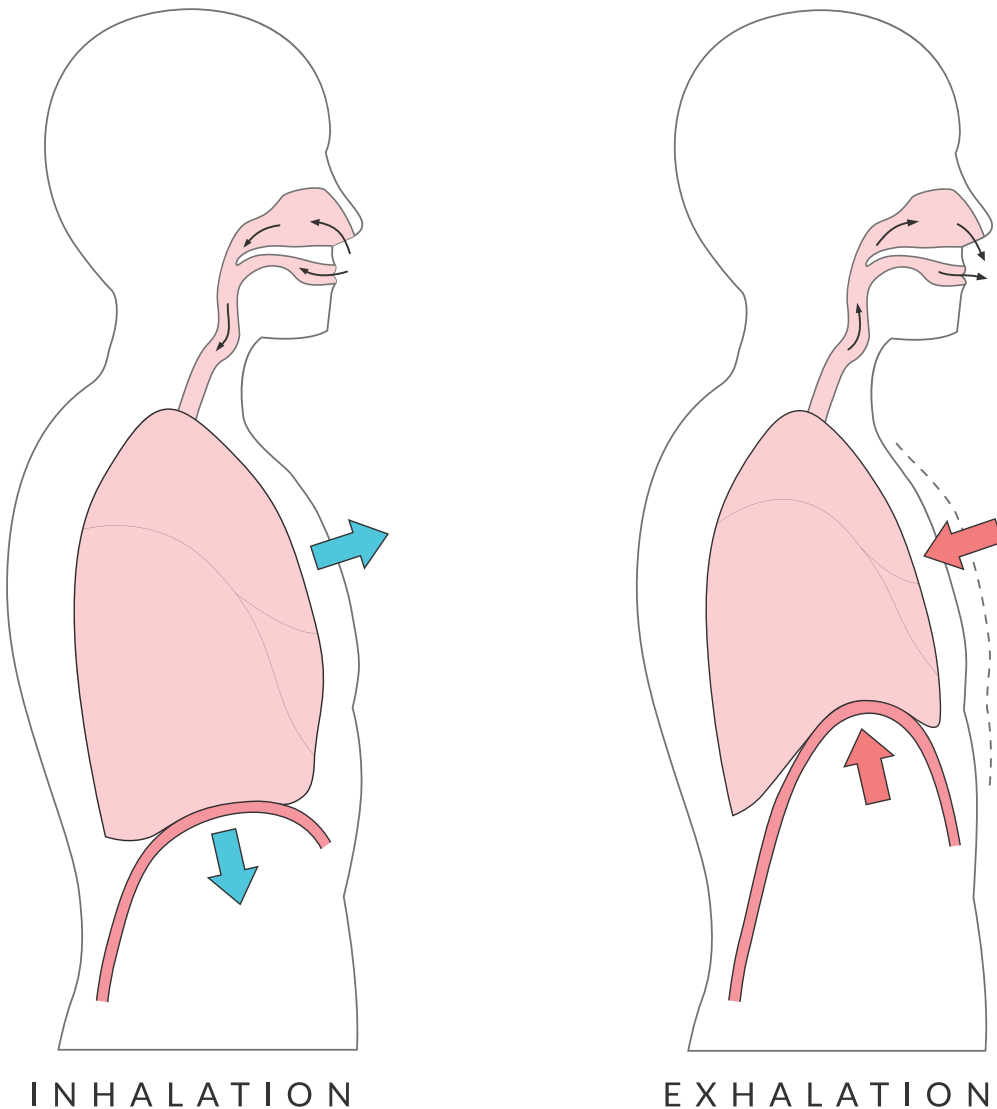


Breath Out (exhale)

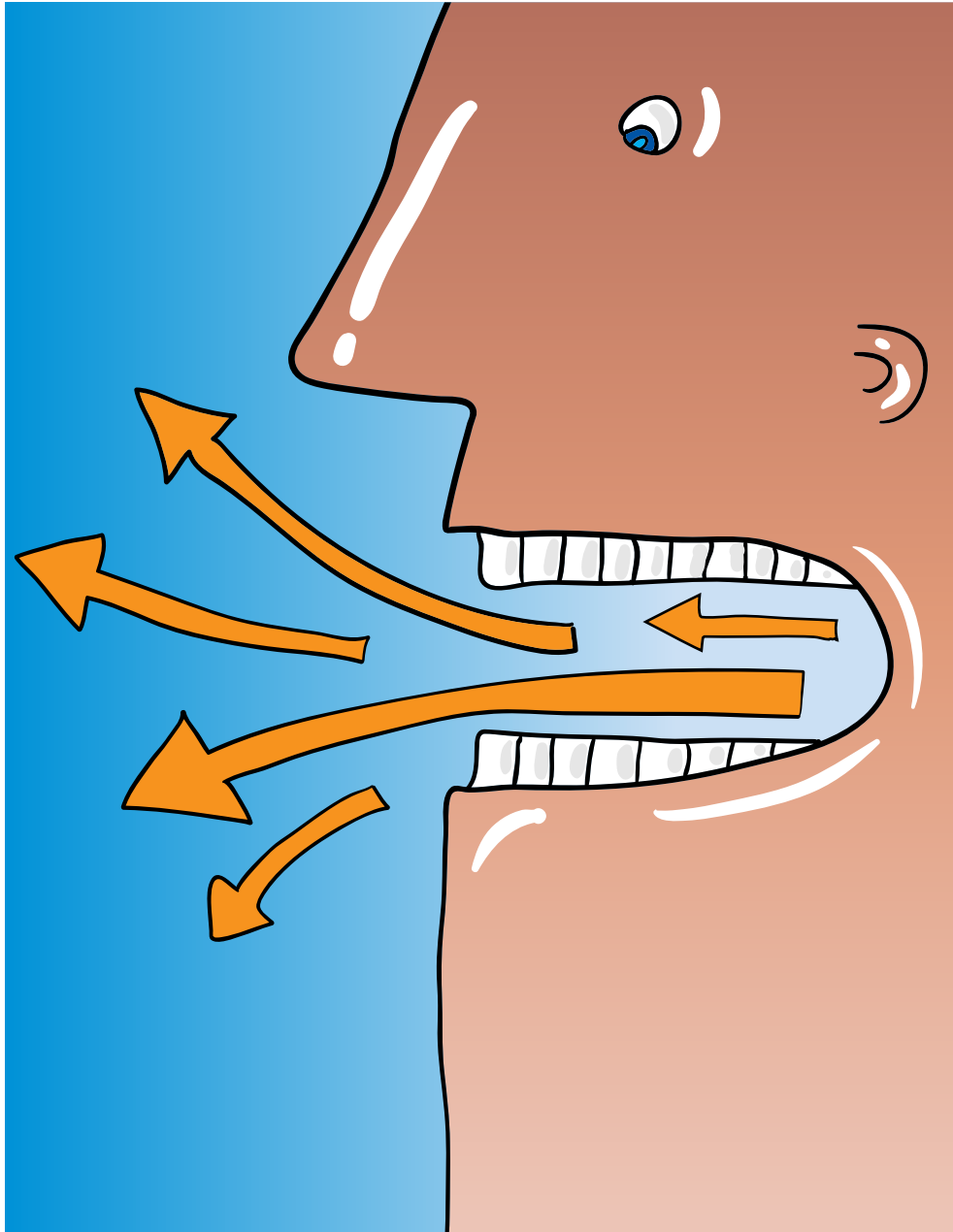
As the diaphragm pushes up, air is forced out of your lungs.



Inhale and exhale



You can feel your lungs when you breathe. Put your hands on your chest and breathe in deeply. You will feel your chest getting slightly bigger. Now breathe out the air. You can feel your chest return to its regular size.



Why is the air we breathe out warm?

The air that you breathe out is warm. It contains wastes and carbon dioxide. As air travels through your body, it picks up heat along the way.

You can feel this heat by putting your hand in front of your mouth or nose as you breathe out.