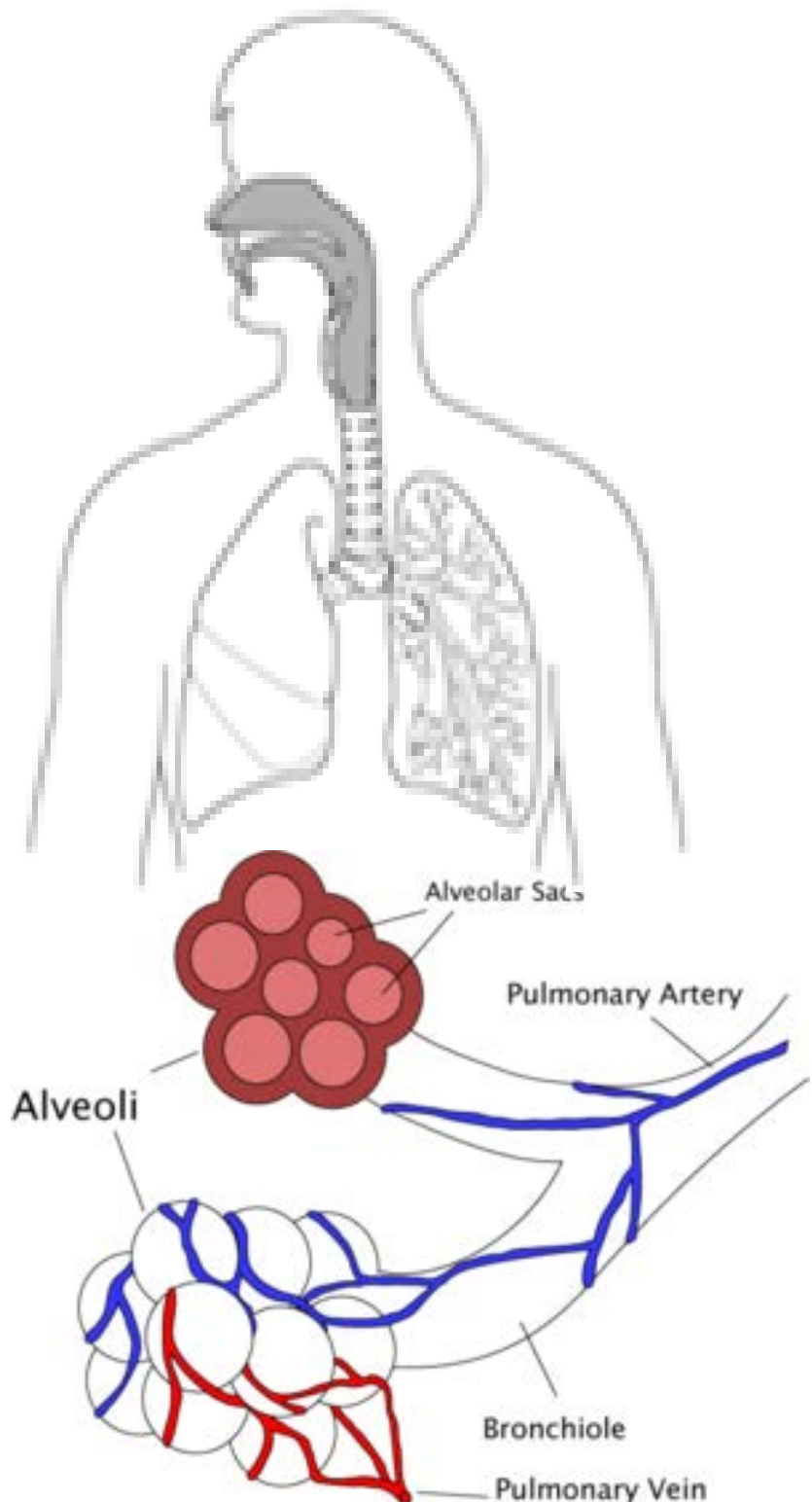


The Respiratory System

Remind yourself of the structure of the respiratory system by listing (in order) all of the structures that an oxygen molecule would pass through on its journey from the air outside to the bloodstream.

How have the alveoli adapted to maximise gaseous exchange?



The Respiratory System

Respiratory System Values

Define the following terms and give an estimated value for each for a normal person at rest

Breathing rate (f)

Tidal Volume (TV)

Minute Ventilation (ME)

What happens to these values when we start exercising?

Why does this happen?

The Respiratory System

Breathing Mechanics – Pulmonary ventilation (REST)

Remember air only moves in and out of our lungs due to changes in the pressure of the thorax. In order for this to happen, muscles have to contract first. Complete the table below explaining what happens to get air in and out of our lungs at rest. Some muscles contract, whilst others relax....

Inspiration (active)	Expiration (passive)
Diaphragm - External intercostals -	

What additional muscles are recruited to the inspiration and expiration processes whilst we are exercising?

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