

The Lungs

Body & health

How air becomes oxygen in the blood, and the numbers behind a breath.

One breath, from nose to bloodstream.

1

Nose and mouth

Air is warmed, moistened and filtered before it goes further.

2

Trachea and bronchi

The windpipe splits into two bronchi, then branches about 23 times.

3

Bronchioles

The narrowest airways. Asthma constricts these.

4

Alveoli

About 300 million tiny sacs, one cell thick, wrapped in capillaries.

5

Exchange

Oxygen diffuses in, carbon dioxide diffuses out, driven by pressure differences alone.

THE NUMBERS

12–20 breaths per minute at rest

About 500 ml per breath

Alveolar surface area: roughly 70 m²

The diaphragm does the work. It contracts and flattens, lowering the pressure so air is pulled in.