

The Mechanism of Inhalation and Exhalation

Introduction

Breathing involves the muscles of the diaphragm and the intercostal muscles. Movement of air into the lungs is called inhalation and movement of air out of the lungs is termed exhalation. Inhalation is followed by exhalation and together these movements go on continuously, ensuring that the lungs are sufficiently ventilated.

MECHANISMS **OF** **BREATHING**



The Lungs

Between the ribs are intercostal muscles. Each rib is attached to the backbone at the back and to the sternum or breast bone at the front. Separating the thoracic cavity from the abdominal cavity is a sheet of muscle - the diaphragm.

Inhalation

- Contracting of intercostal muscles

- Ribs rise and swing out
- Diaphragm muscles contract causing it to flatten
- Volume in lungs increases while the pressure decreases

Exhalation

- Relaxation of intercostal muscles
- Ribs fall and become sunken
- Diaphragm muscles relax
- Volume in lungs decreases while pressure increases

Parts of the Body Involved in Respiration

