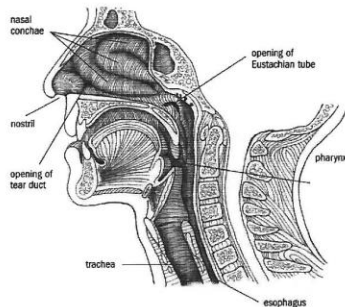
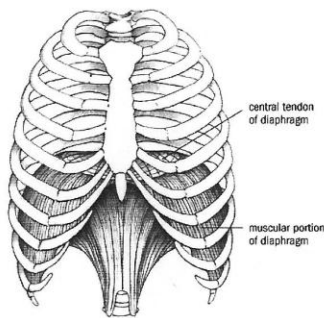
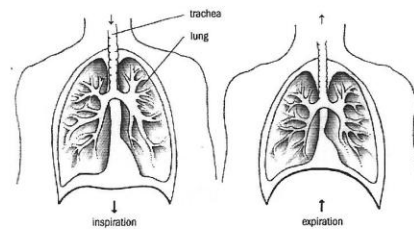


## The Anatomy of Breathing



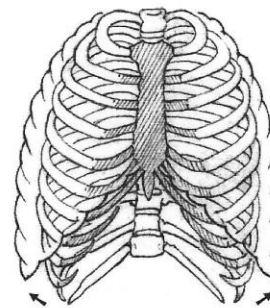
Either the mouth or nose can be used for breathing, but breathing out and in through the nose is the best choice whenever possible. The nose conditions the air entering the body. It filters coarse particles in the air; traps tiny impurities in its mucus lining; moistens and warms incoming air; swirls the incoming air to increase smell and protect the body from impurities; improves the sense of taste; brings air in contact with large surfaces of nasal lining; and reduces the speed and improves the efficiency of breathing.

The lungs and heart are located in the chest. In the lung, carbon dioxide in the blood is exchanged for oxygen. Since blood is constantly flowing through the lungs, they are not the airy sacks we sometimes imagine them to be. They also have no muscle in them to move the air in and out. The spongy tissue of the lungs inflates when the chest cavity expands, drawing air in through the nostrils.



The diaphragm is the main muscle of breathing. It divides your torso into two separate parts, the chest and the abdomen. The diaphragm lies below the lungs, not around them. When it contracts, it pulls the lungs down, expanding them from the bottom, downward and outward. During the process of contraction the diaphragm presses on the organs below, squeezing them so that they press outward, especially in the area of the upper abdomen. When the diaphragm relaxes it is both pushed upward by the organs as they seek to regain their place, and pulled upward by forces within the lungs and chest. Inhalation is active, and exhalation is relatively passive.

In yoga, breath is described as the essential, life-giving flywheel of the nervous system. The breath turns round and round, out and in, maintaining the balance of cleansing and nourishing necessary to sustain our lives and stabilize our emotions and nerves. This flow of breath is an important focus in meditation.



motion of rib cage