
ABDOMINAL “BELLY” BREATHING

Stomach breathing, also called **diaphragmatic** or “belly” breathing, refers to breaths that use your entire lung capacity. The diaphragm and abdominal muscles pull down on the abdominal cavity to fully inflate the lungs. The chest expands very little, while the abdominal area expands significantly. Breaths taken while stomach breathing are slow and deep, taking longer to inhale and exhale and delivering a significantly larger amount of oxygen to the bloodstream. The larger amount of air intake also allows you to exhale a larger amount of carbon dioxide, eliminating it from your body at a faster rate. It also sends a relaxation signal to your autonomous nervous system.

Chest breathing, in contrast, refers to breaths from the top lobes of the lungs that use the chest muscles to inflate the lungs by pulling on the rib cage. In chest breathing, the chest expands and contracts with each breath while the abdominal area does not. These breaths tend to be short and quick, using only a small portion of the lungs and delivering a relatively minimal amount of oxygen to the bloodstream. Chest breathing is often associated with hyperventilation and a sensation of feeling out of breath, as you attempt to take in oxygen quickly despite the low air volume from each breath.

Practicing Diaphragmatic Breathing

If you are not familiar with the sensations present during this kind of breathing, place one hand on your upper chest and the other just below your rib cage. This will allow you to feel your diaphragm move as you breathe. Breathe in slowly through your nose so that your stomach moves out against your hand. The hand on your chest should remain rather still. Tighten your stomach muscles, letting them fall inward as you exhale through pursed lips (see “Pursed Lip Breathing Technique”):

- Sit in an upright position
- Both feet on the floor
- Close your eyes
- Breathe in through your nose
- Breathe out through your mouth
- Exaggerate the pushing out of your belly so you can really feel the diaphragm

Tips:

- Try lying down on the floor, if sitting up doesn’t work
- Put a book on your belly and watch it lift as you breathe in
- Place both hands on your belly with the tips of the longest fingers barely touching, right about at the navel. You are breathing with your belly if the fingers separate slightly.

Pursed Lip Breathing Technique

Pursed lip breathing is one of the simplest ways to control shortness of breath. It provides a quick and easy way to slow your pace of breathing, making each breath more effective.

What does pursed lip breathing do?

- Improves ventilation by slightly increasing the air pressure in the lungs and alveoli
- Releases trapped air in the lungs
- Keeps the airways open longer and decreases the work of breathing
- Prolongs exhalation to slow the breathing rate
- Relieves shortness of breath
- Causes general relaxation

Technique:

- Relax your neck and shoulder muscles.
- Breathe in (inhale) slowly through your nose for two counts, keeping your mouth closed. Don't take a deep breath; a normal breath will do. It may help to count to yourself: inhale, one, two.
- Pucker or “purse” your lips as if you were going to whistle or gently flicker the flame of a candle.
- Breathe out (exhale) slowly and gently through your pursed lips while counting to four. It may help to count to yourself: exhale, one, two, three, four.

A Little Bit of Physiology

Whenever you inhale, your brain signals your diaphragm muscle to contract. In diaphragmatic belly breathing, this contraction of the diaphragm's muscular walls pulls the top of the dome down toward its base at the bottom of the rib cage. When the dome moves down, it pushes on the organs and fluid in the abdominal cavity, causing the belly to bulge outward, in much the same way that a water balloon will bulge out if you set it on a table and press down on it. This requires relaxed abdominal muscles.

