



Deep Breathing

Because oxygen is the most important nutrient for the heart, brain and every other major organ of the body, limiting our intake can have far reaching effects on the body.

Most adults today tend to fill only the upper chest when they breathe and thus miss how the increased oxygen intake relieves tension and improves mental alertness. By doing the deep breathing exercise listed below you can strengthen the lungs, relieve bronchitis, improve circulation, oxygenate the blood and minimize the reoccurrence of respiratory ailments. Also, breathing exercises can be very helpful for reducing stress, relaxing the mind as well as the body.

This exercise will require gentle practice in order that inhalation and exhalation be smooth and balanced. Beginners should only do it 2 or 3 times continuously.

1) Exhale deeply

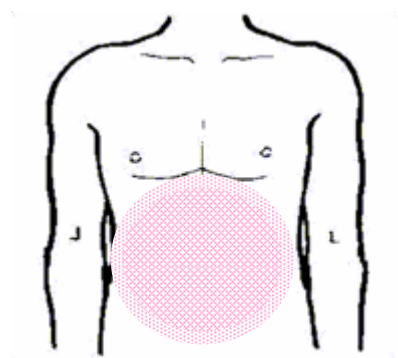
contracting the belly

2) Breathe in Low

Deep Slow Easy Breathing

Inhale slowly into the lower lungs.

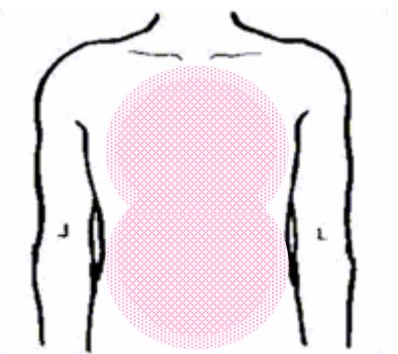
Expand the sides, back, and front of the lower ribs



3) Breathe In High

Deep Slow Easy Breathing

Once lower lungs are filled, inhale more air into the upper chest

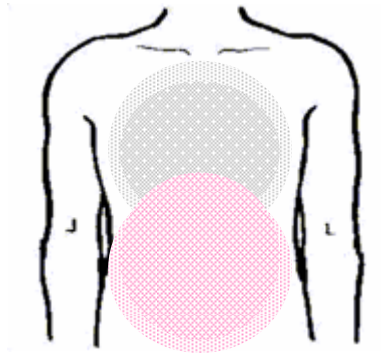


4) Breathe Out High

Deep Slow Easy Breathing

Exhale air from upper chest very slowly

Keep lower lungs full



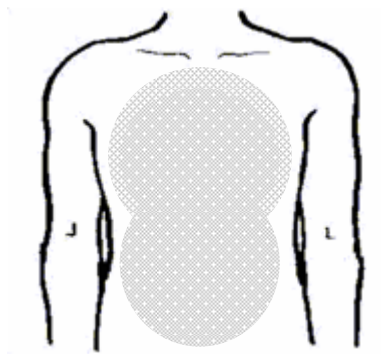
5) Breathe Out Low

Deep Slow Easy Breathing

Contract abdominal muscles to push all air out

Exhale remaining air

Relax



WHEN ARE BREATHING EXERCISES HELPFUL?

Breathing exercises help you make use of your entire lung and keep your chest muscles active. They allow you to get more oxygen with each breath and to breathe with less effort. They help if you have chronic obstructive pulmonary disease (COPD). Breathing exercises also can reduce symptoms caused by anxiety and stress. Anxiety and stress increase the heart and breathing rates, and increase the body's demand for oxygen. Learning to control your breathing rate is a big benefit. Breathing exercises can improve your performance during physical activity, as well.

You may be asked to do breathing exercises before and after abdominal, heart, or lung surgery. The exercises help prevent pneumonia when you are not able to get up and move around easily.

When we breathe fully and deeply, the diaphragm moves farther down into the abdomen, and our lungs are able to expand more completely into the chest cavity. This means that more oxygen is taken in and more carbon dioxide is released with each breath. Deep breathing takes advantage of the fact that the lungs are larger toward the bottom than the top.

In deep, abdominal breathing, the downward and upward movements of the diaphragm, combined with the outward and inward movements of the belly, ribcage, and lower back, help to massage and detoxify our inner organs, promote blood flow and peristalsis, and pump the lymph more efficiently through our lymphatic system. The lymphatic system, which is an important part of our immune system, has no pump other than muscular movements, including the movements of breathing.

WHAT ARE THE BENEFITS IF I HAVE COPD?

Many people with COPD (chronic obstructive pulmonary disease) find themselves getting less and less exercise. They think that being breathless and tired must mean the activity is harming their lungs and heart and that it is better to be resting. This is not true. If you don't exercise, your muscles weaken and you become less able to do the things you want to do. When you exercise any muscles regularly, they are able to do more work on less oxygen. It is important to stay as active as you can. By doing these breathing exercises, you will be able to do more before having to stop because you are short of breath.

Patients who had experienced a heart attack were later taught how to integrate diaphragmatic breathing into their daily lives. "In doing so," says Farhi, "they significantly reduced their chances of having a second heart attack. Another study showed that all 153 patients of a coronary unit breathed predominantly in their chests." By learning deep, diaphragmatic breathing we can apparently help our heart.

DEEP BREATHING HELPS WITH SUDDEN STRESS

When stress hits suddenly, it can be very helpful to perform a short breathing exercise before saying or doing anything in response. Examples of sudden (*acute*) stresses include the following:

- A car abruptly pulling out in front of you while you are driving
- Hearing very upsetting, unexpected information, such as being fired or being diagnosed with an illness
- A conflict suddenly arising between you and a co-worker, friend or family member

In any of these situations, the body's natural response is to prepare the body for "fight or flight," a primal series of reactions designed to increase heart rate, respiration and sudden, quick body movement. "Fight or flight" does *not*, however, enhance the brain's ability to fashion a mature, socially and professionally appropriate response to a difficult situation. Therefore, you are encouraged to pause, take a deep breath and think before identifying and addressing the problem at hand

BREATHING EXERCISES TO DO AT WORK

People tend to breathe very shallowly, working for hours without taking a good, deep, cleansing breath. When people catch themselves sighing or yawning during the day, this may be a sign that the body is trying to take in more oxygen.

As people continue to work long hours, eating meals on the run or skipping them altogether, a short breathing exercise in the middle of the day can relieve stress and be emotionally and physically rejuvenating. Afterward, people may be surprised to find themselves getting more work done, with better quality.

THE IMPORTANCE OF BREATHING THROUGH YOUR NOSE

Except for emergencies, our breathing was designed to take place mainly through our nose. When we breathe through our nose, the hairs that line our nostrils filter out particles of dust and dirt that can be injurious to our lungs. If too many particles accumulate on the membranes of the nose, we automatically secrete mucus to trap them, or sneeze to expel them. The mucous membranes of our septum, which divides the nose into two cavities, further prepare the air for our lungs by warming and humidifying it.

There is another important reason for breathing through the nose. This has to do with maintaining the correct balance of oxygen and carbon dioxide in our blood. When we breathe through our mouth we usually inhale and exhale air quickly in large volumes. This often leads to a kind of hyperventilation (breathing excessively fast for the actual conditions in which we find ourselves). It is important to recognize that it is the amount of carbon dioxide in our blood that generally regulates our breathing. Research has shown that if we release carbon dioxide too quickly, the arteries and vessels carrying blood to our cells constrict and the oxygen in our blood is unable to reach the cells in sufficient quantity. This includes the carotid arteries, which carry blood (and oxygen) to the brain. The lack of sufficient oxygen going to the cells of the brain can turn on our sympathetic nervous system, our "fight or flight" response, and make us tense, anxious, irritable, and depressed. So remember, when possible, to breathe through your nose.

