



DIAPHRAGMATIC BREATHING

To be able to relax fully and gain all of the physiological benefits of relaxation training, one must learn to breathe diaphragmatically. The name for this type of breathing comes from the name of the large, smooth muscle separating the lungs and the abdomen - the diaphragm - whose major function is to control the expansion (inhalation) and contraction (exhalation) of the lungs. However, most people, and especially those under stress, will use a thoracic breathing process.

Thoracic breathing uses the upper chest and rib cage muscles to expand and contract the lungs. Unfortunately, this form of breathing tends to be shallow and uses musculature which is very sensitive to the effects of stress. The effects of stress put these muscles in tension which makes one's breathing even shallower and more rapid. These changes induce a build-up of carbon dioxide in the lungs and blood which makes one begin to feel faint, smothered, and weak. These changes make one anxious, which stimulates the sympathetic nervous system to compensate with an outpouring of hormones which make the situation even worse if the thoracic breathing style is maintained.

In contrast, diaphragmatic breathing is naturally slower and deeper, resulting in better filling and emptying of the lungs, which in turn results in better oxygenation of the blood. The parasympathetic nervous system is stimulated to release a number of hormones and other factors that result in feelings of relaxation. Improved oxygenation of the blood also improves the ability of both the brain and muscles to do their work; hence one feels more refreshed, energetic and clear-minded.

LEARNING DIAPHRAGMATIC BREATHING

1. To begin learning this form of breathing, lie down on a couch, bed, or even the floor. Place one hand on your stomach and one hand on your chest. As you breathe in, push your stomach out. This action will help pull the diaphragm down and give it room to expand which will in turn result in the expansion of the lungs. As you breathe out, pull your stomach muscles in; this action will push the diaphragm up into the chest cavity which will aid your lungs in expelling the old, stale air. Breathe in slowly to the count of "1.. 2..3..4" and then let your breath out slowly to the same cadence. You must breathe in and out to about equal degrees; otherwise you can become light-headed.

In the beginning, this manner of breathing probably will feel awkward and unnatural because you are used to thoracic breathing. However, diaphragmatic breathing is the way our bodies are designed to breathe! It will feel perfectly comfortable once you have practiced sufficiently.

You should also note that the hand on your chest hardly moves at all compared to when you use thoracic breathing. The movement in this case, however, comes simply from your lungs expanding - not from the forced movement of shoulder and rib-cage muscles as in thoracic breathing.

After practicing this form of breathing for a few minutes, get up slowly. Otherwise you may feel light-headed due to the increased oxygenation.

- 2.** Gradually increase the time you spend learning diaphragmatic breathing until you can do it for 10 minutes without feeling either light-headed or partially oxygen deprived.
- 3.** Try to introduce this form of breathing in other settings where you may be sitting or standing. Whenever you take a deep breath, see if you can do it diaphragmatically without moving your upper chest or shoulder muscles (e.g. you should not feel these muscles doing any work as your chest expands).
- 4.** Use this form of breathing when doing relaxation exercises. If you wish, you can see if this form of breathing alone can help you relax before or during tense situations. It probably will be of some help all by itself.