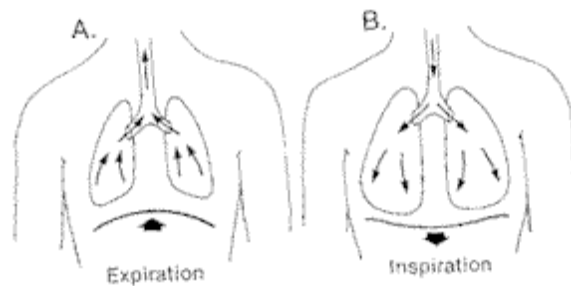


Diaphragmatic Breathing

Breathing is such a natural response that we often don't even notice it. However it is a major player in how well we function, how we handle stress & maintain posture.



Benefits of Diaphragmatic Breathing

1. The lower part of our lungs are 7x more productive in oxygen transport.
2. It acts as a lymphatic pump as 60% of all lymph nodes are located just under the diaphragm. This helps remove toxins and waste products from our system.
3. Breathing helps massage our visceral organs to stimulate them to aid in digestion and elimination.
4. It helps with ease of defecation to allow pelvic floor muscles to relax and decrease strain for normal elimination.
5. Breathing helps to relax spontaneous bladder contractions to help control urgency and frequency of urination.
6. It improves mental concentration and focus.
7. Breathing decreases muscular tension especially of the neck, jaw and spine. It can be very effective in decreasing headache pain, low back pain, and pelvic floor pain.

8. Breathing stimulates the vagus nerve for increasing parasympathetic tone (relaxation response).
9. It assists in keeping correct postural position when diaphragm is in good alignment.
10. Exhalation is needed to effectively activate the transverse abdominis muscle (core muscles).

Did you know?

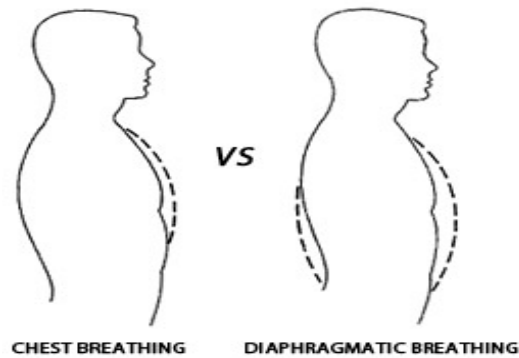
Breathing dysfunction has been shown to contribute to low back disorders, faulty posture, and chronic pain? Studies have shown that persons with chronic low back pain have an abnormal position of the diaphragm. Adding correct coordination of diaphragmatic breathing to a core exercise program increased abdominal fitness compared to exercising that doesn't incorporate breathing.

Since breathing is so important and impacts so many areas of our body, just what is correct diaphragmatic breathing?

The diaphragm connects to the bottom of the ribs and is shaped like an upside down bowl. As you breathe in the diaphragm contracts and pulls air in as the ribs widen outward. As you breathe out the diaphragm relaxes and the ribs drop back down.

Notice how you are breathing. Do you tighten your neck and lift your ribcage up as you inhale? Do you push your stomach outward instead of widening at the chest wall when you inhale?

As you breathe feel your chest and ribcage widen and your stomach fill gently, then feel the ribs drop and stomach sink as you exhale. You can put a sheet wrapped around your ribs for feedback for your breathing. Feel your ribs widen as you inhale and sink away from the sheet as you exhale. Allow yourself to inhale comfortably and exhale completely.



To do relaxed diaphragmatic breathing, you can place your tongue gently on the roof of your mouth (like saying “N”) and let your jaw feel heavy. Notice how this helps the neck to soften and breathing to lower down into your chest wall.

References:

1. Postural function of the diaphragm in persons with and without chronic low back pain
Kolar P, Sulc J, J of Orthopedic Sports Physical Therapy 2012 Apr; 42(4):352-62
2. Effects of different core exercises on respiratory parameters and abdominal strength
Cavaggioni L, Ongaro L, Zannin E, J of Physical Therapy Science 2015 Oct 27(10):
3249-53.doi
3. Lymph, Lymph glands, and homeostasis Shields JW Lymphology Dec 1992, 25,4:147
4. The Breathing Book, Donna Farhi (Henry Holt and Company Inc. 1996)