The Wellness Family

Dr. Madden Keeps You Informed

The Power of Breathing

We take an average of 12 a minute, 720 per hour and over 17,000 per day. Yes, we take that many breaths and we take them for granted. Rarely do we consider just how important that involuntary process is, or that there are proper and improper breathing techniques that can make a big difference in our health.

Typical Breathing

Breathing, or ventilation, is made up of two processes: inspiration (or inhalation) and expiration. When we inhale the diaphragm moves to expand the body cavity. Our lungs fill with air and the blood pumping through the lungs is oxygenated and then carries that oxygen to our brain and other vital organs. As we exhale, our body expels carbon dioxide. But what sounds quite simple can actually be problematic if certain hormones or outside forces affect the process.

Improper Breathing

We seldom think about how we're breathing or that we may be doing it incorrectly. The average person is generally chest breathing, whether they know it or not. The diaphragm separates the chest cavity from the abdomen. In chest breathing, you increase the size of your chest cavity by pulling up. Most of the air then stays in the top of your lungs. This is not efficient.

Also known as "shallow breathing", chest breathing is common for those who work at desk jobs, sit for long periods of time or are frequently in stressful situations. Esther Sternberg, a physician and researcher at the National Institute of Mental Health, says that rapid breathing is controlled by the sympathetic nervous system. It's part of the "fight or flight" response and is activated by stress.

Shallow breathing not only leaves much of the lung capacity unused, but leaves carbon dioxide in the lungs that is then converted to acid. This extra acidity in the body actually then places extra stress on the body.

Signs of Improper Breathing

Any of the following, unless after exercise or manual labor, are signs that you are breathing improperly:

- Neck and shoulders moving while breathing
- Breathing that shows excessive involvement of the upper chest and/or neck
- Jerky breathing ending in sobbing or sighing
- Rapid breathing (more than 20 breaths per minute)
- Uneven breathing such as rapid breathing interrupted by long or jerky pause
- Mouth breathing even when the nostrils are not blocked
- Too long of a pause from one breath to the next
- Loud and noisy breathing without an underlying medical reason

These signs are clear indicators that you are not breathing correctly, which can have a negative affect on your health.

More than just a process to intake oxygen and expel carbon dioxide, breathing can have a major impact on our overall health.

Proper Breathing

The opposite of chest or shallow breathing is belly or deep breathing. Learning to breathe from the abdomen is very important because the blood in the lowest part of the lungs is the richest for oxygen.

Additionally, avoid putting all the stress for your body support and breathing on your upper chest and shoulders, which can aggravate any difficulties you may already have in your lungs, back and neck or core muscles.

When we inhale the diaphragm moves downward, creating a vacuum in the lungs and pulling air inside. The belly then moves up and down during relaxed breathing, a sign that the diaphragm is fully contracting and expanding.

Breathing Exercises

There are several exercises that can help us learn how to breathe properly and improve our overall health and wellness.

First, learn to visualize your breath coming from the deeper part of the lungs and begin to focus on taking deeper breaths.

Second, relax your breathing process. Start by planting your feet firmly on the floor, hip-width apart. Relax your shoulders and soften your joints – ankles, knees, hips. At the same time, stretch your body as if trying to reach the ceiling through the top of your head. Focus on remaining loose but extending your core. Keeping the head straight but allow your head to remain loose so that it can gently nod.

Finally, place both hands, one on top of the other, over your stomach. Use the belly button as the central point. Breathe in and feel your stomach expand; breathe out and push the stomach gently back in as you breathe out. This exercise should help you be more aware of the correct way to breathe.

While deep breathing you should be able to feel yourself expand as you breathe. Placing your hands just above your hips on your bottom ribs, you should be able feel these expand in and out as you breathe. As the diaphragm moves the ribs move. Concentrate on this process as you work on deep breathing.

Breathing Problems

While many of us take our 17,000 plus breaths a day for granted there are many people who struggle with breathing issues. The most commonly known is asthma when the bronchi of the lungs contract making it difficult to breath. Mouth breathing is another common problem. Whether it's caused by chronic allergies, sinus issues or even dental problems, breathing through the mouth actually reduces blood oxygenation.

Jane Boston, senior voice practitioner at the Royal Academy of Dramatic Art in London, says that focusing on proper breathing can be the best preventative treatment for numerous health issues such as asthma and high blood pressure, even aches and pains are created by bad upper body posture.

"We tend to take sips of a breath," says Boston, "and hold it when we're anxious, both of which can have a ripple effect through the system. One bad habit, like shallow breathing, triggers another. Breathing incorrectly can make you more susceptible to lower back pain."

"On a philosophical level, breathing properly helps to keep the mind open, enabling you to think about who you are and what and why you're doing something. But primarily, if you breathe in the right way, you'll have better digestion, your balance will be improved, and you'll develop an optimum posture."

The Chiropractic Factor

While we all know that breathing is an important part of living, we may not be aware of just how important. While stress can cause rapid breathing, learning to take slow, deep breaths can actually stimulate the parasympathetic reaction and actually calm us down. More than just a process to intake oxygen and expel carbon dioxide, breathing can have a major impact on our overall health.

Chiropractic care can play an important role in assisting your body in proper breathing. Misalignments in your middle back or spine can actually interfere with deep breathing. Ask your Family Wellness Chiropractor for more information about proper breathing and regular adjustments.

Dear Patient,
Dr. Madden is dedicated to providing you with the absolute best in family wellness care. So take a moment today to discuss with your Family Wellness Chiropractor any concerns you may have regarding your family's overall health and wellness.

This newsletter is provided to you by:

Madden Family Chiropractic
Dr. Ashley Madden
1545 Hotel Circle South, Suite 270
San Diego, CA 92108
619.738.0933