

Breathing for Health & Sports Performance

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(adapted from articles written for San Francisco Triathlon Club.)

From the moment we are born, we rely on the air we breathe and the food we eat to stay alive. In ancient China, it was observed that breathing and diet are vitally important in regulating one's health and preventing disease. Thus in the ancient Chinese medical texts, it is said that our human body "Qi" (vital energy) is derived from "Air Qi" and "Food Qi". In this article, we will focus on the "Air" part of the equation. The "Food" aspect will be discussed in future articles.

For thousands of years, Chinese QiGong Masters and Indian Yogis researched, developed, and documented advanced techniques for regulating the breath. Breathing meditation techniques were used to improve physical and mental health, enhance martial arts and athletic performance, reverse disease, and even promote spiritual enlightenment. Many of these techniques have now been verified by modern science and repackaged with new names (e.g. Biofeedback therapy). In modern integrative health care settings, breathing techniques are used with great success in the management of many health disorders, especially stress-related ones, including high blood pressure, anxiety, depression, insomnia, asthma, cancer, pain management, menopausal hot flashes, infertility, obesity, and much more.

Of course, you don't have to be an enlightened Yogi or QiGong master to appreciate that breathing is a huge component of one's health, vitality, and sports performance. Even so, most of us take our breathing for granted as an involuntary bodily process that "just happens". How often do you quiet down enough to notice your breath? Could you breathe better, thereby enhancing your health and sports performance?

First, let's start noticing how we breathe.

Many of you are parents, aunts or uncles. Have you ever noticed how a healthy baby breathes with soft, effortless rising and falling of the belly? If you observe carefully, you'll see that the entire body also pulses with the wave-like energy of the belly. What about cats or dogs? They naturally breathe with their whole rib cages, bellies, and bodies too! When you start paying attention to this, you have already taken the first major step in mastering the breath.

The ancients, too, noticed that healthy babies breathe deeply and effortlessly using the abdomen. Then as we become adults, we tend to breathe with our chest and ribcage only, and less with the abdomen. It was also noted that the breath is directly related to our emotional state. Stress, anger, fear, sadness, frustration, shock, etc., can lead to shallow, rapid, and/or irregular breathing patterns. Then as we age, or if we get sick, our breaths become even more shallow or difficult, until we struggle to breathe with just our throat and mouth. Finally when we stop breathing, that's when we pass on. Because of the importance of the breathe and its direct relationship to health, vitality, and mind-body connections, the words for breath, spirit, life, and energy are synonymous in many languages across different cultures. (The Indians called it "Prana", the Greeks called it "Pneuma", the Chinese called it "Qi" or "Chi", and the Japanese called it "Ki.") With this article, I hope each of you will start to notice your breathing and uncover its relationship with your own health and vitality.

Can you breathe better? Absolutely!

The good news is that breathing is both a voluntary and involuntary activity. That is, you breathe if you're thinking about it, and you breathe if you're not thinking about it. So the idea behind practicing breathing exercises (as with any other practice), is that you can "re-program" your body to breathe more effortlessly, more efficiently, and more naturally all (or most of) the time.

Besides better utilizing your lung capacity and acquiring more oxygen with each breath, there are also important mental/spiritual benefits to regulating the breath. While stress and emotions can cause your breath to become shallow or scattered, the reverse is also true! By actively improving your breathing patterns, you

can undo some of the effects that stress has on your body, and also proactively re-program your future reactions to stress! As with everything else, practice makes perfect. Thousands of years and countless Yogis and Qigong masters have proven this to be true. Now modern science continues to verify their findings.

While there are dozens of breathing techniques in Chinese QiGong tradition (some very complex and can only be mastered by hermits meditating in the mountains), the most important one is Normal Abdominal Breathing. That is, we breathe with a relaxed rising and falling of the belly, just as we once did as infants! No matter how busy our modern lives get, all of us can learn and benefit from this kind of relaxed deep breathing. As mentioned before, age, illness, and emotions can cause breathing to become shallow and scattered. Most adults are chest breathers. But if we re-engage the abdomen and take more deep, slow, smooth breaths, we will find profound improvements in our energy, health, vitality, and emotions.

Directions on Normal Abdominal Breathing

Abdominal Breathing can be practiced seated, standing, or lying down in bed. In QiGong, there are very specific directions for regulating one's posture, which is beyond the scope of this handout. For now, simply practice in a comfortable position and a quiet place. Let go of distracting thoughts, quiet the mind, and just attend to your breath. Focus your attention on the inside of your lower abdomen. With each inhale, draw the breath in smoothly all the way down into lower abdomen. Allow the belly to expand gently like a balloon in all directions. With the exhale, let the belly contract. You may use your hand to check that the belly is moving with each breath. If done properly, your lower back, pelvis, and perineum should also be expanding and contracting. Take deep, slow, smooth breaths, and keep a steady and effortless rhythm. ***It is most important to stay relaxed. The moment you notice over-efforting or strain. Please stop and take a break!***

Benefits of Deep Abdominal Breathing

By drawing the breath deep into the abdomen, you ensure that air perfuses the lower lobes of the lung. Compared to the upper lobes, the lower lobes of the lung tend to be more highly vascularized (more blood vessels distributed), which means that there is better opportunity for oxygen to get into the blood stream. Obviously, there are major health benefits to improving the oxygen supply in your bloodstream and throughout your body. Enhanced sports performance is just one of the many advantages.

When you gently expand and contract the lower abdomen (as well as lower back and pelvic floor), you are not only drawing in a fuller breath. In fact you are massaging all of your vital organs! Just as sports massage will help your muscles recover faster after workouts, so too abdominal breathing can refresh and re-energize all your internal organs. This gentle massaging action helps to deliver freshly oxygenated blood to the organs, as well as flush waste products out of them. There are numerous lymph nodes near your pelvic area and throughout your trunk, so the massaging action will also enhance lymph drainage. The improved diaphragm movement not only draws a fuller breath into the lungs, it also supports the pumping action of the heart! All of this works together simultaneously to enhance whole body circulation and efficient functioning. It is no wonder why the QiGong masters named the area in your low abdomen "Dan Tian" or "Field of Elixir." In Qigong tradition, deep abdominal breathing is considered to be key to harnessing one's self-healing energies!

Dr. Andrew Weil, M.D., the renowned author and expert on natural and holistic medicines, includes an excellent section about breathing in his bestseller book Natural Health, Natural Medicine. He concludes the breathing chapter with:

"In writing about diet and exercise, I point out that those factors, while important, are not the sole determinants of health. I know people who eat excellent diets and exercise faithfully and are not very healthy, and I know some healthy people who eat bad diets and do not exercise. **I do not know any healthy people who do not breathe well.** For that reason, I urge you to concentrate on the information in this chapter [on breathing] and put it into action in your daily life."

I echo Dr. Weil's sentiment, as this has proven true in my own experience as well. As athletes, we tend to be quite health-conscious. So we are well-positioned to discover and benefit from improvements in our health, vitality, and sports performance using natural techniques like nutrition, hydration, and breathing. Whenever I hear new allegations about professional athletes using illegal EPO or blood doping, I wonder why so few American professional athletes harness the performance-enhancing power of QiGong breathing meditation techniques. Yes, it requires patience and consistent practice. But the benefits are enormous, and there are no side-effects! It has produced powerful results in Martial Arts training for millennia. Perhaps it's time for us "New-age" Californian athletes to start a new (or rather, very old) trend?