

Breathing for Every Day, Tai Chi and Qigong

Breathing in and out through the nose is the only method that enables the body to process Chi energy effectively. Most people understand the importance of breathing in through the nose. When we breathe in through the nose, there are a series of defense mechanisms that prevent impurities and extremely cold air from entering the body.

First, a screen of nose hairs traps dust and other particles that could injure the lungs if we breathe through the mouth. Next, there is a long passage lined with mucus membranes, where excessively cool air is warmed and very fine dust particles that escaped the hair screen are caught. Finally, in the inner nose are glands which fight off bacteria that may have slipped through the other defenses. The inner nose also contains the olfactory organ that gives us our sense of smell, which can detect poisonous fumes that could damage our health if we were to breathe them.

The word qigong has been translated as “breathing exercises.” The word qi is commonly defined as air or breath and the subtle energy carried by the breath. Awareness of the breath is a constant feature of both moving (active) and Tranquil (passive) qigong.

It is important to note that the efficient, healthier respiration is not the same as deep breathing. Rapid expansion and contraction of the chest cavity actually causes oxygen to bind too tightly to the hemoglobin molecules, so that less is released to the cells. It also causes a constriction in the blood vessels, further preventing the oxygen from reaching its target. Oxygen delivery depends more on the quality of breathing – ease, Grace, and efficiency – than the quantity of air forced into the lungs with each cycle of respiration.

If breathing habits are poor, then the respiratory rate increases in order to keep approximately the same amount of oxygen flowing to the cells each minute. This quickened pace is a drain on body energy.

Healthy breathing increases vitality and creates the most favorable condition for gaseous exchange.

Abdominal Qigong breathing causes even the tiniest blood vessels, the capillaries, to relax and gently dilate with a greater flow blood, oxygen, and qi.

On a psychological level, nose breathing encourages meditative awareness.

Four aspects of breathing

- 1) how does the breath feel? ie. Smooth, choppy, deep or shallow, clear or turbid, light or heavy, quiet or noisy, easy or difficult, healthy or diseased?
- 2) where do you breathe?
- 3) which part of the body moves with inhalation and exhalation?
- 4) what is your breathing rate? Breaths per minute ?

Natural Breathing

The foundation of qigong breathing is “natural respiration”. Natural breathing is also called ***abdominal or diaphragmatic respiration***. On inhalation, the diaphragm muscle contracts and moves downward, pushing the abdomen out. This increases the volume of the lungs, creating a partial vacuum and sucking air in. During exhalation the diaphragm movement is upward, the abdomen releases inward, pushing air out.

Inhalation: abdomen expands

Exhalation: abdomen contracts

This is the most efficient and natural way to breathe. The dropping of the diaphragm opens the lower lobes of the lungs, where most of the oxygen exchange takes place. Breathing abdominally creates more internal space, more room for the lungs to expand than expanding the chest. This also means that a greater volume of the air will be exchanged. The rising and falling up the abdomen also gently massages the internal organs.

By breathing abdominally, respiration can become slow and relaxed. The average adult respiratory rate is about 16 breaths per minute. Someone mentally and physically relaxed should breathe at about five breaths per minute! The breath can slow to 5 beats per minute when the body is completely still, the mind quiet and untroubled, the environment and temperature comfortable and the clothing loose (especially around the waist).

Unnatural breathing

Hyperventilation ; characterized by predominantly thoracic (chest) breathing with little use of the diaphragm, irregular or interrupted breathing, a quick respiratory rate, and frequent sighing.

Hyperventilation is a common symptom in the seven major psychosomatic diseases: asthma, hypertension, ulcers, rheumatoid arthritis, colitis, hyper thyroidism, and neurodermatitis. It has also been seen in migraine, chronic pain of any origin, seizure disorders, heart disease, and among smokers.

Hyperventilation has a deleterious effect on blood chemistry. It causes the blood to lose carbon dioxide more rapidly. Because carbon dioxide is necessary for acid formation in the body, the loss of carbon dioxide means that the blood’s acid base (pH) balance shifts toward alkinity (base). This shift decreases the ability of the blood hemoglobin molecules to release oxygen. During hyperventilation the bond becomes too tight; the oxygen cannot let go. Thus even though oxygen is in the blood, less of it is delivered to the cells, which means less energy and an impaired ability to carry on ordinary metabolic processes.

Rapid breathing reduces brain blood flow, while slow, deep breathing enhances it, other factors being equal.

The increased excitability of the brain cells is part of a general state of cellular hyperactivity induced by rapid breathing. As the blood becomes more alkaline, more calcium enters the nerve and muscle cells. This causes them to “fire”, that is, respond more quickly and strongly. The net result is a state of nervousness and muscular contraction.

Natural qigong breathing can cure or alleviate many of these conditions. It causes the muscles to relax, including those that caused constriction of the blood vessels, improves circulation, and increases oxygen delivery.

Special note: certain diseases such as hypoglycemia, diabetes, and kidney failure, create metabolic acid doses, too much acid. In these cases, chest breathing and a quicker respiratory rate may be a necessary biological adjustment, a way of maintaining the acid based balance, this is a time when hyperventilation should not be interfered with.

Reversed breathing

Reversed breathing is a way to stimulate the qi and gain more control over the breathing muscles. Reversed breathing is not dangerous if practiced for brief periods of time. It is dangerous if it becomes your normal breathing method.

In reversed breathing, the abdomen contracts during inhalation. At the same time, the chest cavity expands slightly – the ribs opening, the sternum lifting. During exhalation the abdomen is slightly distended, and the chest closes naturally. It is important to maintain meditative awareness on the dantien.

Reversed breathing methods-

- 1) pay attention to the physical process
- 2) note the vertical component
- 3) pay close attention to the horizontal component – on the inhalation the Qi adheres to the ming men (gate of life), on exhalation than the Qi is pushed toward the navel. This is one of the most powerful ways of using the breath to stimulate and strengthen the dantien energy center, increasing the dantiens ability to pump qi through the body.

If you practice reversed breathing for three minutes before beginning natural respiration you find that this frees the diaphragm and abdominal muscles and actually makes the natural breathing much smoother and deeper.

Differentiated Breathing

This method is to practice many varieties of breathing, not only in and out of the nose, but the breath coming in out other parts of the body such as the hands or feet or throat or breaths that are slow and quick, high and low, shallow and deep, fluid and paused.. This kind of breathing awakens various states of consciousness and teaches us about the relationship between breath and mind.

“Dantien Breathing”

When practicing Dantien breathing, both the lower abdomen and the lower back expand with inhalation, and both retract with exhalation.

Dantien breathing includes all of the benefits of natural respiration. It makes the mind and body relaxed, decreases unhealthy reactions to stress, lessens anxiety, allows more efficient gas use exchange, and massages internal organs. Additionally, dantien breathing stimulates the kidneys, the lower spine, and the important acupuncture point mingmen “the gate of life”.

Dantien breathing primes the body's major energetic pump so that Qi can spread more efficiently throughout the body.

Breathing and Qi

Breathing out through the nose requires a deeper understanding of the nature of Chi energy. Practitioners of martial arts, especially karate, need to absorb and process the Chi that they are breathing in order to generate the power and force for the techniques they practice.

They also need to be able to retain the Chi within the body until the moment it is needed. Basically, when we inhale, we are bringing fresh oxygen and Chi into our body. When we exhale through the mouth, we are expelling carbon dioxide, which contains all the toxins and poisons that have built up within the lungs.

We are also expelling Chi from the body. But if we are continuously expelling the Chi, we never give it a chance to build up into the rich source of energy needed to complete our techniques to their maximum effectiveness. By exhaling through the mouth, we simply allow the Chi energy to dissipate back into the world. Breathing out through the nose, however, completes a closed circuit. By exhaling through the nose, rather than allowing the Chi energy to be expelled with the carbon dioxide, we transfer it to the dan tien or hara, located about three finger widths below the umbilicus. With each breath we take in, more Chi enters the body and circles down to the dan tien, growing stronger and stronger. During this breathing process, the tongue is up, touching the top palate of the mouth just behind the front teeth and the air is expelled from the nose with a slightly audible hiss. There is also a feeling of the abdominal walls contracting down with the exhalation.

Once sufficient Chi has been generated this way, the practitioner is able to direct the Chi with tremendous force. Remember that Chi is a subtle, invisible force that requires much patience and long years of practice to understand. The ability to relax and breathe effectively will benefit your training in building Chi. When your mind and body are working together in a relaxed manner and you are breathing properly, a tremendous amount of energy is able to flow through your being. The key is not to force it, just slow down, relax and breathe through your nose.

Breathing in Tai Chi

When practicing Tai Chi you may find yourself breathing with different methods of breathing as you move throughout the form. If your mind is on self defense during the form you might do more reverse breathing than you would if your mind is concerned with movement for health. Tai Chi for self defense and striking might require reverse breathing to produce power. Tai Chi for relaxation and health may require more natural breathing to move the Qi into and out of the body's organs. Either way the form aids in bringing more oxygen, blood and qi throughout the body to every cell of the body. As the body oxygenates more you are on the road to better health.

The Daily Checkup

Begin to change your everyday breathing habits by checking how you are breathing in the moment. If the breath is shallow start to breathe with the Natural/Abdominal breath. Take a few proper breaths then go on with your business. Re-check throughout the day. In time you will regain proper breathing 24 hours a day.