THE IMPORTANCE OF PROPER BREATHING IN TAEKWON-DO

I realized the importance of breathing for the first time when I began practicing Chinese Qi Gong 15 years ago. In 2004, I started Taekwon-Do and focused on this exciting Martial Art. Qi Gong was left in the background for a while. After working my way through the Gup gradings I was promoted to Black Belt in May 2007.

Reaching this level created new challenges - physically and mentally. But my passion for Taekwon-Do has driven me to continue the voyage of learning this Martial Art, trying to reach a better understanding of its principles and to discover more about the spiritual side of Taekwon-Do.

Several years of study in Japanese Shiatsu had brought me into contact with the principles of Traditional Chinese Medicine [I obtained a Diploma in Zen Shiatsu in 2008].

Now this background of Qi Gong and Shiatsu [acupressure] assists me in the perception of certain aspects of the Art and so to improve knowledge and training.

One main aspect of Qi Gong and Shiatsu is breathing technique.

Proper breathing is often neglected in daily life and the positive effect of breathing techniques is very much underestimated.

General Choi draws attention to the importance of correct breathing in Taekwon-Do in his Encyclopedia, where he gives the following rules:

History of Taekwon-Do:

"correct breathing methods should be devised, enhancing the speed of each movement and reducing fatigue".

Taekwon-Do and Physical Fitness

"Helps the lungs operate more efficiently".

"These techniques of warming up and warming down as well as the breathing exercise taught are other examples of the highly developed science of body mechanics and physiology contained within formal Taekwon-Do training".

"The attacking "Yell", that is taught, also has its basis in basic physiology. Aside from serving to demoralize the opponent, the "Yell" serves also to tighten the lower abdominal muscles to prevent injury in the event of an unexpected counter-attack. In addition, the exhalation, or thoracic grunt as practiced also by weightlifters or wrestlers serves to equalize the pressure increase in the thorax which may result from violent exertion, thus

preventing injury to the vital organs. The complete exhalation of the "Yell" serves to expel the tidal air of the lungs thus increasing the breathing or vital capacity of the lungs".

Training Secrets of Taekwon-Do

"To bring the movement of eyes, hands, feet and breath into a single coordinated action".

"To exhale briefly at the moment of each blow except a connecting motion".

Theory of Power

Breath control

"Controlled breathing not only effects one's stamina and speed but can also condition a body to receive a blow and augment the power of a blow directed against an opponent. Through practice, breath stopped in the state of exhaling at the critical moment when a blow is landed against a pressure point on the body can prevent a loss of consciousness and stifle pain. A sharp exhaling of breath at the moment of impact and stopping the breath during the execution of a movement tense the abdomen to concentrate maximum effort on the delivery of the motion, while a slow inhaling helps the preparation of the next movement. An important rule to remember: Never inhale while focusing a block or blow against an opponent. Not only will this impede movement but it will also result in a loss of power.

Students should also practice disguised breathing to conceal any outward signs of fatigue. An experienced fighter will certainly press an attack when he realizes his opponent is on the point of exhaustion.

One breath is required for one movement with the exception of a continuous motion." <u>Attack Techniques</u>

"Tense the abdomen at the moment of impact by exhaling sharply".

"Hold the breath while attacking or blocking".

"In Tae Kwon Do training, breathing supports the speed. During movements we must hold our breath for maximum power when striking, attacking or blocking. When we contact the opponent, breathe out quickly. After contact, inhale slowly. If we inhale during the block, a light attack can do a lot of damage. Even with a strong attack to you, holding your breath will reduce the damage. The conclusion is that during action, it is best to hold our breath when attacked".

To get a better perception in the concept of breathing, we should go back to some principles of **Oriental Philosophy:**

Oriental philosophy is essentially defined by Buddhism, Taoism, and Confucianism.

Choi emphasizes the importance of the spiritual aspect of Taekwon-Do and we find many references to great philosophers i.e. Confucius, Lao-Tzu, Mencius - in the Chapter "Moral Culture" of the Encyclopedia, in "The Memoirs of Choi Hong-Hi" and in his "Moral Guide Book".

Unfortunately, physical training and competition (which is often over-emphasized in sports), without recognizing the values of tradition, virtue and harmony, will in fact keep one from realizing the Do (the way).

There are several main concepts, expressed throughout East Asia, that are at the root of its philosophies, religions and culture. Though their influence seems less evident in Taekwon-Do, than in some other Martial Arts like Tai Chi Chuan, Aikido or Hapkido, a basic idea of these concepts can help to better understand some aspects of our Martial Art.

In the Preface of the Encyclopedia General Choi writes:

"all things are governed by the law of *Yin* and *Yang* (dark and light)... happiness can often stem from catastrophic moments."

Yin and Yang theory was expressed for the first time in the "Book of Changes" or "I Ching" which dates in its earliest form to the 2nd millennium B.C.

"I Ching" explained the fundamental principals of life and universal energy and provided the common source for Confucian and Taoist philosophy.

The concept of the three natural energies or powers, Heaven, Earth and Man was introduced and a line system was developed to express different natural energies and stages.

The two categories of Yin and Yang can be expressed as two different lines:

One unbroken continuous line conveying direction and movement:

YANG

One broken suggesting space and stillness:

YIN

YIN energy tends to sink, decrease, representing the receptive, less active movement of nature

YANG energy tends to rise and increase, representing the creative, active movement of nature

The interaction of YIN and YANG expressing the four phases of universal energy:

Strong YANG:

Weak YANG:

Strong YIN:

Weak YIN:

These lines were grouped in eight combinations of three, symbolizing all the basic permutations of natural forces and phenomena called the *Eight Trigrams* ["Ba Gua" in Chinese; "P'algwae" in Korean].

The two categories of YIN and YANG expressed by a circle

The early stages of Natural Development start with an empty circle. Nature evolves from Zero. According to Chinese Taoist scripture, the universe was initially without life. This state is called "nothing" or "neutral - "*Wu Chi*" (literally "no extremity").

Then the existing natural energy divided in two extremities, known as YIN and YANG. This polarity is called "*Tai Chi*".

The Tai Chi (Korean: "T'aeguk") symbol means "Great Ultimate" and represents the two great forces in perfect balance and perpetual alteration, with YANG becoming YIN and YIN becoming YANG, each possessing within itself the embryo of the other.

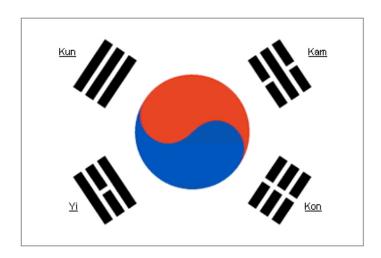
This symbol represents the perfection of balance and harmony, and the creative union of opposites throughout the universe.



Tai Chi symbol and Eight trigrams

The same principles are represented in the Korean flag.

Its design symbolizes the principles of the Yin and Yang in Oriental Philosophy. The circle in the center of the flag is divided into two equal parts. The upper red section represents the positive cosmic forces of the Yang. Conversely, the lower blue section represents the negative cosmic forces of the Yin. The two forces together embody the concepts of continual movement and the balance and harmony that characterize the sphere of infinity. The circle is surrounded by four trigrams. Each trigram symbolizes one of the four universal elements: heaven, earth, fire and water."



In the Encyclopedia under Moral Culture, General Choi mentions the concept of *Ki* [Chinese: *Qi*]

"Ki is a form of active energy which fills every physical cell and organ, while "Chi"-will, is the motivation force: the former moves and the latter leads."

The concept of Qi (Chinese) or Ki (Korean)

Qi is the energy or natural force which fills the universe, flowing through and animating all things. There are three general types of Qi: Heaven Qi, Earth Qi and Human Qi. *Qi* is often described as "vital energy" or "life force" and is found in every living thing. The concept of the body as an "energetic" organism that appears in modern scientific research as "bio-energy", existed already as an ancient Chinese idea, which evolved through centuries of experience and study into a system of medical theory - the base of Traditional Chinese Medicine [TCM].

The oldest record related to this theory is said to date back to the reign of the Yellow Emperor (2690-2590 BC) - "The Yellow Emperor's Classic of Internal Medicine". According to Traditional Chinese Medicine, Qi flows in the body like a system of rivers and canals, known as *meridians*, which are pathways distributing Qi throughout the body, vitalizing cells, tissue, organs, and other systems. There are twelve major pairs of Qi Channels (six Yin channels - related to six Yin organs, and six Yang channels - related to six Yang organs) and eight Vessels, two of them are particularly important: the Conception Vessel (Ren Mei), which runs down the center of the front of the body and the Governing Vessel (Du Mei), which runs down the center of the back and the head.

Throughout the meridian system, there are places where the Qi flow comes closer to the body's surface, called "cavities".

These have been defined as points of high electrical conductivity and are used in Eastern Medicine to manipulate the Qi flow.

Martial artists learned to attack specific areas, such as vital acupuncture cavities, to disturb the enemy's Qi flow and create imbalances, which can cause injury or even death. This technique is called *Cavity Press*, Dim Mak or Dian Xue.

Lifestyle, emotional stress or injury can provoke blockages or weakness in the flow of Qi, which may lead to physical symptoms, psychological or emotional disturbances.

The use of acupuncture, acupressure, massage, and herbal treatment to adjust human Qi flow has become the root of Chinese Medical Science.

Over many thousands years, a range of systems has been developed to cultivate Qi and promote health and longevity.

The training and practice used to strengthen Qi circulation is called Qi Gong and consists in mental and physical exercises and special breathing techniques.

Qi Gong means literally a training or study dealing with Qi taking a long time and a lot of effort.

There are four major schools of Qi Gong:

Medical Qi Gong for healing is the oldest one. Since the birth of the concept of Qi circulation in the human body, about four thousand years ago, Chinese doctors have devoted a major portion of their efforts to the study of Qi. The result was acupuncture, acupressure and herbal treatment. In addition, they created different sets of Qi Gong exercises for maintaining health or for curing specific illnesses.

Scholar Qi Gong

There were two major schools: One of them was created by *Confucius* (551-479BC). Humanity and the human feelings are the main subjects of study. The basic philosophy of the Confucianists are Loyalty, Filial Piety, Humanity, Kindness, Trust, Justice, Harmony and Peace. Confucians were primarily interested in the working of human society rather than withdrawal and self perfection

The second major school is *Taoism*, created by Lao Tzu around the 6th century B.C. Lao Tzu is considered to be the author of the most influential "Tao Te Ching" (Classic on the Virtue of the Tao) In this book he mentions certain breathing techniques. This is the first record of using breathing techniques to increase Qi circulation and thereby to increase the length of life. Taoists are associated with withdrawal from society to perfect the self.

Both Schools emphasized maintaining health and preventing disease. They believed that many illnesses are caused by mental and emotional excesses, and the scholars put special importance on gaining a peaceful mind through meditation. Their training focused on regulating mind, body and breath.

Religious Qi Gong. The main purpose of their training is to reach enlightenment or Buddhahood. *Buddhism* believes that all human suffering is caused by the seven passions (joy, anger, sorrow, fear, love, hate and lust) and by the six desires (generated from the six roots -eyes, ears, nose, tongue, body and mind), and that Qi Gong training enables them to keep their spirit independent, so they can escape the cycle of repeated reincarnation. Their primary method was still meditation with breathing directed toward stilling the mind.

The latest school to develop was Martial Art Qi Gong.

It is believed that during Liang dynasty (502-557 A.D.) a Buddhist Monk named Da Mo wrote "The Muscle/Tendon Changing Classic" and "Marrow/Brain Washing Classic" in Shaolin Temple. These methods not only improved the health of the monks, but they also greatly increased their strength.

The Shaolin priests continued developing Qi Gong exercises and integrated the training into their martial arts forms. This was the first known application of Qi Gong to the Martial Arts.

Many martial styles have created Qi Gong sets, the most popular being Tai Chi Chuan. Qi Gong training consists usually in regulating the body, regulating the mind, regulating the breath and regulating the Qi.

Breathing techniques are a very important part of Qi Gong training.

The length of time one takes to inhale and exhale, how smoothly, softly, steadily, silently and slowly this action is performed, and the holding of one's breath affect the involuntary nervous system. As a result, internal bodily functions - heartbeat and digestion among others - are influenced.

There are many ways that have been developed to regulate breathing, some of them are used in Martial Arts:

Natural Breathing

The purpose of Natural Breathing is not to actively control the breath, but to learn to pay attention to it and feel it.

Breathing is constantly affected by our thought. For example, fear or excitement causes quicker breathing. Depression causes slower breathing. When you are happy the exhalation is longer than the inhalation, when you are sad inhalation is longer.

Also, breathing is different depending on age: little children still have the habit of abdominal breathing, middle age people tend to breathe with their stomach and older people tend to breathe with their chest - this can lead to shallow breathing. Regulating the natural breath means concentrating the mind to understand the natural way of breathing, to feel the way one breathes, and finally to guide the breathing to a more relaxed and smoother stage.

The first step is to find a posture that feels natural and comfortable, and get rid of emotional disturbances, then learn how to feel the muscles which are related to the breathing.

Then to breath through the nose, softly, gently. The breath should be calm, slender, deep, continuous and uniform.

In breathing the *diaphragm* plays a key role. During inhalation, the diaphragm contracts, thus enlarging the thoracic cavity (the external intercostal muscles also participate in this enlargement). This reduces intra-thoracic pressure. Enlarging the cavity creates suction that draws air into the lungs. When the diaphragm relaxes, air is exhaled by elastic recoil of the lung in conjunction with the abdominal muscles.

Chest Breathing

Chest Breathing is breathing by expanding and contracting the rib cage which increase the lung capacity. It also allows to hold the breath longer. Although the abdomen is moving up and down slightly, the focus is on the chest. The chest muscles and mind should be relaxed.

This method is used in weight lifting, free diving and in many external-oriented Martial Arts.

Abdominal Breathing

Abdominal Breathing is an important part of Buddhist and Taoist Qi-training.

It is also called Dan Tian breathing.

The Dan Tian is a concept that refers to three regions of the body:

The Upper Dan Tian is located on the forehead between the eyebrows and is also known as the "Third Eye".

The Middle Dan Tian is situated at the solar plexus.

The *Lower Dan Tian* [Korean: "Tanjon", Japanese: "Hara"] is located 1-2 inches below the navel and 1-2 inches deep. It is said to be the center of all vital energy and the foundation of human power. In Acupuncture it is represented by the point REN 6 called "Qi Hai" or "Sea of Qi". The Lower Dan Tian is a source of power and it is the equivalent of the center of gravity.

Abdominal breathing is characterized by using the muscles of the lower abdomen, rather than the chest muscles to support the diaphragm. This method of breathing has several benefits. The up and down motion of the abdominal muscles during deep breathing will

massage the stomach and intestines as well as exercise the muscles holding the internal organs in place, and will increase their strength. The deep breathing uses the lungs to their fullest capacity, thereby strengthening them.

Exercising the abdominal muscles will generate more energy to the organs surrounded by these muscles and increase blood circulation - keeping the organs healthy.

Generally people breathe very shallowly because of habit. But if one emphasizes long and smooth exhalation, it is possible to maintain a constant lower abdominal pressure. This is very important because constant lower abdominal pressure is the pump for the veins as opposed to the heart, which is the pump for the arteries. If these two pumps support each other, the complicated blood circulation system of the human body will function more effectively.

There are two common ways of abdominal breathing: *Normal Abdominal Breathing* and *Reverse Abdominal Breathing*.

Normal Abdominal Breathing [Buddhist Breathing]

Normal Abdominal Breathing involves slow, deep breathing - using the mind to control the muscles of the abdomen.

When you inhale - you expand your abdomen, at the same time the large intestine and small intestine drops, allowing the diaphragm to move down.

On the exhale - the abdomen withdraws and the diaphragm moves up.

The Inhale is considered Yin, the exhale is considered Yang.

As a rule, you should never hold the breath. This type of breathing is the key for calming down, both physically and mentally. It is one of the most effective ways of changing the body from Yang to Yin, and so enhances relaxation.

This method is an important part of Buddhist Qi Gong training. Their primary method was still meditation with breathing directed toward stilling the mind.

Normal Abdominal Breathing training not only helps relaxation, but also focuses the mind. For health purposes, the method of Normal Abdominal Breathing is used, because it is safer.

Reverse Abdominal Breathing [Taoist Breathing]

Reverse Abdominal Breathing was used by Taoists Qi Gong practitioners. They realized that Reverse Breathing is a tool and a strategy to lead energy more efficiently, to manifest power at a higher level. The advantage of the Reverse Abdominal Breathing is its ability to

lead Qi to the extremities more naturally and easily than it is possible with Normal Abdominal Breathing.

Buddhist and Taoist philosophy diverge in the matter of Qi circulation. While the Buddhist created a situation, that allowed the Qi to circulate freely, Taoist went one step further and used the mind to improve Qi circulation. Simplified: "Buddhists let it happen, Taoists make it happen"

This type of breathing can make one more tense and excited. The method is similar to Normal Abdominal Breathing in so far as the breathing takes place in the lower abdomen.

The difference is that the action of the abdominal muscles is reversed.

On the inhale the abdomen contracts, - the diaphragm moves down.

On the exhale the abdomen expands, - the diaphragm moves upward.

Abdominal Breathing before learning Reverse Abdominal Breathing.

The fact that during the inhale the abdomen is contracted and at the same time the diaphragm moves down, is creating a pressure upward, which makes it harder for the diaphragm to move down. This can cause pressure and tension below the solar plexus, which can lead to problems such as stomach ache, chest pain, or even serious injury. This method is more difficult to learn and one should be comfortable with the Normal

Traditionally, training in the Martial Arts focuses on Abdominal Breathing in order to increase both energy and power. Through Abdominal Breathing training, we can increase our lung capacity along with our health and fulfill the original purpose of the martial arts, which is to increase energy and power in addition to developing self-defense skills.

Scientific studies with Martial Artists have proven, that Reverse Abdominal Breathing increases the lower abdominal pressure as well as the striking power very significantly.

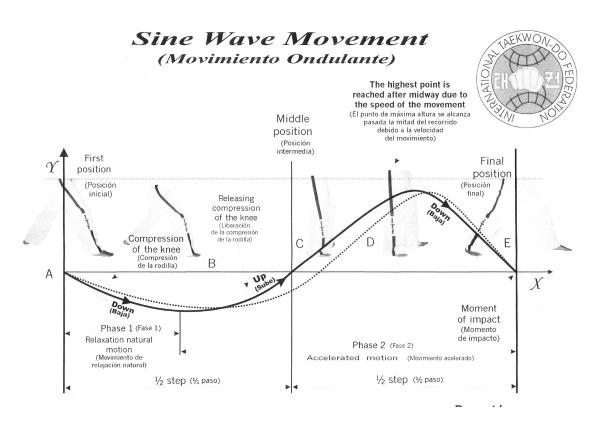
An important key to allow proper breathing is to have a good *posture*.

In his Encyclopedia General Choi defines the basic principles for a proper stance:

- 1. Keep the back straight, with few exceptions.
- 2. Relax the shoulders
- 3. Tense the abdomen.
- 4. Maintain a correct facing. The stance may be full facing, half facing or side facing the opponent.
- 5. Maintain equilibrium
- 6. Make use of the knee spring properly.

Also in the Theory of Power great importance is given to *equilibrium* and *center of gravity*:

"To maintain good equilibrium, the center of gravity of the stance must fall on a straight line midway between both legs when the body weight is distributed equally on both legs, or in the center of the foot if it is necessary to concentrate the bulk of body weight on one foot. The center of gravity can be adjusted according to body weight".



Sinewave is another aspect of Taekwon-Do in which breathing plays an important role: previously, we have seen that the phase of the Inhale is the Yin part of the breathing process - the relaxing phase.

[&]quot;Wu Bei Zhi", an ancient Chinese classic on philosophy, strategy, medicine and martial arts techniques describes vividly:

[&]quot;When you inhale, your body become light, when you exhale your body becomes rooted" "When the body stretches up and inhales, it resembles a giant ocean wave, knowing no resistance. However, when a stable posture is assumed and the air is forced out from the lungs while contracting the muscles, one becomes immovable, like a majestic mountain"

The movement of the *Sinewave* incorporate both phases of the breathing process. The following interpretation is my personal understanding of the movement:

The sinewave starts with a relaxation phase, the Yin part of the breathing process, the flow should be slow and smooth - we have a slight downward movement with compression of the knee, then we release this compression, the body starts raising.

It follows the transition into the accelerated motion. Close to the highest point, we hold the breath for a short moment, leading into a downward motion and finishing at the moment of impact with a sharp, short exhale, [while contracting the muscles of the abdomen, bringing the movement of eyes, hands, feet and breath into a single coordinated action] - this is the YANG part of the breathing process, the flow should be short and strong.

Both phases should operate together like in the Yin and Yang circle, one becoming the other, smoothly, effortlessly, in a flowing movement created by the Sinewave, allowing to perform a powerful technique in harmony.

Choi Hong Hi - Taekwon-Do

Choi Hong Hi - Memoires

Choi Hong Hi - Moral Guide Book

Dr. Yang Jwing Ming - Chinese Qi Gong

Marc Tedeschi - Taekwondo

Marc Tedeschi - Hapkido

Dong Seung Gyoo - Breathing Techniques: Its relationship to the Generation of Power in Martial Arts

Patrick McCarthy - Bubishi

Hua-Ching Ni - I Ching-The Book of Change

Ilza Veitht - The Yellow Emperor's Classic of Internal Medicine