

The
SECRET
ART
of
HEALTH
&
FITNESS

Uncovered from
the Martial Arts Masters

Claudio A. Iedwab & Roxanne L. Standefer

Presented in electronic form by

askSensei.com


Thank you for your interest in **The Secret Art of Health & Fitness** - *Uncovered from the Martial Arts Masters*.

Martial Art is the original mind/body exercise system, and it has always had a great deal to offer to those interested in a well-rounded program of vigorous fitness and relaxing meditation. The history of the modern martial arts will show that the founders always intended their training to be for everyone, regardless of age, sex, and previous athletic training. In a step-by-step fashion the practice of Martial Art improves flexibility, alignment, strength, mental focus, stamina, and reduces stress in the body and the mind.

The philosophical and spiritual background is of particular interest in today's society where movement therapy and body-work theories have borrowed from the martial arts curriculum. **The Secret Art of Health & Fitness** returns to the original sources for exercises, background, and clear explanations of the training methods and traditions of Martial Art.

This electronic presentation of **The Secret Art of Health & Fitness** is brought to you by the Authors and **askSensei.com**. We hope you enjoy it and let others know about the book and the site. **The Secret Art of Health & Fitness** is available in printed book form from regular outlets in stores and online, although we encourage you to order it directly from Barnes & Noble through the links in **askSensei.com**.

You might also be interested in **Martial Arts Mind & Body**, and our forthcoming book for children, **The Peaceful Way**.

© 1999 Claudio A. Iedwab & Roxanne L. Standefer
Artwork & Illustrations © 1999 Claudio A. Iedwab

Disclaimer: The adoption and application of the material offered in this book is at the reader's discretion and sole responsibility. The Authors and Publisher of this book are not responsible in any manner whatsoever for any liability, injury, loss or risk, personal or otherwise, that may occur indirectly or directly from the use of the content of this book and/or following the instructions. Not all exercises are designed for all individuals, and since the physical activities described herein may be too strenuous in nature for some readers to engage in safely, it is essential that a physician be consulted prior to training.

Chapter 2

The Simple Act of Breathing

EACH breath we take, from the first to the last, is the very measure of our days.

Continuously, we engage in an exchange with the air around us. Our organism replenishes its supply of oxygen and rids itself of carbon dioxide through the process of respiration.

Breathing is unusual as a bodily function. Unlike most other vital processes (the pumping of the heart, the filtering of the kidneys, for example, where the body continues performing the process unconsciously), we also have a voluntary control over breathing rhythms and volumes. We can hold our breath to go underwater, exhale to sing a long sustained tone, or inhale a deep lungful of scented air in a pine forest. This is an important area in the distribution of power between the body and the mind; neither is in complete control and the balance is always subject to negotiation.

Why then, do we tend to completely ignore our breathing? Unless congested with flu or out of breath after climbing a long flight of stairs, we hardly take notice of our most vital activity.

The martial artist, however, studies this delicate relationship as a fundamental of training. He practices with careful attention to breathing in order to energize and efficiently utilize the body's power. By consciously controlling his exhalations, he can calm the mind and relax emotional responses.

Although we all breathe, we don't all breathe very well. For many, the modern sedentary lifestyle rarely compels us to breathe deeply or rapidly unless we are stressed or angry. Running to the bus stop can put some people out of breath and it is often at these times that one

thinks: “Oh, I’ve got to get in shape!” Even for those already committed to a fitness lifestyle, going for a walk or run along streets congested by the internal combustion engine and construction dust can do more damage than good to the lungs and immune systems.

There are several important considerations regarding improving one’s breathing. One is capacity, the actual volume of air that can enter and leave the lungs. Another is the aerobic ability of the system. What is most important about both of these is the actual efficiency of the gas-

eous exchange going on in the alveoli, the thin vessels deep in the lungs across whose membranes the molecules of oxygen and carbon dioxide enter and leave the bloodstream. This movement and circulation represent the real capacity of breathing to energize, replenish, and refresh the body as a whole.

*In practicing
both Zen
and
the martial arts,
it is essential
to concentrate
on breathing out.*

•

*Taisen Deshimaru
1914–82*

Early in their training martial artists will learn to inhale and exhale in such a way that maximum gas exchange can take place at the cellular level. Greater control over the mechanism of breathing can benefit technique, timing, and the overall health and strength of the body. Through abdominal breathing, muscles can be alternately contracted and relaxed to maximize breathing potential and provide anatomical support to the body. Expanding the mind’s ability to focus and empty in the same way, is an additional benefit of the exercise of breathing.

Emphasis is placed on the slow exhalation phase of the breathing. This promotes the full emptying of the lungs of waste by-products but also prolongs the time that the body is in the exhalation mode. Studies and practice have shown that one is stronger for pushing, pulling, striking, jumping, etc., when breathing out, especially if the breath can be controlled to assist in the timing of an event. Absorbing a blow or maintaining balance is aided by breath control, and an audible shout or *kiai* is often utilized at the moment of maximum strength or impact.

When frightened or anxious we tend to inhale more rapidly, and holding the breath when startled is common. However, the body’s muscle strength drops rapidly when a breath is held, and the consequent buildup of carbon dioxide in the blood and brain triggers more anxiety and fatigue. Hyperventilation or uncontrolled shallow gasping for breath can completely short circuit the timing of the breathing mechanism, and bring about a response close to panic.

The martial artist learns to breathe from the abdomen in a manner similar to yoga practitioners, singers, actors, and wind instrument players. This is also referred to as breathing from the diaphragm. Both these

descriptions are misleading because, of course, all breathing is done with the lungs, but as a mental image, the idea of centering the breath low in the body is helpful in retraining the breathing response.

Children and animals at rest naturally breathe with visible movement of their abdomens, rather than their chests. Adult humans seem to have lost this natural ability, and we can only speculate on the cause. The ideal body image in the West demands a flat abdomen and well-developed upper body, and fashions which are worn tightly about the waist and hips only help to constrict the breathing. Too much sitting in desk chairs, television couches, and automobiles has certainly debilitated our posture; combined with very little cardiovascular demand for oxygen in these positions, this has likely contributed to shallowness of breathing (and thinking too, one might argue).

Although a large volume of air will enter the nose and mouth when we take a big breath, only a small portion of this air will travel as far as the alveoli. This is particularly true if the breath we take is shallow and the lungs are not fully inflated. Many people breathe only with the upper portion of their lungs even when engaged in an activity that demands a good oxygen supply. A visible indicator is the extent that the shoulders rise and fall while breathing. The chest cavity is looking for room to expand and shoulder movement will result. This is not, however, the best way to improve capacity, as it still confines the air exchange to a small portion of the upper lungs. In order to answer the oxygen demands of the body, the rate of respiration (number of breaths per minute) will increase. Normally, this compensation does not nearly fulfill the potential available.

Martial artists, on the other hand, work to control their breathing and expand the capacity of the lungs by strengthening and localizing the response of the diaphragm muscle, in order to allow expansion of the lung tissue down into the abdominal cavity.

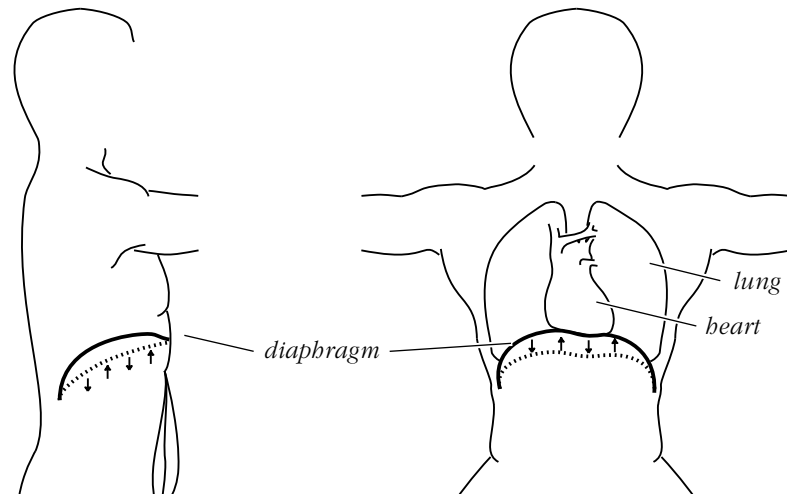
The diaphragm is a smooth, thin sheet of muscular tissue that stretches in a double dome shape from back to front across the body, completely separating the thoracic cavity (which holds the heart and lungs) from the abdomen (intestines, stomach, liver, etc.). When we inhale deeply, the diaphragm works to push gently against the abdominal organs, pulling down the pleural cavity around the lungs. The lower ribs swing outward and upward to allow the lung tissue to expand downward into the space created. Most texts on physiology look upon the act of inhalation as the part of ventilation that requires muscular effort and

*It is
believed that
to strengthen
the spirit,
it is essential
to strengthen
the abdomen.*

•

Masutatsu Oyama

1923–94



the expenditure of energy. From their point of view, it is exhalation that is the automatic and relaxation phase of the muscles involved. Martial artists and others interested in working with the body's breathing mechanism as a tool, train their "instrument" to be used in just the opposite manner. They consider exhalation the working or power phase, with inhalation occurring to restore the relative atmospheric pressure.

Taisen Deshimaru, a prominent Zen master, emphasizes in *The Zen Way to the Martial Arts* the importance of breathing out slowly, with control and always from the abdomen. He maintains that it is vital to good health to train using *zazen* (seated meditation) to make this response unconscious, so that it can be performed when sleeping as well as when physically active. In addition to the calming effect on the mind and the release of tension in the upper body, it is important for the martial artist to realize that he should strike only when breathing out, and guard against the vulnerability of the moment of inhalation, a weak point in any defense.

This inhalation can be especially dangerous for the martial artist who is not breathing from the abdomen, or *bara*. An intake of breath that is too "upward" in the body redirects the attention away from a low, stable center of gravity, and can be all an opponent needs to knock you off balance. Receiving a blow to the chest or abdomen when inhaling can have the disastrous effect of disabling the breathing signal mechanisms, familiarly known as "having the wind knocked out of you." Exhalation during a blow and the accompanying tensing of abdominal muscles reduces this effect and protects vital organs.

Striking as an opponent inhales is a simple counterattack skill. Learning to read this intention in others is facilitated by observing one's own breathing, balance, and body language. Even a simple signal such

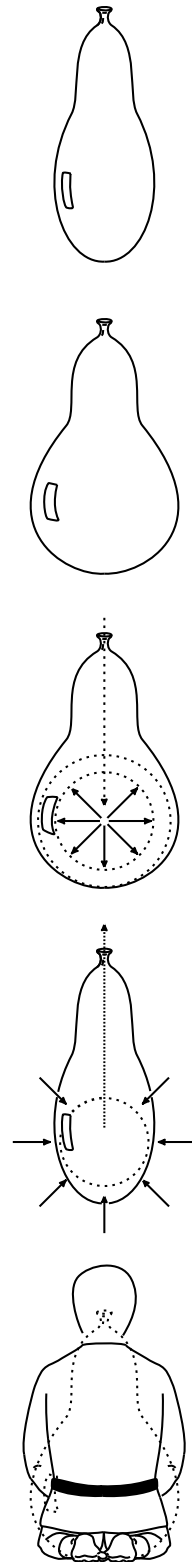
as the flaring of nostrils before an attack gives away the breathing rhythm of the opponent, and watching carefully can reveal a need for oxygen. Movement of the shoulders or chest can telegraph the intention to strike and can be used to fake the start of a technique. As part of the study of tactics, a student of *ninjutsu*, popularly known as a *ninja*, learns to breath silently and without motion of the body for stealth and “invisibility.” The warrior, combatant, or competitor learns to syncopate the breathing rhythm to confuse opponents, preventing them from taking advantage of vulnerabilities.

Other metabolic systems of the body are influenced by respiration even if they are not directly controlled by ventilation. The lymphatic immune system operates in the body fighting invading diseases, and although not yet completely understood, its circulation has been shown to be strongly affected by breathing processes. It is postulated that contraction of abdominal muscles suppresses the sympathetic nervous system, having the result of reducing common reactions to stress and fear (increased heart rate and blood pressure), allowing some measure of control over emotional reactions. The autonomic nerve center of the solar plexus is also affected by abdominal breathing. This network controls the digestive processes and waste removal mechanisms of the liver and kidneys by controlling the circulatory ability of small blood vessels and capillaries.

Yoga has a long legacy of belief in and practice of the detoxification and purification of body, mind, and spirit by breathing technique. *Chi kung*, *tai chi chuan*, and *shiatsu* are Asian healing practices that teach breathing as a fundamental basis for self-healing or the treatment of others. Modern movement therapies such as Feldenkrais, Alexander, Trager Mentastics, and Rolfing all have accessed this ancient knowledge for their exercises that coordinate breathing and physical action to improve health.

What then is this abdominal or diaphragmatic breathing? What does it feel like and how is it obtained? Many teachers describe the physical process of letting your abdomen rise (when you are in a horizontal position) or extend, keeping the chest still. Many beginners find this difficult to achieve as they fill their upper lungs first, and then try to “stick their stomach out.” Learning to engage the diaphragm consciously is the key to this type of breathing.

If we imagine the body cavity as a vessel to be filled with air rather than water, we can visualize pouring the air right to the bottom and the level rising as it fills. Even more helpful, (and anatomically correct), is a mental image of a balloon with a bulgy bottom that inflates at the base and expands spherically outward in all directions. This expansion is lightly controlled by tension in the abdomen and by



maintaining proper alignment of the pelvis, spine, and head. Feeling that the expansion is occurring across the lower back helps properly position the abdominal cavity, and is part of the therapeutic value of utilizing breathing exercises to those working with body mechanics.

Another factor in how the “balloon” is filled, is the shaping of the oral and nasal cavities. The opening and closing of the mouth, holding the teeth clenched, or engaging the soft palate will affect the pressure of the air and the nature of its passage both in and out of the lungs.

Breathing passively and quietly through the nose will usually engage only the upper area of the lung, indicated by chest rising and often the shoulders lifting as well. In exhalation, by closing slightly the soft palate at the back of the nose and throat, a gentle resistance pressure is created at the exit, which both strengthens the diaphragm muscle and allows for control over the movement of air through the passages. If you think of swallowing or closing the back of the nose when underwater you can close the soft palate. Relaxing the abdominal contraction and then inhaling with open and relaxed throat, will allow the lungs to expand downward, the abdomen expand outwards, and at most we should see the lower floating ribs move with the inhalation and exhalation.

In *zazen* meditation, the martial artist will concentrate on breathing with a slow measured exhalation. By sitting in *seiza* (a kneeling

Zen Testing

EXPERIMENTS on Zen monks have documented the physiological effects of *zazen* breathing on circulation, ventilation, metabolism, and brain wave patterns. Tests were done using a respiratory pneumograph for a comparison of thoracic versus abdominal breathing, a Douglas bag to analyse gas exchange, and electroencephalographs to monitor brain activity.

It was clear in most studies that participants who had more experience, many years of training in abdominal breathing and meditation, displayed consistent results and more control over the body's processes even when subject to testing distractions and interruptions. In general, the tests have shown that once *zazen* breathing has been established, the number of breaths per minute drops dramatically, along with oxygen consumption, to well below normal levels. At the same time, contrary to what was predicted, there was no change in the blood oxygen concentration, thereby indicat-

ing that the oxygen and carbon dioxide exchange became more efficient due to increased tidal volume and metabolic changes.

The reports also remarked on the apparent ability of breath regulation to impart a physiological and psychological control over emotional responses due to the relationship of the autonomous nervous system and the control center of mental processes.

Other studies have shown the positive results of utilizing the *zazen* exercises as therapeutic techniques in the treatment of a variety of physical and psychological disorders.

Sources:

- *Oriental Breathing Therapy*
by Takashi Nakamura
- *Psychological Studies on Zen*
by Yoshiharu Akishige
- *Zen Training, Methods and Philosophy*
by Katsuki Sekida
- *Zen Meditation and Psychotherapy*
by Tomio Hirai, M.D.

position with the spine straight, shoulders and head relaxed, and arms resting comfortably), the student can become more mentally aware of the rhythms of breathing, and the expansion and contraction of the upper body to accommodate the ventilation process.

This exercise is often practised at the beginning and end of martial art classes as a quiet moment to compose oneself and prepare mentally for the training. The breathing exercise aids in this calming effect. But the principle reason for *zazen*, especially for beginning martial artists, is to train the breathing mechanism, first consciously and then unconsciously, so that during the more energetic phases of the training, they will still be breathing smoothly and efficiently without having to devote much attention to the process. At more advanced levels of training, *zazen* meditation provides other benefits, which will be discussed in later chapters.

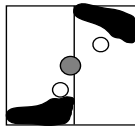
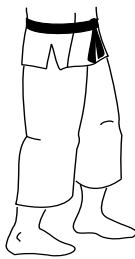
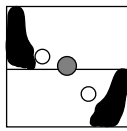
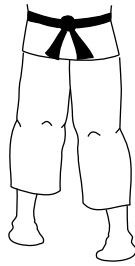
There are many different ways of breathing, depending on the position and activity of the body. In martial arts, as in *zazen* breathing, the emphasis is on the abdominal exhalation, yet the pattern of breaths will vary. Particularly in the more vigorous phases of training the intake and expiration of air can be fast or slow, silent or noisy, with tension or relaxation, depending on the requirement of the technique and the task at hand. What is important is the voluntary control of the breathing at the center of the movement, rather than the breathing response limiting what the body and the mind want to do. This is not to say that technique should not flow from the breathing, as this is a fundamental of graceful, strong movement in any activity. But the martial artist trains to strike a balance between the physiological demands of the organism and the intention of the spirit and mind, to best utilize the body's energy and dynamic resources to achieve its goal.

As we naturally emit a grunt or groan when lifting a heavy object, in the same way a martial artist will focus the exhalation of air with a vocal sound into a *kiai*. The word itself means union of spirit energy, from the Japanese for *ki* (energy) and *ai* (union), and therefore represents more than the mere physical manifestation of a shout. For the martial artist in action the term "spirit yell" best describes the source and meaning of the *kiai*. It is the outward expression and extension of one's internal energy in union with the body and its external surroundings. The breath is believed to be at the center of this energy, which is both spiritual and physical.

In Eastern philosophy, the intrinsic energy of the body is considered to be centered in the *hara* or *tanden* (an area just below and behind the navel). It is essential that the *kiai* be formed from air expelled from the deepest area of the lungs and controlled by the abdominal muscles. The *kiai* will take on many forms, as will be discussed later,

depending on the task or flow of the moment, such as pulling, pushing, entering, and turning. A sharp exhalation *kiai* is used by martial artists to accompany short percussive strikes, blows, or blocks.

Sanchin breathing practice, most often associated with the *goju-ryu* and *uechi-ryu* styles of Okinawan *karate-do* (originally from the *pan-gai-noon* style of Chinese *kempo* and thought by some to be the original lessons given by Bodhidharma to the Shaolin monks) is used for developing pushing and pulling technique. The air and energy is mustered up in the *hara* and then expelled slowly and gutturally with a slight closure of the soft palate at the back of the throat to control the flow of air. It develops great power and emphasizes rootedness and sturdiness, with energy flowing upward from the ground like a tree standing in a storm. The moving tension of the arms and legs forms an isometric pressure zone around the abdominal cavity, allowing the strengthening of the entire body, and developing the use of this strength in a very controlled manner.



Foot placement for the sanchin-dachi (three-point stance) for breathing practice, shown in front and side view.

In striking and grappling techniques, students are often taught to visualize energy “flowing like water through a hose” in conjunction with their exhalation of air, or to “breathe through their hands.” Breathing exercises, focus on abdominal contraction and the controlled exhalation of the breath during the performance of techniques is central to the daily training in the martial arts.

After the period of *seiza* at the beginning of a typical class or individual workout, the martial artist will do a series of exercises as a warm-up. The purpose of this is to raise the body temperature so that muscle and connective tissue will stretch and contract without damage. Breathing deeply can boost metabolism and activate energy stored in the chemical systems in the body. It is also important that the mental attitude and breathing rhythm from the *zazen* meditation be carried over into the warm-up, as it is here that the coordination of breathing and physical movement will be established and synchronized. The gentle stretches and rotations done to limber and loosen the joints and spine will be performed with slow exhalation, taking care to not hold the breath. If done correctly and with attention to the pattern and depth of breathing, a nice flowing movement of the body will result, and provide a good transition to the vigorous and demanding exercises to follow.

Basic exercises, or *kihon*, can encompass a wide range of techniques practised in combination. These exercises are repeated rhythmically as

Basic exercises, or *kihon*, can encompass a wide range of techniques practised in combination. These exercises are repeated rhythmically as

learning drills for accuracy, strength, stamina and endurance. In *gorin-do*, *karate-do*, *taekwondo*, and others, they can be performed either standing or moving back and forth across the floor or ground. In the throwing and grappling arts of *aikido* or *judo* the pattern of practice with partners may appear to be somewhat different, but the purpose of *kibon* to break down technique into component parts and then rebuild repetitively is the same.

Kibon is excellent training for the improvement of vital capacity, cardiovascular efficiency, and overall fitness and coordination. The closest parallel in conventional physical education is the aerobics exercise class of modern fitness clubs. In fact, the most recent trend in physical fitness training is the incorporation of martial arts and boxing techniques in these classes. Although martial art professionals are happy to see some recognition of the systems that they have been training in for decades, there is concern that there may be insufficient attention being paid to proper preparation and precise technique in order to avoid injury. While they do popularize the whole-body benefits that martial arts training can offer, without the mental and spiritual influence and the grounding in the breathing practices, these exercises provide to participants only a small part of the total “package.”

Kibon provides a good aerobic workout in which the mind is always engaged, focusing on accurate technique, breaking it down into parts, recombining, making movements flow with the breath. In more advanced martial arts training, intensive and long training sessions are designed for improving endurance, concentration, and reliance on correct technique to conserve energy. Here the body will pass from aerobic respiration (where oxygen is used directly) to anaerobic respiration, where lactic acid is formed in the muscle tissue and extended feelings of fatigue, both physical and mental, set in. All forms of long distance or endurance exercise will engage the aerobic/anaerobic crossover effect. Good instruction and training can increase the time spent operating aerobically and considerably reduce the discomfort of the anaerobic metabolism. Although the physical effects of the body’s “changing of gears” are very real, the reaction to them and their influence on enjoyment and the desire to continue training, or

*Now and again, it is
necessary to seclude
yourself among deep
mountains and hidden
valleys to restore your link
to the source of life.*

*Breathe in and let
yourself soar to the ends of
the Universe; breathe out
and bring the cosmos
back inside. Next, breathe
up all the fecundity and
vibrancy of the earth.*

*Finally, blend the breath
of heaven and the
breath of earth with that
of your own, becoming
the Breath of Life itself.*

•

Morihei Ueshiba

1883–1969

more to the point, the *perception* of the ability of the body to continue, is largely mental.

The martial artist is working to recognize and control this mind-body effect and use it to his advantage. Understanding and control of breathing is critical in being able to increase the limits of his physical endurance, and eliminate the anxiety induced when “waiting for that second wind,” by making that wind come to him. Breathing fuels the metabolic furnace of the body and affects the production of adrenaline and endorphins. These chemical and hormonal influences produce feelings of well-being, pain relief, and surges of energy and power. A martial artist seeks to access the virtually unlimited potential of the human body and spirit that we see demonstrated in situations in which, for example, a mother has to lift a tree branch off her injured child, or the survivor of a plane crash crosses hundreds of miles of bush to seek rescue. Although the physical limits of most humans appears to be finite, it is often the will to survive and the ability to concentrate one’s energies on a single task that sets us apart.

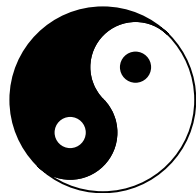
Learning to access and harness the body’s intrinsic physical resources, uniting the intellect, will, and passion, is the training goal of the martial artist. By recognizing the equilibrium required, and by studying the ebb and flow of these energies, the student or practitioner can work to direct these skills. At the same time, a martial artist is learning to let go,

go with the flow, and allow energy to come to him. This *yin-yang* balance between control and chaos is part of what makes the martial arts so challenging and interesting, both as an activity and a way of life.

Training in *kata* (a formal series of arranged movements), is the next step in the integration of natural flowing movements and breathing. Fast and slow, push and pull, grappling and jumping are all included in these moving meditations. Initially perceived as a teaching exercise, its role expands as the student progresses. *Kata* is considered by some as the highest form of expression in the martial arts and is certainly where mind, body and spirit come together. Endless repetition of *kata*, “polishing the diamond,” allows

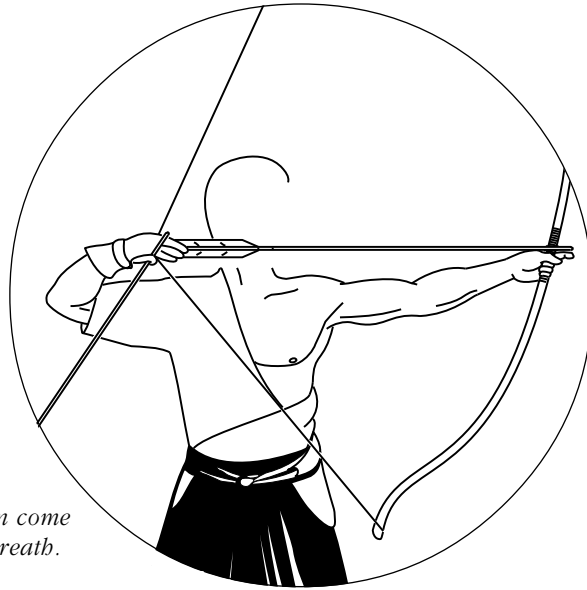
Yin and Yang

THIS well-known graphic represents a balanced interplay of pairs of essential but opposing forces, each containing some component of its opposite, thus generating a cyclical, eternal ebb and flow of the activities and qualities of each member of the pair.



Pairings descriptive of yin and yang

<i>push / pull</i>	<i>salty / sweet</i>
<i>hard / soft</i>	<i>control / chaos</i>
<i>light / dark</i>	<i>loud / quiet</i>
<i>in / out</i>	<i>white / black</i>
<i>up / down</i>	<i>heavy / light</i>



Focus and concentration come from the center of the breath.

students eventually to let go of the mental and physical limitations of the training and breathe with the spirit of the art.

The martial artist is using the breathing process of meditation in extreme moments of excellence or survival. By concentrating on the breathing in various levels of respiration, the brain acquires a focus that can be used to calm the mind or inspire it. Deep breathing can serve to both energize and relax at the same time. Feelings of anxiety that often result from the organism of the body being unsettled or stressed can be quelled, and the effects of adrenaline and other by-products of the body's metabolism can be controlled. As well, emphasizing the benefits of allowing the body to perform in optimum conditions, with a positive attitude, can significantly enhance one's sense of general well-being and happiness. Just learning to relax can release great energy in the body and spirit. The old adage "just take ten deep breaths" to control anger or other emotions comes from this. Through training, the martial artist seeks to become more "present" in every moment. Being aware and engaging fully in the experience at hand is both a philosophical fundamental and a necessity for the martial artist. Communicating and expressing this with the physical senses, always brings us back to how we "breathe in" or absorb our environment, and continuously return energies back to it.

Prana is the Sanskrit word for the energy given off by the movement and flow of living things in our universe, and is often associated with water and earth that is vibrant and alive. Breathing in the spray of waves crashing, waterfalls flowing, and the scent of verdant forests, fields, or jungles, has always brought joy and health to the human spirit. Whether interpreted as complex interactions of molecules of oxygen,

hydrogen, nitrogen, and carbon-based life forms, or metaphysically as union with *ki*, this effect is basically what defines our lives as humans. The simple basis of the systems that allow us to exist should humble and amaze us, and the delicacy of the balance required for survival deserves our respect.

Even the trees breathe. It is not just poetic to consider the large remaining jungles and forests as the lungs of our planet. Deforestation caused by humankind is a serious threat to the balance of ecosystems and the quality of the air we breathe. The oxygen supply of this “Spaceship Earth” exists as a very thin skin around a planet of water, rock, and some organic matter. Although we feel the atmosphere is immense around us, even at an altitude of 10,000 feet, the air is appreciably thinner; it becomes difficult to breathe and the adjustment to different concentrations of elements in the air and in the bloodstream can make our organism feel quite unwell.

Breathing problems associated with pollution in urban environments arise not just because particulates in the air are inhaled, but also because of the imbalance of gases and the lack of oxygen-producing plants and trees in these concrete and asphalt environments.

The martial artist not only exercises caution in avoiding polluted air, but constantly seeks out opportunities to fill his lungs and spirit with

Breathing Attitudes

MARTIAL arts breathing is a singular symbiosis of “laughing” and “coughing.” Both mechanisms are employed to clean and activate the whole self, from the inside out.

	LAUGHING	COUGHING
Inhale	<i>Short</i>	<i>Long</i>
Exhale	<i>Long</i>	<i>Short</i>
The body	<i>Limbs externalized (clapping and stamping on the floor)</i>	<i>Bend forward and raise the back to contract the abdomen muscles (internalized)</i>
Benefits	<i>Activates circulatory system Induces relaxation</i>	<i>Cleans respiratory apparatus Promotes contraction</i>
Attitude	<i>Open</i>	<i>Closed</i>
Senses	<i>Open</i>	<i>Closed</i>
Application	<i>Striking, jumping, spinning</i>	<i>Grappling, anchoring, pulling</i>

clean oxygenated and energized air. It is as vital to the feeding and function of the organism as food and water. Protecting the air supply on both an individual and global level is just basic self-defense.

Many martial arts are practised outdoors in a natural environment. Although it is obvious that “unlimited ceiling” assists the practice of weapons technique such as that of *kyudo*, *kendo*, *iaido* as well as the staff and stick work of *karate-do*, *gorindo*, *aikido* and *kali*, it is the physiological, psychological, and philosophical effects of breathing deeply the natural air and energy that are being studied and utilized. Extending the reach of one’s control by “breathing out” through the hands, and then through the ends of the tools or weapon, is a fundamental of these techniques. Strength, finesse, and flow are acquired through such practice.

Other Japanese arts that employ smaller implements, such as calligraphy, brush painting, and the tea ceremony, are also taught as extensions of the mind and breath. *Zazen* breathing is used to prepare the mind and reflexes and then every movement in the practice arises and flows from the exhalation of the breath. The stroke of the brush on paper or the whisking of the brush in tea is the same as the slice of the blade of the samurai sword; it is the single breath of the artist.

Knowledge and attitudes about breathing are one of the main areas of divergence between Western and Eastern ways of thinking, both culturally and historically. Western science took a very long time to recognize that germs and poisons could invade the body through inhalation. Interest in the conscious control of breathing mechanisms or its connection to personal health is almost conspicuous by its absence. Medical study of ventilation and respiration appears confined to clinical analysis of the human organism and its diseases. Resuscitation and artificial respiration are means of sustaining life, but little analysis of the importance of maintaining breathing as a useful tool of the body, or as an extension of the human mind and spirit has been done in modern Western culture. Perhaps historically the religious fundament to our social and artistic patterns did not allow for “the holy spirit” to be associated with such mundane and profane human processes as breathing. Even though the “heart” has been allowed to embody emotions and will, we don’t often expose its true simple function as an oxygen pump for a metabolic furnace. How our conscious thoughts and unconscious memories inhabit this physical machine is still mostly a mystery to the Western paradigm. The Eastern philosophies, religions, medicines, and educational systems, on the other hand, place breathing as a physical process and life force. It has a place as the fundamental point of departure for study, teaching, expression, and understanding



Fu: *wind,*
or breath

of all important Ways. Having good *hara* is as much as assessment of character and integrity as it is a physical and health statement.

Emotionally, the martial artist observes responses to different circumstances that affect the breathing responses unconsciously. Through *zazen* and martial arts training the student can learn to reverse the roles, making the breathing patterns influence thoughts and create new situations. Adjusting one's attitude can be reduced to exhaling the old completely and welcoming the new.

Life and death is the philosophical paradigm for the influence of the samurai tradition on the martial arts. Each cycle of breathing is a day-night unit in an organism, a *yin-yang* cellular life unit. From a psychological and philosophical point of view, the experience of "living in the moment" can be defined as the duration of a breath, a "mini-life." This influence of Zen upon the character of martial arts and those who study the Way helps the organism and the person obtain full value for life. By enjoying each breath you take, life becomes long, fruitful, and healthy, the ultimate goals of the martial artist.

*Putting the Ball on the Shelf**Gorindo Breathing Exercise No. 1*

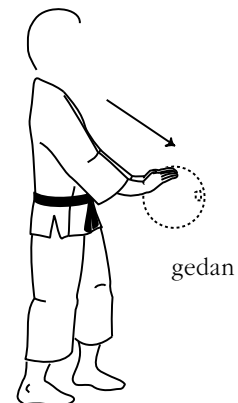
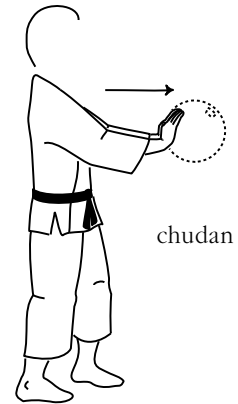
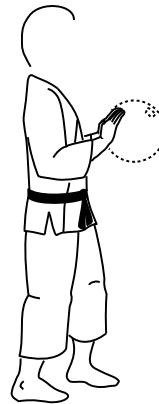
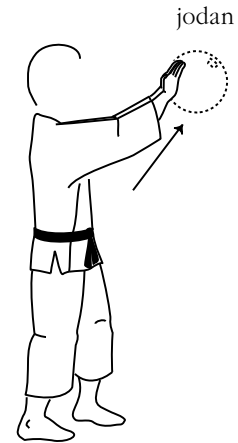
Basic: Begin in a relaxed, standing position, feet shoulder width apart, and knees loose. Step forward with the right foot into a *sanchin-dachi* (three-point stance, see page 22). Feel the heels pointing slightly to the outside, pelvis pulled under and tilting up, knees pushing gently (without discomfort) to the inside, creating three points of a stable triangle.

Inhale while raising the hands in front of the solar plexus, keeping elbows tucked in and ensuring the shoulders are down and relaxed. Pause briefly to balance the relaxation and tension. Begin exhaling with a very slight pressure upon the air in the throat with the soft palate and slowly direct the hands upward and away from the body to the level of the face, *jodan*.

Feel the abdomen contract, the shoulders drop, and the pelvis pull underneath at the end of the exhalation. Pause. Maintain that alignment of the body, and bring hands back again to the solar plexus while inhaling. The next breath is exhaled as you push hands directly forward from and to the solar plexus level, *chudan*. Bring the hands back again with the inhalation and then exhale, pushing downward and away from the body to the level of the *bara* (just below the navel), *gedan*. Retrieve the hands on an inhalation back to the solar plexus and relax, exhaling as the hands drop to the sides.

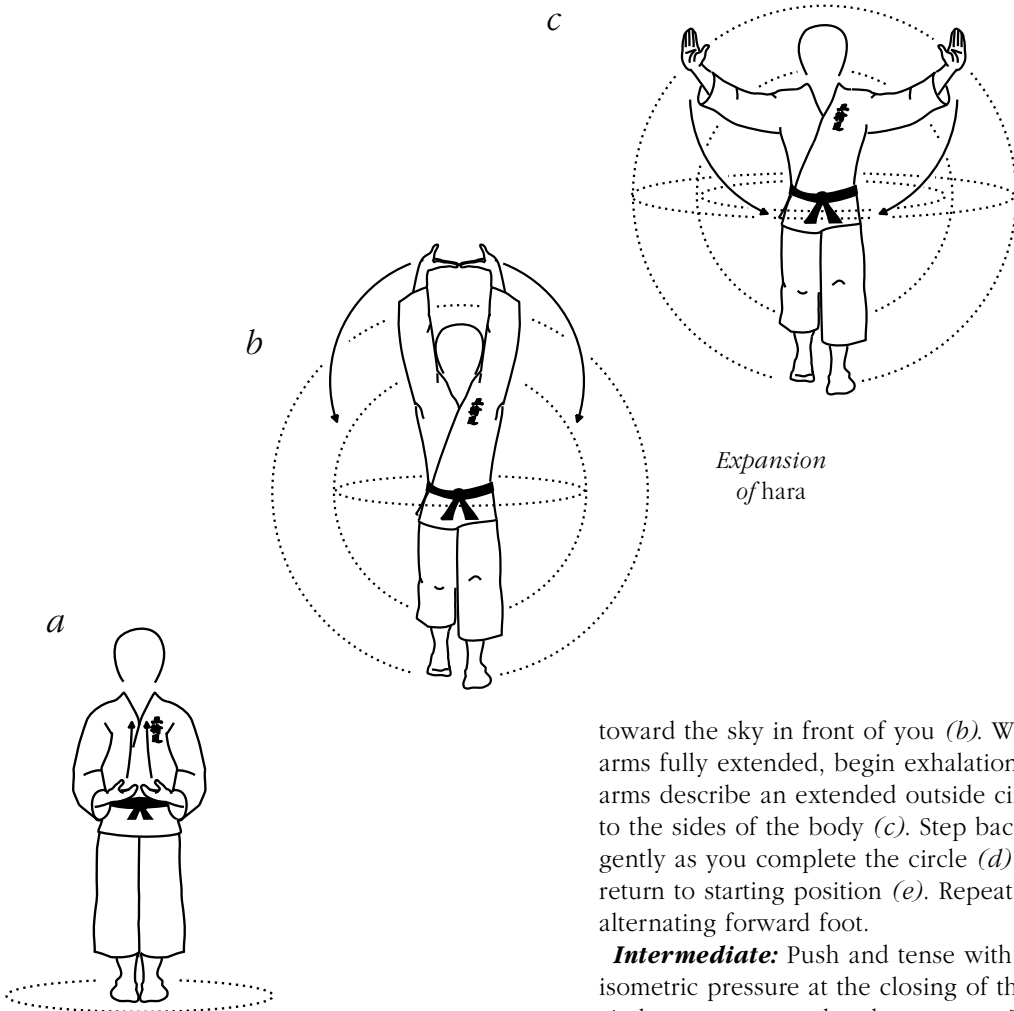
The second half of the exercise repeats with the other foot forward.

Intermediate: Step forward at the same time as inhaling and raising hands. Step back with exhalation while dropping hands. More pressure can be used against the closing of the palate.



Casting Petals to the Winds

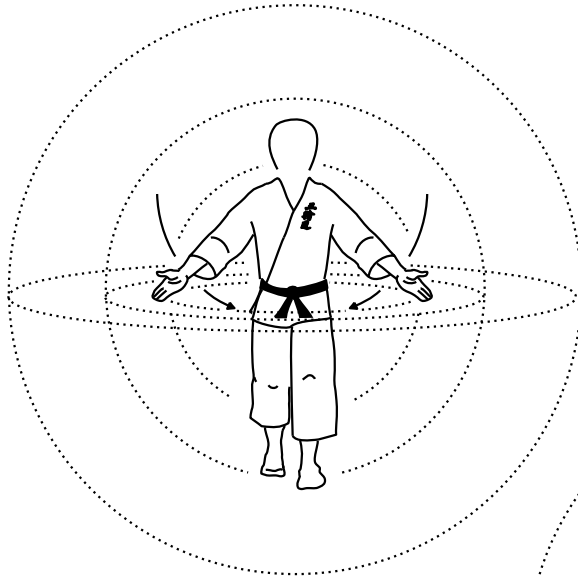
Gorindo Breathing Exercise No. 2



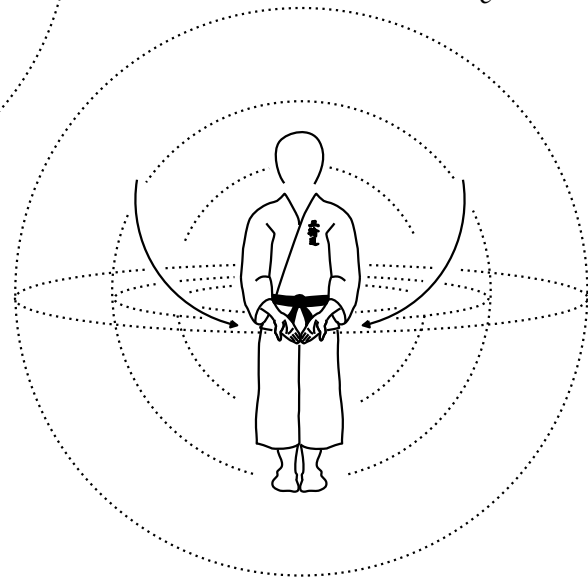
Basic: Stand with feet together, hands palm up, fingertips together in front of you, cradling your *hara* or *ki* center just below your navel (a). With a gentle rocking motion, step forward while bringing your hands up the center of your body as you inhale. As your hands pass the level of your face rotate them to a palms up and thumbs up position, then push upward

toward the sky in front of you (b). With arms fully extended, begin exhalation as arms describe an extended outside circle to the sides of the body (c). Step backward gently as you complete the circle (d) and return to starting position (e). Repeat alternating forward foot.

Intermediate: Push and tense with isometric pressure at the closing of the circle as you return hands to center. Try to feel that you are describing a sphere with your body, breath, and mind. Take care that your eyes look forward and upward on the extension but without your head falling back onto the neck. The rocking motion of the step involves walking heel first and then shifting the weight to the ball of the foot as the heel of the trailing foot lifts off the ground. To return, reverse the process. Proceed with the motions without stopping in between.

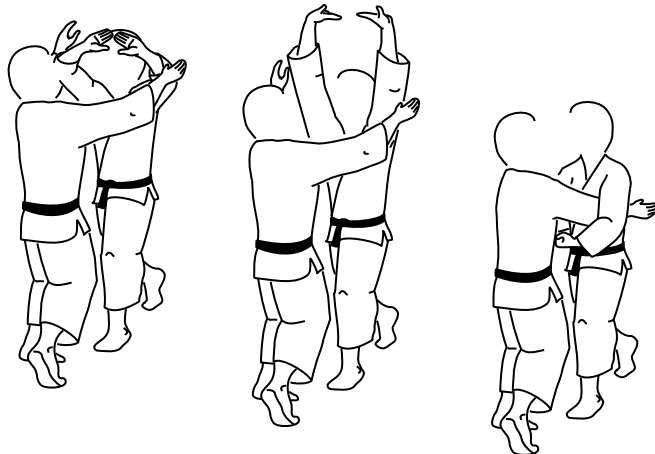


d



e

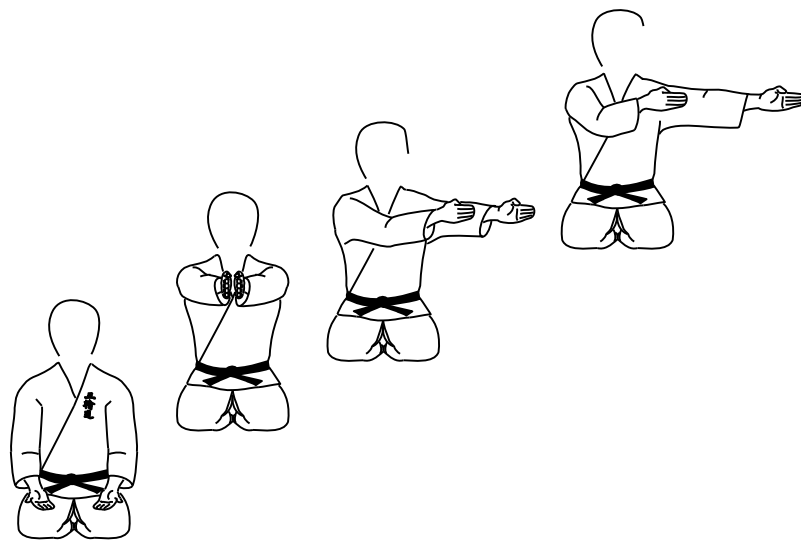
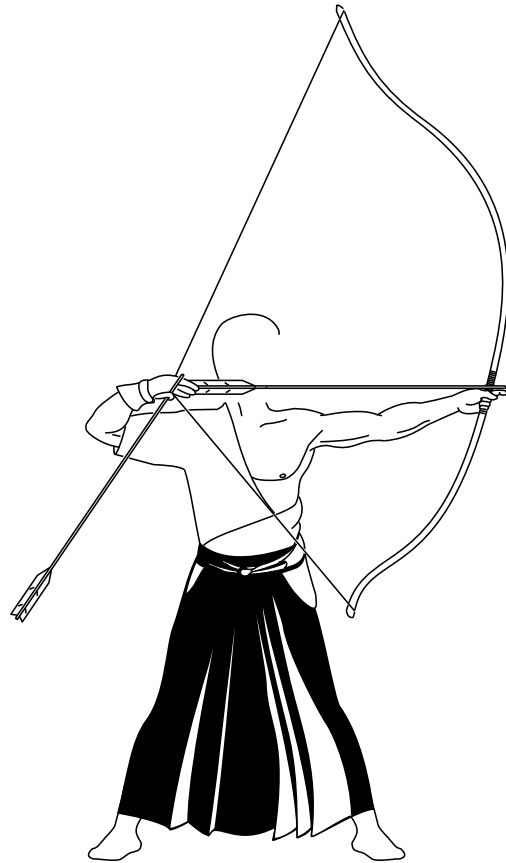
Comments: This exercise is useful to recover the breath after vigorous activity or being winded. Although taught as a breathing exercise for the student within the *gorindo* program, it has a practical self-defense application as well. This technique relies on the breaking strength achieved from the exhalation of air and can be used to defend from a double wrist grab, or in this case, a front choking grab. The defender steps into the opponent, raises hands in front and above, and exhales as hands move in an outward circle, breaking the hold and, if desired, trapping the opponent's arms under his own as he completes the lower portion of the circular movement.

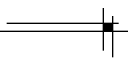


The Archer's Bow (standing or kneeling)

Gorindo Breathing Exercise No. 3

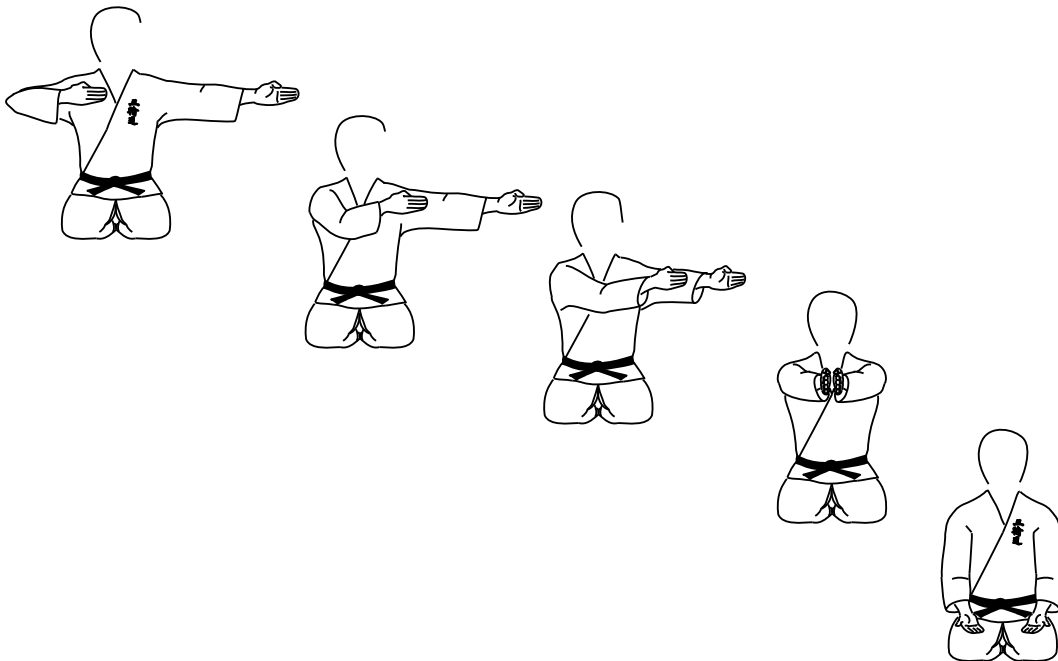
Basic: Begin with hands and shoulders relaxed, palms up. Raise hands slowly in front as you inhale, keeping the shoulders down and letting the abdomen relax and expand. Move the head and arms to the left, describing a circle with the eyes moving with the hands, exhaling slowly and fully contracting your abdomen as you complete the drawing of the bow. At the release of the string, release the tension in the abdomen, relax the throat, and allow the air to refill from the bottom of your lungs as if you are the target attracting the arrow. Follow the air with the sweep of the arms back to center. Begin to exhale again when the hands are together in front of the chest and allow your hands to return slowly to the lap. Breathe normally for a breath or two, then repeat on the other side.





Intermediate: The mechanics of the movement are the same but as a physical and mental exercise, the dynamic of the breathing changes.

Raise hands in front. Continue to inhale as your hands draw to the side. As the near pulling hand begins to cross the expanding (but not rising) chest, a slight pause or retention of the breath occurs without pressure. As the arrow is “released,” follow the return of the hands with an exhalation downward into the abdomen. Remember that the visualization of the inhalation and exhalation occurs not just to fill the area of vision in front of you, but describes a semicircle behind you as well. By repeating the movements on the other side of the body, you should create a mental image of concentric circles with yourself as the eye of the target.



Secrets of the Martial Arts

- Early in their training martial artists learn to inhale and exhale in such a way that maximum gas exchange can take place at the cellular level. Greater control over the mechanism of breathing can benefit technique, timing, and the overall health and strength of the body.
- Emphasis is placed on the exhalation phase of breathing. This promotes the full emptying of the lungs of waste by-products and also prolongs the time that the body is in the exhalation mode.
- Martial artists work to control their breathing and expand the capacity of the lungs by strengthening and localizing the response of the diaphragm muscle.
- It is essential that the *kiai* be formed from air expelled from the deepest area of the lungs and controlled by the abdominal muscles.
- It is important that the mental attitude and breathing rhythm from the *zazen* meditation be carried over into the physical warm-up, as it is here that the coordination of breathing and physical movement will be established and synchronized.
- Although the physical effects of the body's "changing of gears" are very real, the *perception* of the ability of the body to continue is largely mental. Martial artists work to recognize and control this mind-body effect and use it to their advantage.
- Endless repetition of *kata*, "polishing the diamond," allows students eventually to let go of the mental and physical limitations of the training and breathe with the spirit of the art.
- Concentrating on the breathing in various levels of respiration allows the brain to acquire a focus that can be used either to calm or to inspire the mind.
- The martial artist not only exercises caution in avoiding polluted air but seeks out opportunities to constantly fill the lungs and spirit with clean oxygenated and energized air.
- The Eastern philosophies, religions, medicines, and educational systems recognize breathing as a physical process and life force.

Contact the Authors

For more information about Gorindo, “the Friendly Martial Art” and other publications, programs, and research of the authors of this book, please visit us at our website: www.askSensei.com or e-mail: info@askSensei.com.