

Aging and Martial Arts Training

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Contemporary Martial Arts as *Do*

Many contemporary martial arts incorporate the word “*do*” into their names, for example: *taekwondo*, *judo*, *karate do*, *aikido*, *kendo*, *iaido*, et cetera. The Chinese character that *do* refers to is a pictograph meaning road, path, or “*Way*”. Martial Arts that end their names with *do* imply or contend that their style is in some sense a “*Way*” of life—as distinct from mere technique or skill—which in Japanese is referred to as *jitsu* and in Korean as *sul*. Some examples are:

- *Taekwondo*: The way of the Foot and Hand
- *Judo*: The Gentle Way
- *Kendo*: The Way of the Sword
- *Aikido*: The Way of Universal Harmony

The practice of ending the name of a martial art with the word *do* has roots in two separate events. First, when Dr. Jigoro Kano (1860–1938) created *Judo*, he purposely and systematically demilitarized traditional *jiu-jitsu*, eliminating or modifying lethal and maiming techniques in favor of ones that could be used safely in a sport context. His goal was to encourage the physical, mental and spiritual development of the individual, and thereby improve society one *judoka* at a time. Kano purposely chose the name *Judo* for his fledgling sport to give it an ethical connotation—in sharp contrast with *jiu-jitsu*, which refers only to skills and techniques.

Second, during the U.S. administered occupation of Japan after World War II (1945–1952, under the leadership of General Douglas MacArthur), the teaching of Japanese martial arts was initially outlawed. Over time, however, various schools were opened (or re-opened) having named (or re-named) the styles they taught as *do* instead of the more traditional *jitsu*.

The notion that a “Way of Life” or “Way of Conduct” was being taught instead of pure fighting or warrior skills and techniques allowed many traditional Japanese martial arts to be revived under the watchful eye of the Occupation forces. Consequently, it is now commonplace for many Japanese martial arts to be named with the *do* suffix.

Despite the now ubiquitous suffix *do*, it’s worth reflecting on the meaning and implications of this simple word. *Do*, the “Way”, in contrast to *jitsu*, “technique” or “skill.” It is not unlike the difference between “Wisdom” and “Knowledge”. Fighting “skill” without a moral context within which to use it may denigrate into simple thuggery. Likewise, knowledge of facts and figures without the wisdom of how to use and apply them is useless. So, the “Way” (*do*) in which we use or fighting skills—and indeed the “Way” in which we lead our lives—becomes a paramount part of the contemporary study and practice of martial arts. In fact, in an age of guns and other high-tech weapons, the study of bare-handed fighting only for the sake of self-defense is somewhat limiting. On the other hand, the use of such study as a means of training oneself physically, mentally and spiritually is very practical and useful far beyond the walls of the training hall.

In learning the meaning of *do* in martial arts, practitioners pursue intangible goals including:

- courtesy
- integrity
- perseverance
- indomitable spirit
- self-control

Moreover, an ideal common to many modern martial arts is to promote the unity of mind, body and spirit. Here, mind is defined as one's present mental focus, while spirit is defined as one's soul—eternal and unchanging. In short, a major objective of martial artists who practice and study various *do* is to develop, refine and strengthen their physical bodies, mental facilities and the harmonious coordination of these two aspects of existence with the more ethereal concept of spirit.

Do, in the context of being the “road” or “path” holds two oft-cited admonitions for the marital artist. One, *keep moving!* Never stop learning, growing or pursuing the way. Or, as it has been said: “*If you don't keep moving ahead, somebody gonna come from behind and run you over!*”¹ Second, *the journey is more important than the destination*. In other words, the sweat, work and practice needed to achieve the next level is much more important than arriving at the next level itself.

While the meaning of *do* is of import to all who study martial arts, it has particular relevance to older practitioners. And although I'm sure that “we know who we are”, for the purposes of this paper we'll consider “older” to mean 40 and over. For us, keeping mind, body and spirit in harmony increasingly takes

self-control and an indomitable spirit. And if pursuing this unity is truly one of the reasons we train, is it not more important and increasingly relevant as we get older and face the challenges of aging?

Know Thy Enemy – Physiological Aging

*If you know the enemy and know yourself,
you need not fear the result of a hundred
battles.*

*If you know yourself but not the enemy,
for every victory gained you will also
suffer defeat.*

*If you know neither the enemy nor
yourself, you will succumb in every battle.*

Sun Tzu

The numerous theories about the causes of aging are beyond the scope of this paper. Likewise, highly detailed scientific descriptions of the aging process are not covered here. For our purposes, we will focus on the general changes that take place in the body that are most common and relevant to training and aging.

Cardiac Output

Both figuratively and literally speaking, the heart of the aging process is encapsulated by the gradual decrease in cardiac output. The loss of peak cardiac capacity (as measured by maximum heart rate) not only accompanies aging, but cardiovascular disease, which is “far and away the most common cause of death and disability in the United States and throughout the developed world”.²

From a training perspective, peak heart rate typically drops from 200 beats per minute for a 20 year-old youth to 160 beats per minute for a 60 year-

old adult. Indeed, the rule of thumb for calculating maximum heart rate is to take your age and subtract it from 220. So by age 70 we're down to 150 beats per minute, and by age 80 down to 140 and so on. Furthermore, there is evidence that suggests with age the heart becomes less responsive to the surge of adrenaline that occurs with exertion.³

Perhaps even more unsettling is the relentless accumulation of cholesterol plaque in the arteries. A full discussion of HDL (high-density lipoprotein), the so-called "good" form of cholesterol, versus LDL (low-density lipoprotein), the "bad" cholesterol, and triglycerides, another kind of fat that can damage arteries, is equally confusing and depressing. For most of us, the simple conclusion is that we should cut back or give up many of our favorite foods, and/or consider taking LDL lowering drugs. All of us living and eating in our modern world are accumulating cholesterol plaque on the inner walls of our arteries—at a rate, and to a degree far in excess of our primitive ancestors. Ironically, doctors often refer to this build-up on arterial walls as "pizza topping", because of its color and waxy consistency. The danger with cholesterol plaque is that as it builds up it causes atherosclerosis, severely decreasing the flow of blood. When blood flow stops completely in that artery, the resulting event is commonly described as a stroke or heart attack.

Overall, the prospect of a gradual, but inevitable decrease in our maximum heartbeat capabilities and seemingly equally inevitable build-up of plaque in our arteries is not a happy one

Aerobic Capacity

Aerobic capacity is defined as the body's ability to process oxygen, moving it from the lungs into the blood, through the bloodstream and so throughout the body. Scientifically, this capability is referred to as peak oxygen pulse or VO_2 max, the maximum volume of oxygen consumed by the body per minute during intense, whole-body exercise. Aerobic capacity is not just a matter of having good lungs, but a healthy heart and a sound vascular system. The average untrained male will have a VO_2 max of ~45 ml/kg/min, while a similar female will measure ~38 ml/kg/min. Endurance athletes can measure far higher, with world class men measuring over 80 ml/kg/min and women over 70 ml/kg/min. Unfortunately as we age the relative maximal oxygen intake declines by about 5 ml/kg/min per decade from age 25-65.⁴ For the average male this means your aerobic capacity has already started to decrease at age 30 and by age 65 it may be down as much as 30% to 40% of what it was at age 20. As such, VO_2 max is an excellent measure of physiological vs. chronological aging. Yet any way you measure it, the sad truth is that our ability to get oxygen into the body and utilize it efficiently diminishes dramatically with age.

Sarcopenia

Sarcopenia is a medical term arising from the Greek (literally, "loss of flesh"), and refers to the loss of muscle mass that occurs with aging.

Skeletal muscle cells group together and form fibers that can be classified into several distinct types. These types are most commonly referred to as

strength cells (Type II) and endurance cells (Type I). Endurance cells (also known as *slow-twitch* cells) have more mitochondria for greater endurance, but less power.⁵ Type II or *fast-twitch* muscle cells are for strength. These cells tend to have fewer mitochondria than Type I cells, but can generate much more power. Individual nerve cells can transmit signals to *either* strength (Type II) muscle cells *or* endurance (Type I) muscle cells, but not both simultaneously.

The depressing truth is that with age we not only lose muscle mass, but also muscle strength—it turns out that most muscle loss from aging is of the Type II muscle fibers. Muscle strength peaks at about age 25 for most humans, levels off at around 35–40 and then declines. Peak force drops about 25% by age 65.⁶ And even though the loss of Type II muscles can be forestalled by exercise, the decline is inevitable. This is why world-class sprinters, who require bursts of great speed and power, attain peak performance in their late teens to early 20's, while world-class marathon (endurance) runners compete well into their late 30's.

Bone Deterioration

There are two types of bone in your body: cortical and trabecular. Cortical bone is solid looking and compact. This type of bone is mainly found in shins and forearms. Trabecular bone by contrast is made up of a latticework of bone spicules (small, needlelike structures made up of calcium carbonate), and can be found in the spine, thighs and hips. Over time calcium loss causes deterioration to the interior matrix of both types of bone, but trabecular bone is affected more severely than cortical. This calcium loss, which can

start as early as 30, makes the bones more brittle and can contribute to a slight decrease in height. In women the process of calcium loss accelerates for about five years around menopause. A classic injury among older people is the fracture or breaking of a brittle hip, often triggered by a loss of balance, commonly resulting in irreversible bed rest and death.

Flexibility and Range of Motion

The elasticity of connective tissues decreases with age. These structures, which connect muscles to bones, include tendons, ligaments and joint-capsules. Decreased elasticity, often combined with arthritis, results in decreased flexibility, especially in the hips, knees and other joints. This means that these joints must bear increased stress while we exercise, instead of dissipating the stress into nearby tissues (primarily muscles) as happened when we were younger. Over time the stress on aging joints can injure and eventually destroy them. Meanwhile, the range of motion that the joint has will also decrease.

Basal Metabolic Rate and Type II Diabetes

Metabolism is a fancy way of referring to the ongoing chemical process of creating and destroying tissue, releasing heat and energy in the body. *Basal Metabolic Rate* (BMR) refers to the measurement of this process while you are at rest (e.g., when you first get up in the morning). BMR therefore is a benchmark that establishes how many calories your body is using at rest, when activity is low but “fuel” is still needed to keep you alive. Putting it another way, BMR is a measure of your base efficiency at burning calories.

In general “a person’s BMR declines about 2% per decade starting at age 20”.⁷ Unfortunately, while BMR falls as we age, appetite usually does not. So by the time we’re 30 we may *need* 100 less calories a day—but if we’re still eating like we’re 20 (and not exercising)—the combination of lower BMR and excess caloric intake will result in deposition of fat throughout the body, particularly the abdominal cavity. At age 25, a typical man’s body is composed of 18% fat, but by age 65 this increases to 38%.⁸

Digestion of food elevates the level of glucose (sugar) in the blood, which is used to deliver energy to the cells. The body seeks to maintain a constant blood-glucose level regardless how much we eat. If we eat too little, the liver makes extra glucose to compensate. Conversely, if you eat too much, the pancreas releases insulin which causes muscle cells to use more glucose. With age, decreased muscle and increased fat, it becomes harder for the body to maintain this balance. More and more insulin is required to induce decreasing muscle tissues to use more glucose. To make matters worse, with age the pancreas has increasing difficulty putting out extra insulin. Diabetes is defined as “an absence of insulin, or an abnormality in which the action of insulin is blocked and sugar cannot get into cells properly.”⁹

There are two types of diabetes: Type I, known as *juvenile-onset* or *insulin-dependent* diabetes, and Type II, called *adult-onset* or *non-insulin-dependent* diabetes. The type that concerns us is of course Type II. The major danger from Type II diabetes is permanent vascular problems. High levels of blood sugar (glucose) work together with high cholesterol,

high blood pressure (and/or smoking) to exacerbate atherosclerosis in the arteries to the heart, brain and legs. Not only does Type II diabetes contribute to a higher incidence of strokes and heart attacks, but it can also cause blindness and destroy the kidneys.

The key point of this section is that with age comes decreasing BMR, increased body fat, and high levels of blood-sugar—all of which raise the risk of developing Type II diabetes.

Senses, Coordination and Balance

The final insult we will discuss is the general deterioration of the nervous system. As we age our senses of vision and hearing become weaker. Less blood flow gets to our brains, resulting in an increased reaction time to such stimuli—and thus slower reflexes. Perhaps most alarming of all, our sense of balance and coordination also ebbs away. This is of particular concern because a fall by a senior which results in a broken or fractured hip may also result in a stroke-inducing clot heading toward the brain or a period of bed rest from which one will never escape.

Finally, the Good News

While the laundry list of ailments associated with aging is almost enough to keep anyone from trying to grow old, there is some good news... and some bad news. First some additional background.

Plasma in the bloodstream carries numerous proteins and chemicals that govern almost every aspect of our physiology: immunity to disease, accumulation of fat, metabolism, growth and

development, emotional state, breakdown and decay of tissues, et cetera. All of these processes boil down to a balance between inflammation and repair. The process goes like this: when a cell is stressed (from exercise, for example) it begins to release specific substances that will begin inflammation—which is the basis for repair. These specific chemical substances enter the bloodstream and gather white blood cells to the stressed zone. Then, once the inflammation has done the “demolition” work, white blood cells retire and there is a “clean slate” for new growth and rebuilding.

There are hundreds, maybe even thousands of different “messenger molecules” in our bodies, collectively known as cytokines. These molecules control virtually all the metabolic pathways in our bodies, and they interact to “coordinate growth or decay throughout your body, regulating growth and decay down to the most microscopic level”.¹⁰ Among all the cytokines, two specific ones control decay and growth in the muscles: cytokine-6 (C6) and cytokine-10 (C10). Oversimplifying things for the purposes of this paper, C6 is the “master” chemical for inflammation (breakdown or decay), and C10 is the master chemical for growth and repair. “C6 is produced both in the muscle cells and the bloodstream in response to exercise, and C10 is produced in response to C6. This is your body’s brilliant mechanism for coupling decay and growth. C6 actually *triggers* the production of C10. Decay triggers growth.”¹¹

Now for the bad news: **vigorous** exercise is required in order for C6 to trigger the release of C10. A leisurely walk through the park won’t do it. You gotta

sweat. And to add to the problem, the default setting of our bodies calls for a constant drip, drip, drip of C6. In other words, without exercise our bodies are naturally and constantly in the process of decay. The final insult is that the older we get the more we secrete C6. In short, the process of bodily decay is relentless and inevitable.

The only saving grace in this scenario is that **vigorous** exercise can cause a rush of C6, which in turn promotes the release of C10 (our hero!). C10, as you may recall, stimulates rebuilding and repair of the body. It can offset the decay and demolition caused by C6, leaving you better off than you were before the initial C6 release. But remember, the release of C10 is only triggered by inflammation (exercise) sufficient enough to trigger the release of significant quantities of C6.

All of this is a gross simplification of the complex processes going on inside us. But the basic message and meaning is simple: vigorous exercise can result in the overall rebuilding, regeneration and growth of the body. Another useful way of looking at this process is from an evolutionary perspective.

In nature as winter approached animals prepared for the approaching cold and maybe even hibernation by storing body fat, conserving energy to survive, and **not** expending it by investing in growth and creation of new tissues (e.g., muscle). In fact, animals prepare for hibernation by consuming extra calories, slowing down their activity and accumulating fat. So, by leading a sedentary life-style, or even worse—being a “couch potato”—you are essentially telling your body that it’s soon going to be winter and hence time to fatten up!

Moreover, the primitive part of our brain interprets a lack of physical activity and the accumulation of fat as the signals that it's time to prepare for famine (or hibernation).

Fortunately, by exercising we are telling our bodies that it's *springtime*: time to revive and replenish the body with new tissues—bone, connective tissue, muscles, joints, and so on. Storing fat is no longer the goal—preparing for renewed activity is. We need to get ready for the hunt—hunting and gathering in the sunlight and being a major-league predator. In short, by exercising regularly we are telling our bodies that it's *always* springtime. It's always time for renewal, putting on lean muscle and shedding fat.

Benefits of Exercise

The reason we spent so much time above trudging through the minefield of problems related to aging is so we can more fully appreciate the wonderful, indeed life-giving, benefits of regular vigorous exercise. Let's take a brief look at how exercise can improve or even *prevent* age-related ailments.

Cardiac Output

Like any other muscle in the body, the heart responds to regular exercise by getting stronger. *Gradually* increasing stress on the heart muscle itself will strengthen it, and of course, to stress the heart muscle, other muscles (e.g., in the legs or arms) must be used first. Although an older heart will not increase in size in response to exercise as much as a younger heart will, there can still be improvement in the

strength and output of the heart from regular, vigorous exercise. Additionally, because exercise lowers hypertension, it is often prescribed to persons suffering from high blood pressure.

Aerobic Capacity

Exercise improves aerobic capacity by causing the density of the capillaries to increase, thereby increasing the quantity of oxygen-carrying blood to the muscles. This in turn causes the muscle cells themselves to become more efficient in using the oxygen and better able to obtain energy via the bloodstream from food eaten, and energy stored as fat.

Sarcopenia

Although replacing the fast-twitch Type II muscle fiber lost as we age may not be possible, it is very possible to maintain, and even increase, both muscle mass and strength. Even seniors in their 60's and 70's can make significant gains in strength via a regimen of gradually increasing weight training over the course of several weeks. The key to increasing strength is slow gradual progression, followed by adequate rest after exercise to allow for healing and rebuilding of muscle tissues.

Bone Deterioration

Interestingly, aside from getting enough calcium and other minerals in your diet, the key to maintaining bone density and strength is stress. Like muscles, stress (e.g., from bicycling, running or even plain ole walking) causes bones to get stronger. Evidently stress

causes the bones to take more calcium from the blood, becoming stronger. Weight-lifting seems to enhance this process too, as the increase in muscle mass demands that the bones supporting the muscles become stronger.

Flexibility and Range of Motion

Not everyone will realize improved flexibility or increased range of motion from exercise. There are those among us who will remain stiff in certain areas—or just get worse over time. However, regular exercise will most likely help *preserve* or *maintain* both flexibility and range of motion. Stretching (always a good idea before and after a work-out) not only helps prevent pulled muscles, but generally also improves these areas. In any event, exercise promotes stronger connective tissues and joints—the better to support new and stronger muscles.

Basal Metabolic Rate and Type II Diabetes

Unlike flexibility and range of motion, BMR can be almost universally improved with exercise. Regular exercises builds muscle and forces the body to burn more calories to create more energy; over time this can also lead to the conversion of body fat into energy as well. Moreover, using more blood-sugar (glucose) and turning it into energy to support exercise reduces (and may well eliminate) the risk of developing Type II diabetes. For those of us who really like to eat this is good news but not great news. We can probably eat more than we should, but it means that we will also have to exercise more than we want.

Senses, Coordination and Balance

Although exercising the heart muscle will improve blood flow to the brain, the gradual deterioration of the senses, nervous system and reaction time may not be offset so easily. Exercises that require balance and coordination (e.g., cycling, jumping rope, etc.) will help retain these abilities. Practicing these exercises may prevent a fall, a broken hip, and a one-way trip to bed rest.

Risks of Martial Arts Training

For the past several pages we've made no distinction between "exercise" and "martial arts training". This was intentional because the benefits of exercise and training are the same in the ways in which they "combat" aging. As mentioned before however, martial arts training—as a "way of life"—puts the exercise part of training into a context. And, unlike many other forms of exercise, martial arts training and practice (sparring, throwing, falling/rolling, wrestling, etc.) has unique inherent risks. Therefore, like any other form of exercise, consulting with your personal physician *before* starting a new exercise program is wise for the older athlete—and for an older person starting martial arts training, additional consultation with the senior instructor (as well as practitioners of a like age in the class) is another wise idea.

Certain styles are better suited for certain body-types: kicking and striking arts like *karate* and *taekwondo* may be better suited to taller people who will enjoy the longer reach of their arms and legs. But these arts also put a great deal of strain on the knees,

ankles and feet. *Judo* may be better suited to shorter, stockier people, but all the falling, rolling and mat-work can put a huge strain on the neck and back. *Aikido* and *jiu-jitsu* are full of various forms of human *origami*, twisting and turning joints in ways God never intended—and even the most supple person can wind up with a tweaked elbow or wrist in these arts. The point of this discussion is that finding the right art—or at least being aware of the inherent risks of your chosen style—is particularly important to the martial arts practitioner who is starting up a little later in life.

Training Strategies for the Mature Student/ Practitioner

Unfortunately there is no “magic pill” that can make training easier or less painful. However, here are a few tips that may be useful. Please bear in mind that these should be “seasoned to taste” depending on your particular body type, flexibility, past injuries, choice of martial art, and so on. There is nothing “hard and fast” about the following strategies and you should use what works for you, discard what does not and try to find what compliments and improves your training regimen.

Warm-Up Before Class for the Warm-Up in Class

I find that the “in-class” warm-up - with the rest of the class (most of whom are in their 20’s) is not quite long enough for me to actually get “warmed-up” (even though this initial part of class can last up to 30 minutes). In fact, sometimes I’m so stiff and my muscles are so cold that even doing the warm-up exercises is

difficult. So tip #1 is to *arrive about 30 minutes before class and “warm-up” for the “warm-up”*.

Starting with slow, rotations of the arms, hands, legs and feet to get the joints going, and then moving into calisthenics is a good way to begin. You want to get the synovial fluid, which lubricates and cushions the joints, well distributed within the joint capsules. Likewise you want to begin getting your heart rate up and blood flowing into all parts of the body. In this regards it's often suggested that starting with the legs is best because they have the largest muscles in the body, require the most blood and get the heart pumping the fastest.

Everyone has a little different routine (often dependent of the subjects to be covered that day in class), and so there is no “best” warm-up. However, by the end of the warm up, your joints should be moving comfortably, muscles well supplied with blood, and you've stretched a little (before, during or after warm-up). Personally, I also like to have a nice film of sweat beading on my forehead to let me know that I'm ready for action.

Warming up is one of best ways to protect against pulled or strain muscles and joint injuries. In fact, it's so important that if you're late to class I encourage you to find a corner and do your own private warm-up routine for 15-20 minutes *before* joining the rest of the class.

“Cheat” When You Stretch

Most “standard” stretches are meant for young people on the low side of twenty or for older people who are retired contortionists. A typical mature adult

trying to do standard stretches will experience positions from simply undignified to just plain impossible. Therefore, I recommend and personally practice “cheating” whenever possible when it comes to stretching.

By cheating I don’t mean hiding in a corner behind everyone else so they can’t see you and grunting to simulate the joyous sounds of a good stretch (although sometimes this idea has merit). Instead, I mean *modifying* the standard stretch so that you can do *part* of it and get some benefit from the stretch rather than sitting it out while muttering about how impossible it is. For example, instead of a full front split with hips, knees and ankles on the ground shooting out in opposite directions from both sides of the torso, a modified version might be to extend the legs as wide as they will go apart from each other *from a kneeling position*. This partial stretch still benefits the muscles in the thighs and is not as intimidating (or embarrassing) as a full-split. Experimenting with other stretches can yield many “half-stretches” that are valuable to the mature practitioner, especially in cases that the standard stretch is not an option, or is of minimal benefit.

Remember to hold the stretch for a good 30-60 seconds for the most benefit, and don’t bounce! Just breathe deeply, relax, and try to stretch deeper with each breath.

Modify Exercises Regularly

Many martial art exercises are fast-paced, hard-hitting and wreak havoc on mature joints and

muscles. For example, high kicks to a heavy bag done at a machine-gun pace is not a good drill for an older martial artist. And while bag work is certainly something to be practiced now and again, it will likely do more harm than good if overdone. An alternative that will result in less impact to the knees, ankles and feet (but will still strengthen the leg muscles) would be to simply kick lower on the bag. Perhaps begin at 25%-50% of the ultimate target height. After several sets of 5-10 kicks at this height, increase the target height for more sets at 50%-75% of the maximum height, and so on. The point is that with age often comes the need to “work-up” to drills that younger practitioners—or a younger *you*—may have been able to do with ease. The same concept applies to the speed of the drill. Start out slow, gradually picking up the pace. Give your body time to warm-up and “catch-up” with those 19-year-old kids!

Along the same lines, you may find it useful to change some drills or exercises to have fewer reps, but with greater frequency. This will allow you more time to rest and recover between sets, but increase your endurance because of the greater number of sets.

Another exercise modification I made was to switch from running to stationary bicycling. In so doing I was able to retain the benefits of aerobic exercise, but without the debilitating pounding and stress on my knees and shins.

Similar aerobic benefits could have been derived by substituting swimming for running, with the added benefit of additional build-up in arm strength from that activity.

The point of this section is to encourage you to find ways to make drills and exercises better suited to your needs. This may mean making them less taxing on your knees or elbows or slowing them down so you can actually *breathe* while doing them. Don't be afraid or embarrassed! Experiment! Make the exercise work for you, not the other way around.

Only Weeds and Cancer Grow “Overnight”

In nature the only two things that make startling progress seemingly “overnight” are WEEDS and CANCER. Everything else, especially things of value, take time to build up, progress and succeed. As a culture we're always in a hurry, and we want things in an instant: fast-food, ATMs, and microwave ovens.

Martial arts training, on the other hand, should and does take time. Progress is slow, painful and gradual; it is attained drop-by-drop, it is progressive rather than immediate.

Initially there will be a period of a few months just to get your body accustomed to the demands of training in your chosen martial art. Only when the body is conditioned and “knows what to expect”, can higher learning start. Then, repetition and more repletion is the key to success. Within this reality, especially for us “old dogs”, it's often useful (and sometimes necessary) to break down a technique into the smallest component or part that is possible—and then work solely on that component only before proceeding to the next one. Finally, once each of the the components are polished separately and ready to go they can be assembled into the final product. In other words, a useful strategy for older

practitioners to learn new skills is break them down into “bite-size” chunks, “chew” those thoroughly, and only after digesting and mastering the constituent parts put them together into the final complete technique.

Self-Care

One of the more common character traits among martial artists is a vast capacity for denial. Often we’ve been practicing our art for so long, and enjoy it so much that we don’t want to admit that something has happened that may prevent us from participating—or that we’ve been injured enough to need medical attention.

In some cases it’s a matter of stoicism or just plain stubbornness, in other cases the school “philosophy” advocates a “tough it out” policy towards injuries. The problem is that as we get older the margin for error gets lower, and living with an ill-attended or neglected injury gets harder. So once you get north of 40 listen to your body more—it’s old! Ignoring those twinges and little pains may just lead to bigger pains and an inability to do certain favorite things. We all like to believe that sooner or later we’ll be “back to normal.” Unfortunately, after 40, normal often means permanently unable to do what we could with ease at age twenty, and possibly permanently injured in a given area.

Don’t be in a rush to get back to training after an injury. Give yourself adequate time to heal. Listen to the doctor, and give your body enough time to repair itself. Otherwise you could be out twice as long—or permanently.

On a lighter note, neoprene “sleeves” (for elbows, knees, thighs, wrists, etc.) not only offer support while training but help keep the sleeved parts warm. It is vitally important to keep well hydrated while training and afterwards. Sports drinks (e.g., Power Aide, Gatorade, etc.) are great ways to replace electrolytes sweated out while training. Warm baths, analgesics, and anti-inflammatory pills (e.g., ibuprofen) after a hard-work out are also great ways of recovering.

Training With Younger Practitioners

Training with martial arts practitioners who are younger can be challenging—especially if they can do things that you could do once upon a time, but can’t anymore. Hopefully they look upon you more as a friend, ally, mentor and resource rather than a competitor. But the fact of the matter is (or eventually will be), that their abilities may surpass yours. Here are a few things to bear in mind.

While it’s important to accept our weakness, it’s more important to play to our strengths. Speed and agility may overcome sheer strength, greater control of balance and timing win over superior force. So develop skills and strategies that capitalize on what you do well.

One of the goals Jigoro Kano established for judo was to “achieve maximum results from minimum effort”. This is a good rule for older martial artists to follow when sparring with younger ones. Conserve your energy, seek an economy of motion and energy and try to get the biggest effect for the least input.

In the same way, rely on technique rather than strength. If you have a good understanding of the

physics of many martial arts techniques (especially in judo and jiu-jitsu) you can often turn a younger opponent's strength and momentum against themselves.

Protect your back! Lift from the legs rather than the arms or back. "Strongman" lifts are the province of the young. One slip can put you out of commission for weeks—or worse!

Conclusion

Aging is a natural process. However, the ill effects of aging can be mitigated to a significant degree by regular, vigorous exercise. Training (exercise) is a major part of the "Way" (*Do*) in many martial arts. Thus continuing to train as we age is an important component of pursuing the Way that we as martial artists espouse. In this paper we have examined the aging process in some detail and considered strategies to continue training as we age.

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Endnotes

- ¹ Quote attributed to Dr. Ken Min, founder of the UC Berkeley Martial Arts Program.
- ² Connolly, page 2.
- ³ Cobb, p. 304.
- ⁴ Sheppard.
- ⁵ Crowley, page 170.
- ⁶ Sheppard.
- ⁷ Cobb, page 303.
- ⁸ Cobb, page 303.
- ⁹ Connolly, page 39.
- ¹⁰ Crowley, page 68.
- ¹¹ Crowley, page 68.