YOGA FOR THE AGELESS

Preparing your body for life

Table of Contents

INTRODUCTION: PREPARING THE BODY FOR LIFE 1	
CHAPTER 1 THE HERO'S JOURNEY	7
In the Beginning The Principle of Leverage and Control	
CHAPTER 2 THE DAY THE EARTH STOOD STILL	L 13
The Principle of Incremental Adaptation	15
CHAPTER 3 A NEW JOURNEY	17
Releasing the Tension in my Back Muscles Compression and Decompression The Next Step	17
CHAPTER 4 MORE PIECES TO THE PUZZLE	21
Awareness Training A Journey to the Center of my Core The Porcupine Effect	22
The Janda Situp Enter the Pavelizer Pavelizing or Punishing my Abs	23 24
CHAPTER 5 A Whole New Way	
Slow controlled movement SuperSlow Flow	27 27
Breathing and the Flow State	29
CHAPTER 6 Adding to My Knowledge The Stretch Reflex	_
Benefits of Stretching Balance	
High-Intensity Workouts	

Muscle integration	
The Erosion Principle	
Peeling an Onion	
"I Can" vs. "I Can't" vs " I won't	
Conversational Hypnosis.	
CHAPTER 7 Applying What You Have Learned	
Review	
Explaining the Levels	41
Let's start with a brief evaluation of your starting point. I	Let's begin
with a few tests	-
Test Your Balance	
Test Your Strength	
Test Your Range of Motion	
Final Thoughts	
The Oldest Living Golf Pro in the World	
The Next Step	
Questions and Answers	45

INTRODUCTION Preparing the body for life.

Everyone has heard of the many training programs that athletes use to train their bodies for their particular sport.

What about those who don't play a sport? What about those who just live their daily lives doing the chores and projects that are required for such things as grocery shopping, working around their house, shoveling snow in some areas, and doing their jobs to support their families just for starters.



The truth is that we need a program that prepares the body for the rigors of everyday life. Let's first examine the things we must contend with just in our culture without even doing anything.

Problem :

• Gravity – We have gravity pushing us down day after day year after year. What do you think that does to the spine? It compresses it.

Solution :

• Decompress the spine with stretching exercises.



Problem :

• Cement floors- We walk on cement that has no give and although we tell ourselves it feels better than walking on the ground, it contributes to tightness in our calf muscles over time and that tightness works its way up the leg and maybe into the joints.

Solution :

• Keep the calf muscles stretched out. Find some stairs, hold the railing and put just the ball of your foot on the stair and let the majority of the foot fall off and press the heel down, then place the other foot on the next step and do the same thing all the way up the stairs.

Problem :

• Chairs, toilets, and car seats – How could we live without them? We cannot because they are part our culture, but those things keep our hips elevated and tighten the muscles and eventually restrict us from squatting fully.

Solution :

• Spend some time stretching the hips with some deep squats for example.

Let's look at other things we do in our daily lives that may restrict our movement or in other ways may hamper us.

Repetitive Motion

A famous yoga teacher said that "Repetitive Motion causes stress in the body." That is a powerful statement because that includes activities, we consider exercise that are good for our health. Activities such as biking, running, and golfing. Yes, these things add benefits to our health, but at the same time may be stressing our bodies.

For example, golfers and bikers often experience lower back pain from using the same motion again and again. With Golfers it is the same twisting motion and with bikers it is the same leg motion. This builds stress in the body. This stress needs to be released. We can do this by releasing that tension by doing certain stretches. With golfers we also can lengthen those muscles around the mid back, so we have better range of motion.

Let's look at our jobs: We spend 8-10 hours a day at work, and it takes a toll on our bodies. That might mean sitting at a desk, working with our hands or maybe standing in one place for long periods of time

I have known a few people who have worked in hospitals or nursing homes and at times have had to help move patients.

The National Institute of Occupational Safety and Health recommends that women should only lift 20.7 kg (46 lb.) or less.

But this does not take into consideration the shifting of the weight as the person moves which totally changes the dynamics. I explain this in further detail later in the paragraph on leverage and control.

Before we get into the specifics, I want to share with you part of my journey and how I came to create this program

The truth is I did not create it, it was created by my teachers. Who were my teachers?

Now I am in my 24th year of doing yoga. During my first several years I took all kinds of workshops and training programs but as time went on something strange happened.

There was a role reversal. I, who thought he was the teacher, became the student and those who I thought were the students became my teachers.

When that happened, I started to change the way I taught. I developed what I call a flexible belief system when it came to how the class moved. If I saw people in my class doing certain things, I made a mental note of it.

I started to teach intuitively instead of from a planned regiment. I would make shifts based on what I was seeing in their bodies.

Some of the characteristics of this exercise program are as follows:

1. The Principle of Leverage and Control

2. The Principle of Incremental Adaptation

3. Awareness Training

4. Compression and Decompression

- 5. Releasing Tension
- 6. The Porcupine Effect

7. Slow Controlled Movement/Time Under Tension

8. Flow

9. Breathing and the Flow State

10. High-Intensity Workouts

- 11. Muscle integration
- 12. The Erosion Principle

All of these will be explained in later pages.

But first, let me tell you how it all started.

CHAPTER **1** THE HERO'S JOURNEY

I walked up to the tee box and pulled out my driver. My eyes scanned the sky above. It was bluer than a robin's egg, with not a cloud to be seen. A soft breeze danced across the hair on my arms, but the wind was not enough to affect my game. It was summer in Wisconsin, and boy, do we love a nice change of pace from our brutally cold and snowy winters. This was an unusual hole on a particularly unique course.



My golfing friend, Mike and I headed out to this course, which we had never played before. It was a two-hour drive but well worth the trip. The course was charming and picturesque, but challenging, to say the least. The first hole was on the top of a hill looking over the green. It almost seemed like you could chip the ball down from the tee, but when I glanced at the yardage sign I reached for my driver. My thoughts turned to my all-time favorite golfer, Jack Nicklaus. I have always liked Jack's philosophy on golf. I have played his teaching videos, *Golf My Way*, until they were worn out. The same swing with the same tempo and the only thing that changes is the length and angle of the club. Imagine a stake being driven down the center of your spine (painlessly, of course) and you rotate around that stake. That sounds simple enough. One of Jack's philosophies was that he probably took a thousand swings on the practice tee for every swing he took in a tournament.

* * *

I once met Jack at the Greater Milwaukee Open in Milwaukee, Wisconsin. He came out of the clubhouse to a crowd size I had never seen before or after in that tournament. As he strolled over to the driving range to another crowd, my group and I decided to wait for him on the practice green. We walked over to the putting green and waited. Unfortunately, a lot of other people had the same idea and so we had the same problem.

After a bit, sure enough Jack came over and the crowd was there to meet him. It was a massive putting green and Jack was way on the other side of it. My friends rushed to the other side of the green to get a better look, while I stayed put because I had given up. I looked around and I was all alone. I kept a close watch on Jack putting for a while, then something happened that made my heart skip a beat. Jack picked up his balls and started walking toward me. It was like he was coming up to meet me and only me.

I expected him to change course at any moment, but he kept coming toward me. My knees started to grow weak. As he approached me, his eyes went down, and he dropped three or four balls at my feet, then started to chip. I watched him chip the first ball and then leaned over and whispered to him that if he moved his right foot back one inch, he would have a straighter route to the hole. He took my advice, and the ball went into the cup from twenty feet. Jack thanked me for the advice and headed to the first tee to begin his round. Okay... so, that last part about giving him advice did not happen, but the rest of the story did.

I once played in a tournament and had listened to Jack's golf tapes so much that I could replay them in my mind and did. On that day, everything he had taught me came together and I shot a round that was seventeen strokes under my normal game and won the tournament easily. I had to put up with being labelled a sandbagger (someone who claims to be worse than he or she really is), but that was fine with me. One guy who was in my foursome, got so frustrated he tore up his card and threw it in the wastebasket after the round. Besides Jack's golf tapes, I had always looked for other ways to improve my game. There was a program called Subversion. Two guys were watching a bowling match on television and got so exited after the match, they raced down to the nearest bowling alley and bowled way beyond their normal scores. They decided to take advantage of this new discovery and put out a program where you would watch a golf model (professional golfer, Al Gisbergen) swing in slow motion so your mind could build the neuro-connections and try to duplicate it. I not only took part in this program, but rented a camera and filmed myself driving, chipping, pitching, and putting. I then edited out all the bad shots and watched myself hitting nothing but my good shots.

* * *

With my friend Mike looking on, I pulled out my driver and set up my stance. I lifted the driver and started to bring it into my backswing as if in slow motion. When I reached the farthest point, I gradually shifted my weight forward— uncoiling the feeling of power beginning to build in my swing. As my swing came through the ball, I felt a sharp pain in my lower back. I finished my swing and fell to the ground in agony. My back had gone out again. Into the car we went for the three-hour drive home. I was not only done for the day, but it was back to the chiropractor and three weeks out of work.

Can you relate to my frustration?

In the Beginning

My name is Jim Crane. I am entering my 24th year of Yoga at the time of this writing. I have a resting heart rate of between 40 and 48 which is what is considered "athletic." My legs have not seen a treadmill in thirty years. I take no medication, and do not run. I play pickle ball (a paddle sport that combines elements of badminton, tennis, and table tennis), volleyball, sometimes swim, golf and do Yoga and Pilates

I do not have a PhD or any other significant letters after my name. I do, however, have thousands of hours of training. I have experience and lots of it. I have trained thousands of people using my program, including golf teams, swim teams, and soccer teams.

I am going to share my story and insights with you in the hopes that you will connect with the experiences I have had— helping you to discover solutions to the obstacles that are keeping you from reinventing yourself

Although much of what I will share is based on science, I am not going to bore you with a lot of jargon and references to studies and white papers (I will encourage you to research these things on your own if you're curious enough to do so). I want to keep things as simple as possible using everyday terms everyone can understand. And I hope you will put this program into practice before you judge it as useful or not. Going forward, I will address four components we all use in life: Strength, Balance, Mobility, and Breath.

We will strengthen your core muscles and the muscles that connect to your core creating a connective strength throughout your body. This will give you core stability resulting in greater control of your movement.

We will create a smooth trunk rotation from the back to the front by lengthening the muscles around the thoracic (upper back and abdomen) and lumbar (lower back) areas of the spine. This will allow for more fluid trunk rotation

We will greatly improve your balance creating greater control as you move from one side to the other.

Develop Deeper Breathing: this will help keep your muscles and the central nervous system relaxed, keeping you out of flight or fight so the signals from the brain to the muscles will flow freely.

For those of you who have never heard of Neuroplasticity, it is the brain's capacity to adapt to new experiences. As we use the exercises to create these new experiences, the brain creates new Neuro-pathways, the roads in which the signals are sent to the muscles from the brain.

The more we perform these movements, the stronger these pathways become.

* * *

The Principle of Leverage and Control

When I was young, my grandfather offered to help me build a pigeon coup. I may have been a little guy, but I had to pound nails into boards. After a few minutes my grandfather told me I should not be choking up on the hammer, so I moved my hand down toward the end of the hammer and started pounding again. After a while my grandfather stopped me and reminded me to quit, "choking the hammer," as he put it and I once again moved my hand down the handle. This went on, back and forth until the coup finally got done. Years later I thought about that experience and realized that my grandfather was trying to teach me about leverage. Move the hand down the handle of the hammer and you increase your leverage. When choking up on the hammer, I was showing my grandfather my lack of control. When I had moved my hand up toward the handle, I could control the heavy hammer. It was a great lesson in understanding the relationship between leverage and control. The ideal way for me to use the hammer at that time would have been to move my hand down the handle slowly as I got stronger and more experienced.

CHAPTER **2**

THE DAY THE EARTH STOOD STILL

One day I was throwing a softball around warming up for a game. I was on a hill. It was a balmy day, and you could almost taste the sweetness in the air. We were doing well in the tournament and looking forward to the upcoming game. I was relaxed while warming up letting one leg drop below the other. I reached back to throw the ball and as my arm moved forward, I felt a sharp pain in my back. On the way home, it kept getting worse. The next day I could not sit up without pain and I could not stand. I went to a chiropractor every day for the next three days. It would be weeks until the injury seemed to heal, and I was able to go back any sort of athletic activity, including lifting weights. I thought everything was normal again and I was squatting 450 pounds when I caught a glimpse of a friend out of the corner of my eye. I tilted the bar slightly and pain shot down my leg. I was out of commission once again.

It would take numerous trips to the chiropractor and the doctor until my back finally healed.

One day during my recovery, I ventured into the aerobics room where I was taking a class and I noticed something different. The mat which covered the inside of a 440-yard running track was different. They had replaced the old track with a much harder one.. I took the class which included a lot of jumping around, then went and did my swim, then hit the weights.

I did aerobics every other day and returned for my next class. This time as I began the class pain shot up the back of my legs. It was concentrated in my calf muscles, and it got so bad I had to quit. I took some time off, maybe a week, then came back, and experienced the same thing. This kept repeating until finally I had to quit doing aerobics.

My back problems continued, going out a couple times a year and each time I would be out of work for weeks. I never knew what would trigger it. I was at work one day and had to pick up a tube of plastic. I thought I would test the weight of it before I tried to lift it. I grabbed it by one hand and lifted slightly. The pain shot into my back, and I was out again. I could not lift anymore and could not do aerobics. I could only swim.

I knew there had to be a solution. The chiropractor said I had the worst back he had ever seen, and I needed regular adjustments. Of course, the doctor prescribed muscle relaxers and said corrective surgery could be in my future. I did not like either prognosis and decided I would search for something else. Thus began a three-year search for an alternative solution.

If I knew then what I know now while sitting in the Chiropractors office looking at the X-rays—I was actually looking at the symptoms and not the cause. The herniated disk and the pinched nerve were not the cause. The cause was compression of the spine and the cure I would eventually realize was decompression.

Over the next three years I tried all kind of things like Rolfing—a system of soft tissue manipulation, physical therapy, and many other remedies I hoped would work.

One day while at work, my boss told me about some inversion boots he had gotten. Inversion had become a popular fad at the time because of a movie called *American Gigolo*. In the movie Richard Gere is seen hanging upside down wearing the boots. I thought I would give them a try. I ordered a pair and went down to my basement and hooked them onto some water pipes in the ceiling. I hung for about ten minutes and when I got down I thought I was going to pass out. I was dizzy and nauseated from the blood rushing to my head. I took off the boots and put them in my closet. Isn't it disappointing to think you found a solution to a problem and then to not have it work out? Might it be a case of timing and be worth revisiting at another time? Could there be a variable missing within the solution you thought you've found? In my case, my "solution" was both bad timing and missing an important variable...

The Principle of Incremental Adaptation



What is incremental adaptation? For the purposes of this example, it means introducing change a little bit at a time, so the system can adapt to the change.

One day, while laying on a table, going through the process of Rolfing a potentially brilliant idea hit me. Slow change over a longer period of time, so the body adapts. What if I used that idea and applied it to inversion? It was worth a try.

I got the inversion boots out of the closet and came up with a plan. I would invert for just thirty seconds but would do it every day. At the end of one week, I would add thirty more seconds and go another week, then I would add another minute per week going forward. As the weeks went by I intuitively felt this would help my back if I stuck with it. Weeks passed, and then months. One thing I noticed was the blood from my legs was draining into my upper body causing me to lose the strength in my legs, so I rigged up a rope with knots hanging down next to me, so I could climb up to the pipe I had installed in my closet. From there I would let myself down at the end of the session. That was the only drawback, but for the most part it worked. I had no dizziness or ill effects from hanging upside down. In fact, I got so used to it, I would read books upside down while inverting just to pass the time.

It took many months, but one day as I inverted, I felt an unbuckling in my lower back—a feeling of release that I will never forget. After that I would feel that release every session. Finally, during several sessions, I felt a sharp jerk in my lower back—a little unsettling, but it my back problems were gone.

CHAPTER **3** A NEW JOURNEY

Releasing the Tension in my Back Muscles

I began to analyze what might have happened during my inversion sessions. After a long period of reflection, I realized something my chiropractor had never mentioned. I wonder if he even knew.

During the period of time that I had been doing inversion, the muscles in my back had stretched, then, my spine started to elongate and the impingement that was causing all the problems was released.

The important principle I learned through that experience: when the muscles around the spine are tight they keep the spine compressed. Once the spine and muscles are lengthened we need only maintain that length because we have what we call muscle memory and the body remembers where it has been. To this day I only invert a few minutes a several times a week to keep my spine stretched and of course I also do Yoga.

Compression and Decompression

At the time of writing this book, it has been twenty-three years since I sat in the chiropractor's office, desperate and dejected at being told I had the worst back he had ever seen.

After being twenty years, symptom free, it had become apparent to me was how my back got that way in the first place. Besides genetics and any kind of physical trauma, we have gravity pushing us down every moment of every day. And quite frequently we are walking around on cement floors and sitting on hard chairs. This is like putting the body in a vice and slowly turning the handle. It naturally creates compression of the spine. And in my case, add the fact I lifted weights, and was doing squats, putting up to 450 lbs. on my back added to the compression of my spine. Since compression was my problem then the solution had to be decompression.

The Next Step

With my back finally stretched out, I began to wonder about my other muscles. How could I stretch those as well? As luck would have it there was a yoga class starting at my local YMCA. When I mentioned it at work, I got a lot of eye rolls. But I did not care what they thought. I only wanted to feel better and get rid of the pain that was still in my legs.

The class was much rougher on me that I thought it would be. My muscles were much tighter than I thought, and these stretches made that very clear. Unlike exercise, yoga focuses on what you are feeling inside instead of an external focus. After taking the yoga for about nine months I returned to the aerobics class I had quit. This time the pain in my calves was gone. It was then that I realized, the pain I had experiences was from extreme tightness in my calf muscles. Because I had lengthened them the pain was gone.

It is of the utmost important to look at pain, and not only see it as a symptom or an annoyance; but see it as the body telling us there is something that needs to be addressed. This of course may be easier said than done.

My interest in yoga grew. I discovered there were many different styles of yoga and I wanted to try as many as possible. At one point, I was doing three different styles a week and had to keep track of which one I was doing so as not to be corrected by the teacher, because each one had its own way of doing things.

I did this for about three years, until a group of yoga teachers told me about a new studio about twenty miles away. They said they tried the yoga there, but did not like it, because it was too challenging. However, they thought I would love it, and I did. It had everything I wanted—arm balances, head stands, handstands, and it was done in ninety-degree temperature. It was called Baptist Power Yoga. It was hard work, especially doing six classes per week, but in the end, I felt stronger, more balanced, and looser.

Can you visualize a stronger, more balanced, looser *you*? If you can—wonderful. Read on and you'll learn more about how to create these possibilities for yourself. If you can't yet see the possibilities for yourself, I ask you to take a risk, have a little faith, and read on... greatness lives inside you even if you can't see it yet.

CHAPTER **4** MORE PIECES TO THE PUZZLE

I had never thought about teaching Yoga, but I felt the benefits I was getting needed to be shared. So, after eight years of practicing yoga I decided to take the teacher training in Baptist Power Yoga or Vinyasa Flow as it is formally called.



I completed my training and started to share what I had learned. I continued to take numerous other trainings as I accumulated more knowledge. What I did not realize until I started instructing was that the teacher (me) was actually the student. I probably learned much more from my students than they from me. I saw how the movements affected them and how the bodies they came to class with would shift over time.

Awareness Training

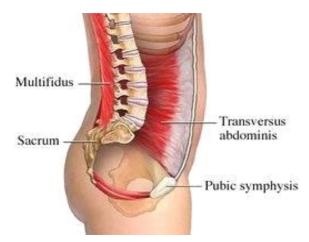
One of the things found in yoga more so than other types of exercises is awareness training. When I walk into the workout area at my local YMCA, I see people on the treadmill with headphones or watching TV on a monitor. The people on those machines are focusing on performing the function (the external) rather than what's happening inside of them (the internal). The focus of yoga is internal, listening to the body and noticing how the muscles are reacting or where the tightness is. How can you perform at optimum efficiency if you don't know what is going on inside your body? Isn't that what we do when we go to a doctor? They run tests to see what is going on inside our body.

The results inform us what our body is and is not capable of. I once walked outside to throw out some trash at my place of business. I didn't realize a forklift driver had popped a board up from a pallet and left a big spike sticking up. I stepped on the spike and the spike went through my shoe, but never penetrated my foot because I felt it and pulled back—more than likely because of the awareness I have of my body due to yoga.

As the years went by, I started to feel that something was missing with Baptist Power Yoga. I did not feel like my core was strong enough.

A Journey to the Center of my Core

I had done many years of traditional core work, such as reclined situps with weights behind my head. I had worked up to a twenty-fivepound weight and had the six pack everyone told me you are supposed to have, but something was missing. After doing some research I discovered two things about the core. One, we have internal muscles called the Transverse Abdominis (see below). Two, in order to strengthen these muscles, we must first isolate them.



The Porcupine Effect

Do you know why the porcupine has those long quills? Because it wants to protect its soft belly from attack. Its belly is its weakness. We do not have quills, but we do have protective measures for our belly. In order to develop the Transverse Abdominis muscle, we must do exercises that expose those muscles, so they can be strengthened. I began to search for exercises that would assist in this.



The Janda Situp

Czechoslovakian exercise physiologist Vladimir Janda, MD was a major figure in the 20th century rehabilitation movement. He was known in many circles as the world's foremost expert on back problems and discovered that people were incurring back problems because of the hip flexors that are engaged while performing standard sit-ups.

Janda surmised that by contracting the muscles on the opposite side of the hips—the hamstrings and gluts—the hip flexors would release. That's exactly what the Janda sit-up is supposed to do. According to Dr Janda, once the hip flexors are released, the deeper muscles known as the Transverse Abdominis will be strengthened.

Enter the Pavelizer



I found a piece of equipment called the Pavelizer, which was invented by Pavel Tsatsouline, a fitness trainer from the former Soviet Union, who claimed his machine would replicate what the Janda sit-up would do. Before I tried the machine, I bought his book *Beyond Crunches* to learn more about his philosophy and soon bought the Pavelizer.

"The crunch belongs on the junk pile of history next to communism!" Pavel likes to say.

Both Dr. Janda and Pavel, agree the crunch does not isolate the abs and Janda admits the hip flexor engagement cannot be eliminated during the standard crunch sit-up. Because tension naturally spreads from a contracting muscle to its neighbors. When doing a crunch style sit-up, the hip flexors are activated, reducing some of the stress off the abdominal muscles (according to both Janda and Pavel).

I found this idea eye opening and wondered if I could use this in other areas of my exercise program. If I put a heavier workload on various muscle groups, then it would make sense that other supporting muscle groups would be recruited to help perform the function I was giving them to do. The result would be groups of muscles working together in a connective way.

How to make this happen?

By slowing down the movement which would then force this recruitment to occur. I started doing this in my own exercise program and it worked. I added transitions which are a way of linking static exercises with movement.

Pavel teaches that we relax the muscles opposite the ones we are contracting, and thus we can release the hip flexors by contracting the hamstrings and gluts.

Pavelizing or Punishing my Abs

The piece of equipment arrived, and I put it to work. I thought I would use the Incremental Adaptation principle and start slow. The Pavelizer slid under a door, then I rested my calves on two rollers with my feet on the floor. It had two bungee cords that I held onto for support.

As I lifted myself up with the help of the cords, I could feel the pull on the back of my legs and the strain on my abs. I did three sets of five, gradually coming up and down. When I was done with the sets I rolled over to my side and lied down there.

My abs were on fire. It would be five days before I could use the equipment again. It was that intense.

Besides the Pavelizer, I started doing Pilates, a series of exercises invented by Joseph Pilates. Some of those exercises focused on strengthening the Transverse Abdominal muscles. As I continued those workouts, I began to get cramps in my legs at night. I went to the Pilates instructor and told her about the problem. She had been instructing for a long time and told me the cramps would subside as my core got stronger and that it would take up to two years for this to occur. It turned out she was right. It took me two years to achieve this, but it gave me a whole new appreciation for the core muscles. I continued to explore other disciplines including Tai Chi, which is a Chinese discipline that involves slow controlled movements. It is purported that focusing the mind solely on the movements of the form helps to bring about a state of mental calm and clarity. I found that concept quite interesting. It brought me back to 1985.

CHAPTER **5** A Whole New Way

Slow controlled movement

In 1985, I was lifting free weights at my local YMCA. I was working out with other power lifters and making some progress. One day I got this idea: I put a few weights on the bar and lie down on the bench and began to lift the weight down to my chest in a slow and controlled fashion. As I did this my arms felt like they were on fire. It was like every muscle fiber in my arms was being stimulated all at once. I did this on and off for a few weeks and then mentioned it to a fellow weightlifter. He started to laugh and told others about what I was doing, and they joined in—not laughing with me but at me. I felt so embarrassed that I never did it again. I succumbed to the peer pressure.

SuperSlow



SuperSlow is a trademarked form of resistance training made popular by Ken Hutchins. It is based on ideas from the 1940s called 10/10 "muscle contraction with measured movement." It is implement using fixed weight Nautilus machines (a fitness machine that accommodates human movement). Wayne L. Westcott, PhD, fitness research director at the South Shore YMCA in Quincy, Mass and author of twenty fitness books ran two studies—one in 1993 for eight weeks and another in 1999 for ten weeks. There were seventy-five people in the studies with some doing the SuperSlow program using strength training and others not. Those doing SuperSlow in both groups experienced a gain in strength of over fifty percent.

According to Hutchins, the key to SuperSlow is to never let the muscle rest and "to remove the element of momentum from each exercise, making the muscles do the work instead of capitalizing on the tendency of a weight in motion to stay in motion."

Half the people in Westcott's group did ten repetitions of each exercise, pulling the weight up and lowering it over the normal amount of time in each direction. The other half did five repetitions, but lifted slowly, ten seconds on the upstroke and four seconds on the way back down (Hutchins recommends ten seconds each way for a total of 20 seconds).

Learning about these studies, I decided to bring this methodology into my program and view the results over a fixed period.

I found that in my own exercise program I began to gain strength. Once again as I experimented with weights in 1985, operating slowly in my movements I felt all the fibers in my muscles firing and the groups of muscles learning to work together as a unit. As an added benefit, I finally felt my core working to control the movement, connecting to the supportive muscle groups around it. And this is part of my methodology. When we are learning something new physically, a new dance step for example, we want to move slowly until we have trained the body and mind to remember that movement, then we can speed it up. This is called muscle memory.

Flow

Flow is the mental state of operation in which a person performing an activity is fully immersed in a feeling of energized focus, full involvement, and enjoyment in the process of the activity. Flow is characterized by complete absorption in what one does, and a resulting loss of awareness of one's sense of space and time.

Breathing and the Flow State

I am reminded of an interview Green Bay Packers quarterback Aaron Rodgers gave after the 2016 Packer-Cowboy playoff game. Green Bay drove the ball down with three seconds left to win the game. Aaron Rodgers threw a perfect pass to Jerod Cook along the sidelines to give Mason Crosby the chance to kick the winning field goal. After the game, they asked Rodgers what he was thinking about on that last drive and he said he was thinking about his breathing, trying to keep it steady, and the rest is muscle memory.



The sympathetic nervous system is activated by stress and prepares the body to either fight or run. From a primitive point of view this is the mechanism that increases heart rate, blood pressure, blood sugar and dilates the pupils. It is termed a "fight or flight" response. Evolutionarily, it is necessary to be able to react quickly when facing immediate danger.

But what is danger? Danger is something that is perceived by the mind, so the fear of an animal can be seen by the mind as equal to a job pressure, a bill we cannot pay or anything else we decide it is.

Learning to move from "fight or flight" to a calm, relaxed state of mind can very well be initiated by long deep breaths. Since one of the symptoms of fight or flight is a short quick breath, we can do what is called a pattern disrupt by changing the breathing pattern. If we change the short quick breath by consciously taking long deep breaths, we may be able to change our state of mind and move out of fight or flight.

CHAPTER **6** Adding to My Knowledge

The Stretch Reflex

The stretch reflex is a muscle contraction in response to stretching within the muscle.

Without getting into jargon or technical speak—basically what this means is that in order to lengthen the muscle, we have to move beyond the Stretch Reflex and that usually done with holding the stretch consistently over a period of time

Benefits of Stretching

One of the main long-term effects of stretching is an increase in your overall flexibility or range of motion. When you make stretching a habit, you slowly stretch out the muscles and connective tissues of your body. Over time, this improves the ranges of motion in your joints, and in turn your overall ability to move.

Stretching these muscles and connective tissue(s) can also help relieve muscle stiffness and reduce the risk of joint degeneration, according to the American Council on Exercise.

Recently, I was at dinner with some friends, and one of them was talking about how he had a pulled hamstring. He was quick to show me how he was stretching it out. I pulled up a chair and showed him how he could stretch the muscles around the hamstring. He looked at me with a blank stare. "Why would I do that? Those muscles are not hurting."

I had to explain to him the benefits of the stretch reflex concept.

Balance

In a recent study, different age groups were tested for their balance. The goal was to stand on one leg for up to one minute. While the average thirty-forty-year-old person came close to the one-minute mark, people in their fifties made it just 45 seconds. For people in their sixties, it was 40 seconds; for those in their seventies, it was 27 seconds, and for folks over eighty, it was 12 seconds.

High-Intensity Workouts

I noticed over the years in my own training that when I went at the more intense exercises after a short rest, I got a lot more benefit than when I tried to muscle my way through until exhaustion. I started to encourage my students to take rests in-between the more demanding parts of the workout. This approach has become known as HIIT. High Intensity Interval Training.

HIIT is any workout that switches off between intense bouts of activity and periods of less intense activity, or total rest. It can lend itself to almost any form of exercise. This has also become known as Burst Training.

In one study at the Norwegian University of Science and Technology in Norway, volunteers did HIIT sessions over either three or eight weeks. This meant that each subject exercised for either three times per week or daily.

At the end of the appointed time, the subjects who had finished three HIIT sessions per week had saw an improvement in their endurance capacity by nearly 11 percent. In contrast, those who exercised daily using HITT exhibited no improvements. The study suggests that maybe less can be more.

Isn't it exciting to know that you can accomplish more with less time and effort?

Muscle integration

I recently had the honor of listening to a lecture from Lawrence Biscontini.

Lawrence Biscontini, MA, is an award-winning group fitness instructor recognized worldwide for his innovative programming. Lawrence has created nutritional menus for spas from Manhattan to Mykonos and has appeared many times on national television.

One of the things Mr. Biscontini said was that all exercise programs should have the goal of muscle integration. Why? We want all of the muscles connected and working as a unit to perform whatever function we are asking it to do.

For example, when we swing a golf club we may rely upon certain muscles to be more dominant, but there are other supportive muscles that are just as important to the movement. Muscle integration has also become known as Functional Fitness.

I do not agree with all Bocconcini's beliefs. I think some isolation exercises have their place, but they need to be combined with exercises that integrate. These types of exercises also emphasize core stability.

The Erosion Principle

Have you recently been to a beach you have gone to for many years? Maybe the landscape has changed, but the rocks and the shoreline are pretty much the same. Maybe you went there when you were a child and you looked out over the water, and you saw the water rushing in hitting a particular big rock. The rock displaced the water because of its density, but years later as you return to the beach you notice that the water has worn away some of the rock over time and has changed its shape. We can take this approach to our bodies regarding gaining mobility, balance, and strength.

One of the draws of exercises like weight training and running is that the results are measurable. One can see the results measured in a heavier weight being lifted or a better time in a run and so we have a gauge of improvement.



In functional types of exercises, we may measure the improvement by such things as greater ease in movement or a feeling of connection to one's body, but I have found the greatest gauge in these functional types of exercises that I teach is when the results are transferred into daily activities.

Peeling an Onion

I was in a workshop years ago when the teacher had us get into a very uncomfortable position called "Frog Pose ". Google it if you want to know what it looks like. It is not a very comfortable position and that was not the worst part of it. What made it especially challenging was that we were in it for 20 minutes. What happened in those 20 minutes was truly amazing and totally unpredictable. At first the muscles were tight as predicted, but after a few minutes they started to release as you relaxed into the position.



But after a while in that relaxed position the tension came back, and it became very uncomfortable again. This cycle went on for the full 20 minutes and I began to release the meaning of something Baron Baptist said "Releasing tension can be like peeling an onion, you go through layers. I would add you might also shed a few tears as you would with an onion."



"I Can" vs. "I Can't" vs " I won't

When it comes to most exercises, most of us have the tendency to sum up the exercise with what we can do and what we can't do. I can't count the times when I was teaching a mixed level class and I invited the class to try a difficult exercise, I was greeted with a chorus of laughter. As I looked around, I always found someone doing the very thing I had suggested.

One of my favorite sci-fi movies is *The Matrix*. In it the Oracle points to a sign in Latin on her kitchen wall and says to Neo. "Do you know what that means? He says, "No," and she replies, "Know

thyself." We need to approach any self-improvement program with a realistic view of ourselves, so we can build upon what we *can do* and not focus on what we can't. The focus needs to be on the process not on the results.

I have taught many different ages, some just young kids and others great grandfathers and grandmothers, but one the one characteristic the ones that stick with it have is having a sense of purpose.

The thought of **"I can't** "is fine if it truly applies because **I can't** become "I **will** "with time but at the same time **"I won't** "can become "I **can't**. because the body is intelligent, and it will shut down muscles that are not being used.

I subbed a chair Yoga class the other day and half of the people were ready to accept a challenge and get off the chair, while the other half wanted to stay on the chair. I could tell very quicky that the second group had never been off the chair and when it came to a simple calf stretch, no one in the class had ever done it.

Conversational Hypnosis.

I read somewhere that if you want to grow in your trade, you must look outside it and bring something back that although may appear unrelated at first glance, may strengthen your position when applied.

For several years, I attended different training programs and workshops all over the country and some out of the country. One of those was in Las Vegas with a training for what they called Conversational Hypnosis.

As I reviewed the material they sent me to study, I thought it was like guided meditation, but on closer review, I found it had some interesting twists.

One of the techniques was to use your voice in a way that is like the feeling and or direction you want the students to engage in.

For example, if you want the students to slow down and you are talking very fast about slowing down, you are sending a contradictory message to their Central Nervous System. I started practicing this whenever I taught.

I started to picture someone standing on a rock in a stream with several other rocks that will lead that person across the stream. As I guide that person, I feel the unsteadiness of every step. I must emphasize that they must focus on each rock as they move from one to another.

VR

I recently watched a video on Virtual Reality programs. They had someone put a 2 x 4 on their living room floor and walk across it. When that person looked down, they saw the carpet. Then they did that same experiment and had that same person put on a Virtual Reality helmet. This time when the person looked down, they saw themselves walking across the Grand Canyon. Do you think that would make a difference in that exercise? They were still on the same board.

Perception is everything and we need to take that into consideration when doing any kind of exercise program.

CHAPTER **7** Applying What You Have Learned

Review

The Principle of Leverage and Control – finding a balance between the two to create strength and control in a golfer's body.

Incremental Adaptation – slow changes over time that allows the muscles to adapt to the change.

Compression and Decompression – keeping the spine long

Awareness – using awareness to make necessary changes.

Core Training – building a strong core as part of a strong foundation.

Slow Controlled Movement/Time under Tension – By slowing down our movement we encourage the muscles to work together as a unit. This also increases the amount of time the muscle is under tension which helps increase its strength.

Breathing – by practicing long, deep breaths we keep the muscles and central nervous system relaxed.

The Flow State – training our body to rely upon muscle memory as we swing the club.

Mobility – by lengthening the muscles we create a greater range of motion.

Balance – by improving our balance we create better transfer as we move from one side to the other.

High Intensity Interval Training – by using rest periods between more demanding exercises, we achieve greater results.

Muscle Integration or Functional Fitness – exercises that are designed to encourage muscles working together to simulate the activities done in everyday life.

The Starting Point – finding a place where you can start and build from.

If there was a program that had all the thirteen elements in it, would you be interested in knowing about it?

Before you try this exercise program, please read the following :

Fitness and Exercise Disclaimer

The purpose of this DISCLAIMER AND NOTICE is to make you conscious of the potential risks connected with activity in any exercise, physical fitness or training program. And to help you make an informed decision about whether you should participate in these activities.

You should understand that participating in any exercise or exercise program carries the possibility of physical injury. You should be in good physical condition and able to participate in the exercise. If you engage in this exercise or exercise program, you agree that you do so at your own risk, are voluntarily participating in these activities, and assume all risk of injury to yourself.

You hereby agree to release, discharge, indemnify, and hold harmless the author against any loss, liability, damage, claim, cause of action, known or unknown cost, or expense of any nature whatsoever, including without limitation reasonable attorneys' fees and other legal costs arising from the content of this program

The program is designed with different levels.

Each level has a series of exercises.

Each new exercise builds on the previous ones.

Each new series builds on the previous one.

* An explanation for how to use the videos is as follows :

- Once your muscles become acclimated to the Level 1 exercises, which could take up to a few weeks or months, you can move to the next series of videos, Level 2 Stay with it.
- Now once you get used to the exercises and they work for you, you can contact me to learn about **my live online classes**

Explaining the Levels

• Pro-Tip: The goal is not to move from one level to the next. Instead, the goal is to build strength, balance, and mobility at the level that you are best suited for—finding balance between strength and control.

At first the body resists the new movements. Even athletes find this a bit surprising because the movements are simple, but the stretch reflex comes into play and contracts the muscle to protect it from being strained. This is also the point where we start creating new neuropathways. The exercises themselves are basic, but we are building a foundation like you would if you were building a house. You would want the basement to be solid before you put up the frame.

The Program is not a series of exercises randomly thrown together. It is a program consisting of exercises that are carefully put together with each exercise building on the next.

Note! Here is the good news. Once you have established where you need to be, you only need to maintain that by doing a maintenance program.

Let's start with a brief evaluation of your starting point. Let's begin with a few tests<u>.</u>

Let's do an exercise that will show you how to connect your breathing to your movement.

https://youtu.be/KHJmgDeySqY

Test Your Balance

Now let's test your balance. Start with Level I and continue to a level that works for you and stop.

Level I https://youtu.be/fEkFQOtyBc8

Level II https://youtu.be/0PXs47PZL7Y

Level III https://youtu.be/sxEHPMfYHqU

Test Your Strength

Level I https://youtu.be/4rYJnkPXhAo

Level II https://youtu.be/9zZh6fnixPk

Level III https://youtu.be/YmEVhfqvuas

Test Your Range of Motion

Level I https://youtu.be/wthXKp4GUus

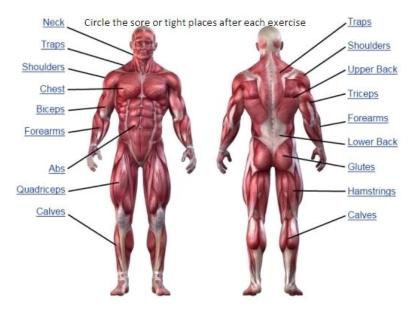
Level II

https://youtu.be/IDggbhNZC-4

Level III

https://youtu.be/PwXURZgOk1E

Take a moment to scan the chart and see what muscles felt like they needed more work.



I was playing in a golf tournament recently in a retirement league. As we were walking up the fairway of a par 4 on the 7th hole, one of the golfers, a gentleman who didn't look too old, pointed to a spot on the fairway and said, "That is where I hit my drives back in college. I've lost sixty yards on my drives."

This man was too young to have lost sixty yards. I had not lost any distance on my drives. Then it occurred to me: if you do not continue to work on your strength, balance, and mobility—much

like a car that is not maintained—your body cannot continue to function on a high level.

Final Thoughts

Walter Payton, the great running back in American football, used to talk about running hills instead of spending all his time in the weight room. He attributed his specialized workout to his lack of injuries and his longevity in the NFL. Walter Payton understood "Functional Fitness."

The Oldest Living Golf Pro in the World

Gus Adreene is a golf professional. He has hit a hole-in-one eight times and he is one-hundred-four years old.

His ability to still play golf has a great deal to do with his lifestyle. He starts each morning with exercises, which include riding an exercise bike, swimming, walking, and stretching. Andreone still has a current driver's license.

The Next Step

I want to thank everyone who took the time to read my story and follow my journey. I hope you got something out of it. I also hope some of you will try out this program, so you can experience some of the many advantages it has to offer.

The next step after reading this book is to check out the videos at <u>https://www.youtube.com/c/ChairYogaForTheAgeless</u>

After that you can apply to attend my live online sessions.

Send me your questions and comments to <u>empowerbuilding@gmail.com</u>

Until we meet again...

-Jim Crane

Questions and Answers

Question: Will this program work with a weightlifting program?

Answer: This program will not only work with it but will enhance it. We tend to isolate the muscle groups when we lift weights. This program will bring those groups together. It will also prevent the muscles from getting overly tight.

Question: How long before I see results?

Answer: It is different for everyone. Some people see results right away, while for others it takes more time. Do the program three times a week and give it a couple of months.

Question: What is the difference between this program and regular exercise such as running, biking, or aerobics?

Answer: Regular types of exercise build stamina and increase your capacity for cardio. This type of program can change the way you move at a very basic level, so when and if you do this, other exercises you do become more efficient.