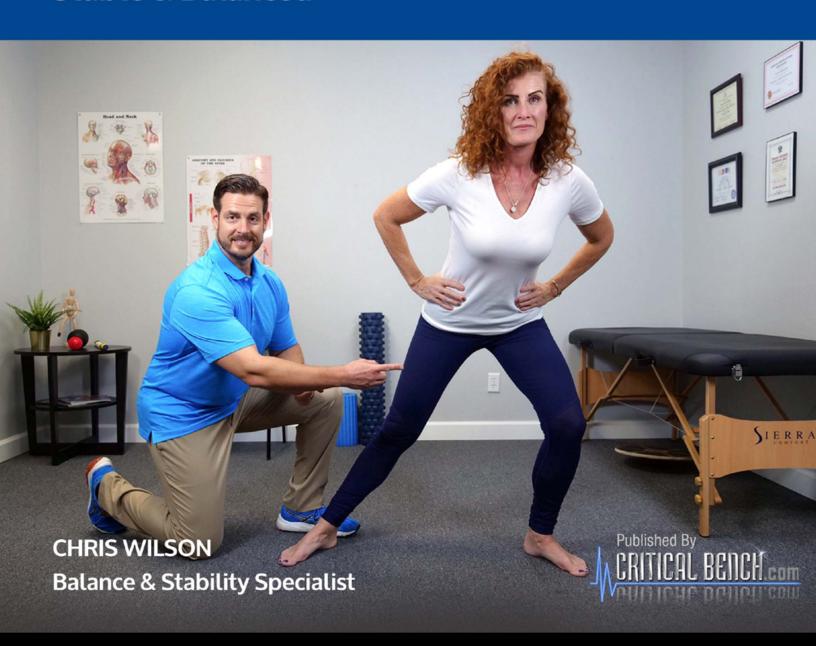
NEURO-BALANCE THERAPY

Revive Your Body's Ability to Feel Strong, Stable & Balanced



HANDBOOK

LEGAL STUFF

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NEURO-BALANCE THERAPY

HANDBOOK

BY CHRIS WILSON, RKC, CPT, SNC

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CHAPTER 1 WHY BALANCE IS VITAL TO LIFE



Today is the greatest time in history to be 50 to 100 years old!

That's right, we live in the most informed, technologically advanced age in the history of mankind. There is more opportunity for aging adults to be more active, mobile and better connected than ever before and that's so exciting.

But there is still one looming issue that holds many men and women back from living their fullest lives. A fear that often keeps them sedentary and secluded. Their balance and a fear of falling.

The alarming news is that 1 in 3 people over the age of 65 die from a fall. It's not always a direct result from the fall itself but from the related circumstances over the prevailing weeks, months and years.

Falling is something we learn about at a very early age. It's a huge part of our lives as children. In fact, we must fall in order to get better at moving. And movement of the body is the key to life and longevity.

Here is one of my favorite quotes from a Neuroscientist about the necessity of movement:

"We have a brain for one reason and one reason only – that's to produce adaptable and complex movements. Movement is the only way we have affecting the world around us... I believe that to understand movement is to understand the whole brain. And therefore, it's important to remember when you are studying memory, cognition, sensory processing, they're there for a reason, and that reason is action."

Neuroscientist Daniel Wolpert

Action. Movement.

These are powerful words that breathe life into our lives. And they certainly describe the life of a child. But we cannot overlook falling.

The difference is that falls as children are necessary in the movement and

balance learning process and are not typically life threatening. Kids are designed to "bounce" back up and keep moving.

However, as older adults, a fall can be catastrophic to our well-being.

An unexpected fall can lead to serious injury of a limb, pelvis, shoulder or head resulting in regular hospital visits, extended inactivity, chronic pain and eventual depression or isolation.

This is sobering to think about and will be addressed in detail in chapter 6.

I'm saying this not to be morbid but because I've seen firsthand what a slip or fall can lead to. In my over 20





years of working with men and women, mostly over the age of 50, I've seen my share of upsetting outcomes from an untimely fall.

I've witnessed a sudden and unfortunate end to active, fulfilling lives because of injuries sustained from a fall. But I've also witnessed how well older active adults can react to a slip or fall and minimize the consequences.

And that's precisely why I always made BALANCE the key to my training regimens with clients. Since I was a younger man in my twenties, I knew that keeping adults on their feet was

absolutely the best thing I could do for their lives.

I'm proud to say by improving balance and responsive movement for people, it opened up opportunity and reduced fear in their daily living. It kept them engaged, confident and fulfilled.

We all know that life can be unpredictable.

No one anticipates that slip in the bathroom or on the front porch after it rains. But it's HOW you are able to respond to that slip that can mean everything to your quality of life.

The broken hip versus the strained muscle. The fractured arm versus the bruised shoulder.

Certainly, there is still a great need for strength training and cardiovascular function for all older adults but implementing balance specific movements must be a top priority.

But what makes up our body's balance system?

CHAPTER 2 YOUR CENTRAL BALANCE SYSTEM

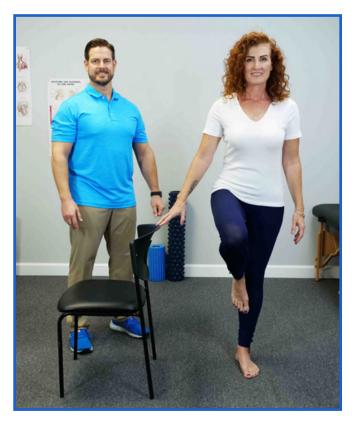
Our body is truly an amazing machine. The overall design and integration of systems is mind blowing and frankly incomprehensible the deeper you look. It's equally as impressive as looking up at the stars at night and imagining the size of the universe.

And at the very center of all of this awesome design is our balance. For it is movement and movement alone that breathes life into our body. As you will learn reading through these chapters, motion of the body is what's central to daily life. Without it, the body quickly deteriorates and breaks down.

"We don't stop playing because we grow old; we grow old because we stop playing."

- George Bernard Shaw

The central balance system is a complex network that I like to refer to as the 'Big 3' including Vision (sight), Proprioception (touch) and the Vestibular System (motion, equilibrium, spatial orientation). This complex network of systems is what provides



the sense of balance you've come to know. And this incredible system took years and years to develop.

Think for a moment about babies. We aren't born and immediately able to walk, run and jump. Now maybe if you're a prey animal like gazelle, horse or cattle that's the case but most mammals cannot walk after birth. It's something learned over time.

After 9 months in the womb growing



and developing, humans are born and must still undergo years of developing our senses. And then we endure years of learning how to perfect movement and motion of the body. Falling down, as mentioned in Chapter 1, is just a necessary part of life, a requirement to get good at movement. Practice makes improvement!

All of the information the body senses about your position in space, the environment you're in, the surface you're standing on and your reaction to each step is reliant on the Big 3.

If any one of these systems is impaired or compromised, movement and balance are impaired. With diminished eyesight, your steps will surely be slower and more thoughtful. Endure inner ear trauma and you may certainly stumble more often. Stop stimulating muscles and joints regularly and you surely will fall over.

Ultimately all sensory input is based on your ability to see, hear and touch well. Three of the five senses in the human body! The others being taste and smell which aren't directly connected to movement of the body.

To clarify, a loss of hearing is not necessarily directly connected to impaired balance but because balance comes from the vestibular system found in the inner ear, the two are interconnected when it comes to equilibrium, spatial awareness and motion.

All of these organs like the eyes, inner ears, muscles, joints, skin and more work together to send signals to the brain which recognizes and analyzes the information in milliseconds. It then sends the necessary signals back out to the body to correctly respond or react to that information. To even think about the speed in which all of this happens is truly fascinating.

Signals can actually travel as slow as 1 mph or as fast as 268 mph! And your brain makes decisions about those signals before you're even aware of what those decisions are. Absolutely mind blowing to consider.

"Physical fitness is not only one of the most important keys to a healthy body, it is the basis of dynamic and creative intellectual activity." – John F. Kennedy

Thankfully we don't have to really

"think" about this stuff at all. Our brain is such a super computer that we can interpret the information in the 'background of our lives' because of how well movement and balance is built into our DNA software.

This is precisely why practicing and working on your balance every day of your life is essential. You're training your entire system to respond and react more efficiently to any and all stimuluses.

Certainly, slips and falls can still happen to anyone. But daily motion provides the body and brain the stimulation they need to stay strong, healthy and functioning optimally.

Let's dive deeper into the mind-muscle connection and its link to our ability to balance well.

CHAPTER 3 THE MIND-BODY CONNECTION

"Exercise and application produce order in our affairs, health of body, cheerfulness of mind, and these make us precious to our friends."

- Thomas Jefferson

Thomas Jefferson was a very intelligent man, one of the greatest thinkers in our nation's history. And before much of the science that exists today, he and other great thinkers like Plato and Friedrich Nietzsche understood that movement was central to life.

Movement is what 'moves' the mind and in turn, the mind 'moves' the body. This is a reciprocal relationship. The two MUST exist. And when either the mind or the body is compromised or stops, life either comes to an abrupt halt or ends altogether.

Precisely why one of the very first things all patients are asked to do after major surgery is to get up and walk. Without daily motion or movement of the body, the balance and strength we rely on to go from A to B is quickly

impacted.

Regardless of your age or physical condition, take away physical activity and the body begins to atrophy, weaken and break down.

And one of the greatest benefits of exercise and movement is the direct affect on balance.

I like how the International Journal of Sports Physical Therapy defines balance:

While "balance" is a commonly used term to describe the ability to maintain an upright position, "postural stability" is a more specific description of human balance. Postural stability can be defined as the ability of an individual to maintain their center of gravity (COG) within the base of support (BOS).

Center of gravity (COG) and base of



support (BOS) are words and phrases we connect to an individual who is physically strong and capable. It's a necessary attribute of someone who is independent and mobile.

This has less to do with head turning athleticism and more to do with day to day function and stability of the human body. If your center of gravity is poor and you don't feel you have a solid base of support, life will be harder and most likely scarier.

The term proprioception was first defined in 1906 by Sherrington as the sense of position, posture, and movement. As mentioned in chapter 2, this relies on the central balance system comprised of both the

musculoskeletal system and the central nervous system.

In other words, all of the muscles and bones in the body working in conjunction with all of the nerves. A superhighway of activity that's unbelievably complex and never stops running. Much like a highway system in a busy city, full of coordinated activity that may slow down but never ceases.

However, once the body stops moving for extended periods of time, the signals or messages that travel along this super highway aren't as strong and efficient. When the brain and spinal cord aren't stimulated on a regular basis, their ability to move, respond and react is affected immediately.

The mind-muscle connection is simply a pathway. And a pathway that isn't well traveled and maintained begins to breakdown and lose its ability to facilitate movement. Unfortunately, as many of us age, we move less and less. The less we move, the worse we get in mind, body and spirit.

This lack of motion makes our bones, muscles, nerves and brains weaker. That's correct. The mind IS a muscle. It may not lift weights like your biceps but it does "flex" all day, every day. The brain NEVER stops running, even when we sleep. It's a computer that never turns off, it can't.

When the body stops sending signals to the brain with regular physical activity, cognitive function is negatively impacted.

So, while crossword puzzles, sudokus and word searches are fantastic for your mind, the best medicine is movement.

"Much more of the brain is devoted to movement than to language. Language is only a little thing sitting on top of this huge ocean of movement."

Neurologist and author Oliver Sacks

The main function of the brain is to help the body move. And when the body slows down and stops moving, the brain also slows down. This relationship is as tangible as any healthy relationship. When communication between people is cut off or slowed that relationship is seriously negatively affected.

The mission of this program is to make very clear that daily movement and the right kinds of movement are imperative to quality of life.

And lack of movement robs you of balance, confidence and longevity. But sometimes its not by choice that the systems of the body begin to break down.

One of the most debilitating conditions for older adults is a condition known as neuropathy. In the next chapter, I will explain and unpack the dangers associated with this nerve related disease.

CHAPTER 4 THE DANGERS OF NEUROPATHY

I've been so very blessed in my life to work with amazing people 10-90 years old. Along the way, I've come across several older adults dealing with nerve related issues that had to be addressed in our sessions together.

While age is certainly a factor in these nerve related issues, it's not always the cause.

One of my favorite clients was a gentleman named Paul. We worked together for years and grew very fond of each other. Paul was my friend and he also struggled with a condition known as Neuropathy, also referred to as Peripheral Neuropathy.

Mayo Clinic defines Peripheral Neuropathy as damage to the nerves outside of the brain and spinal cord (peripheral nerves), often causing weakness, numbness and pain in the hands and feet.

This damage to the peripheral nerves compromises the messaging or communication from the brain and



spinal cord to the rest of the body resulting in balance issues, discomfort and lack of confidence in your steps.

Now this condition can be brought on from a number of causes such as: traumatic injury, infection, a metabolic problem, exposure to toxins or inherited causes. One of the most common ways people acquire neuropathy is actually from diabetes.

In Paul's case, he wasn't entirely sure why he had neuropathy, we assumed it was age related and most likely inherited. Paul just knew the frustration and pain associated with the disease. So, we just worked around the problem

and fought hard to keep his condition from progressing.

The Mayo Clinic identifies the signs and symptoms of peripheral neuropathy including:

- Gradual onset of numbness, prickling or tingling in your feet or hands, which can spread upward into your legs and arms
- Sharp, jabbing, throbbing or burning pain
- · Extreme sensitivity to touch
- Pain during activities that shouldn't cause pain, such as pain in your feet when putting weight on them or when they're under a blanket
- · Lack of coordination and falling
- Muscle weakness
- Feeling as if you're wearing gloves or socks when you're not



 Paralysis if motor nerves are affected

When it comes to peripheral neuropathy, it can affect just one nerve which is mononeuropathy, two or more nerves in the body which is multiple mononeuropathy or it can impact many nerves which is polyneuropathy.

A very common nerve issue is Carpal Tunnel Syndrome which is an example of mononeuropathy. This is the nerve related pain and weakness in the wrists and hands. Typically, people with peripheral neuropathy tend to have polyneuropathy affecting all areas of the body.

What I learned from Paul was the impact this nerve condition can have on a person.

While he was mentally sharp and 100% dedicated to our workout sessions, his frustration with neuropathy was evident. The uncertainty of his steps, the constant numbness in his feet, his inability to grip objects well and the pain caused from the leg braces he wore daily.

What I'll always remember is our time together, his willingness to show up every session and his perseverance. Paul's wish was to maintain his



physical independence and every day he did just that.

The key in dealing with any nerve related disease or physical disorder is to get out in front of the issue and never stop moving.

That was a major takeaway for me with clients like Paul and others was that working hard on a daily basis was paramount in overcoming the fear associated with the disorder. And it kept them connected, confident and mentally strong.

Inactivity and a lack of movement is a

far more dangerous and serious issue resulting in muscle atrophy, isolation, and potential depression. Don't' let this condition rob you of movement and pursuing a fulfilling life. There are so many good options available today for people dealing with neuropathic conditions and a fear of falling. Those will be addressed in more detail in chapter 6.

Now it's time to discover the #1 balance nerve in your body!

CHAPTER 5 STIMULATING THE #1 BALANCE NERVE IN YOUR BODY

With the potential dangers surrounding nerve inactivity and/or delayed neural feedback, it is of utmost importance to make sure the nerves associated with your balance control are fully functional and active. This might require you to 'wake up' the necessary components of your body to provide you with added confidence and assurance as you go about your day.

As we move, information is received by the brain from three peripheral sources discussed previously: eyes, muscles and joints, and vestibular organs. All three of these sources send signals, or bio-feedback, to the brain in the form of nerve impulses from special nerve endings called sensory receptors.

Proprioceptive information sent from



these sources involves sensory receptors that are sensitive to stretch or pressure in the surrounding tissues. For example, increased pressure is felt in the front part of the soles of the feet when a standing person leans forward.

With any such movement of the legs, arms, and other body parts, these sensory receptors respond by sending impulses to the brain. Along with other information, these stretch and pressure cues help our brain determine where our body is in space.

The sensory impulses originating in the feet and ankles are especially important. These cues from the feet and ankles indicate the body's movement and/or the type of standing surface (floor or ground) as well as the quality of that surface (for example, hard, soft, slippery, or uneven).

There is, in fact, one nerve that we consider to be the #1 Balance Nerve. The peroneal nerve, specifically the deep peroneal nerve (dpn).

The peroneal nerve is in the lower leg. It supplies sensation and movement to the knee joint, leg, foot and toes. This nerve divides into two branch nerves and supplies muscles of the lateral and anterior leg compartments.

Simply put, the deep peroneal nerve is responsible for lifting up the big toe and ankle.

When the dpn is not exhibiting optimal function or is emitting delayed biofeedback, the body is susceptible to decreased sensation and stability in the lower extremities. By stimulating the dpn through certain nerve activation techniques, you are able to wake up the #1 balance nerve.

Here are some simple foot stimulating techniques for optimal nerve activation:

Being barefoot as much as possible. Going barefoot works by producing a gentle, natural stride in the body, through the feedback we get from our feet touching the ground. There's less impact and joint torque than in a shoe; it wakes up muscles that have atrophied in our shoes, reawakens nerve endings, and stimulates reflexology points on the bottom of our feet.

By feeling the ground with your bare feet, you will also begin waking up the vestibular system (balance system) of the brain, stimulating new neural connections for greater balance.

When you start going barefoot, it may seem like a big step for some of you,

but trust me, you will get through the initial phases rather quickly.

If you are new to going barefoot, your home is the first place to start. A lot of people do enjoy going barefoot in the home, but if you are used to wearing slippers, leave them in your closet. If you tend to stay in socks, pull them off and start going barefoot. The first few times will seem a little foreign to you. Don't mind the feeling – you are starting something new and like everything else you will soon get used to it.

All it takes to start going barefoot is to overcome a couple of physical and psychological barriers and in no time, you will stimulate and strengthen the deep peroneal nerve and all surrounding nerves and muscles improving your balance and strength.

Foot massage with our spiky massage ball. The main benefits of using the spiky massage ball is, it removes your feet's tiredness instantly but more importantly it physically touches the pressure points of your feet accurately and provides sensory stimulation where needed.

You will learn how to use our spiky massage ball in Chapter 10.



Short Foot. You will also learn how to perform this highly effective exercise in Chapter 10. In short, no pun intended, this foot exercise activates the small intrinsic foot muscles and nerves that support your toes and arch. You will be using this exercise all throughout this balance program as a base of which you will build upon.

CHAPTER 6 FALL PREVENTION & RISK FACTORS

As stated in chapter 1, falls are going to happen at every stage of life. The trouble is the body's ability to properly react to a misstep and how it responds to a fall.

A bump or bruise versus a fractured wrist or broken pelvis.

The Center for Disease Control and Prevention lists falling the leading cause of injury and death among adults age 65 and older.

As the body ages, it goes through a slow degradation of muscle and bone mass and reflexes slow as well. So not only does loss of muscle tissue hinder strength, the bones begin to weaken and become more vulnerable to impact from a fall. At the same time the physical changes in nerve fibers slow the rate of conduction in signals to the brain.

This is also when your proprioception is on the decline. Your ability to sense where your body is in space relative to other things and how you control your



body's positioning. This is also referred to as spatial awareness.

Dealing with this can be scary for older adults. This is unfortunately what leads to them moving less and being extra cautious to avoid any mishaps.

But moving less is not the answer!

The great news is that it's never too late in life to get moving and to work on fall prevention. No matter if you're 59, 69 or 79 years old, deciding to become

more physically active could seriously save your life!

And I've seen firsthand how much better life gets when regular exercise is habitual.

Let's take a look at some of the fall risks you could be facing:

- Having to go up and down stairs too often.
- Dim or poor lighting in or around your home.
- The footwear you typically like to wear.
- A cluttered or disorganized living space.
- A lack of railings, handles or bars in key areas such as walkways, stairways, bathrooms, etc.
- Old injuries that make walking or balance challenging.
- The use of multiple medications and how they interact.
- Positional low blood pressure, also called postural hypotension.

Assessing the environment you live in is a very important and easy thing to do.

Create a checklist of the bullet points listed and add in your own potential risk factors. Then take the necessary action steps to see that you're living and

moving in the safest way possible. Get a family member, friend or neighbor to come over and help you make these changes to your living space.

Taking preventative measures
BEFORE you fall can make life so
much safer and far less intimidating for
you.

Two of the most common falls happen:

- 1.) In the bathroom when going from a sitting to standing position from the toilet or shower.
- 2.) Or in the middle of the night walking from the bedroom to the bathroom.

Not to say that falls can be prevented altogether but with the right daily movements, they can drastically be reduced saving you from a serious injury or hospital stay.

Canes, walking sticks, railings, ramps and grab bars to name a few...

There are assistive devices all around us and meant to help people at all ages and environments.

Years ago, when I was a young boy, I remember watching the older adults at church walking up for communion. I would see husbands and wives holding each other, old men using canes,



clutching the railing as they went up a few stairs or how slowly they walked from the pew to the altar.

What I failed to recognize is that without the people in their lives or the devices they were using, their life would look completely different. It was the person alongside them, the railing, cane or ramp they used that made life "comfortable" and safe for them.

Much of what we see in the world when it comes to assistive devices are good and helpful things that give a sense of relief to those who need them. The key again is to invest in quality items that will do what they say they will do. Buy

trusted brands that hold up and keep you protected.

What good is the railing if it's wobbly or poorly fastened? What good is the cane or walking stick if it can't support your weight? What good is the grab bar if it doesn't properly suction to the bathroom wall?

All of these things have a place for people at any age and can be extremely beneficial to prevent a fall or catastrophic accident at home. The best thing you can do right now is assess what your needs are in your home and create a list.



If your sense of balance isn't quite where you want it to be, would a walking stick or cane make life easier for you? Would a few grab bars in your bathroom make this space safer for you or a raised toilet seat (more on this later)? Would a railing in your hallway or stairway make you feel better when going up or down the stairs?

All of these questions must be considered for you personally.

Please take a moment and decide what 3, 5 or 7+ items you need right now to help create a safer environment in your home. Often times a trip or fall is averted simply because you've taken

action in preventing that from ever happening. Please do this today to make your tomorrow fall-proof.

The key is balance and strength training as indicated by Lora Stutzman, a physical therapist with the Johns Hopkins Rehabilitation Network. "We treat elderly adults for injuries sustained from falls, and other patients who feel unsteady while walking or standing and are fearful of falling. These exercises can help improve balance and build strength to help prevent future falls."

It makes sense. Moving more helps the body move better. But it has to be the right kinds of exercises to ensure total body strength and function.

But what if you're already dealing with an injury, a disability or limited range of motion? Let's see how improving balance and strength can be done with limited mobility.

CHAPTER 7 IMPROVING BALANCE WITH LIMITED MOBILITY

A young adult recovering from a sports injury, a baby boomer in rehab from a heart attack or surgery, an elderly person with severe arthritis; people of any age can have balance issues caused from limited mobility.

As you have learned throughout this program, there are certain factors that contribute to the loss of balance or the ability to maintain balance. Age being a main factor but other factors like previous injury, recent surgery, chronic illness, or ailments can affect your mobility.

Whether your limited mobility is temporary or permanent, there are many things you can do to make your life easier, in terms of balance.

You do not need to have full mobility to experience the benefits of balance exercises. There are still plenty of ways you can use exercise to boost your mood, ease depression, relieve stress and anxiety, enhance your self-esteem, and improve your whole outlook on life.

Within the Exercise Guide Workout Sheets (pdf) included with this program, you will discover how you can modify what we recommend to accommodate your level of mobility. We encourage you to do the best you can but most importantly, take your time, be cautious and use regressions when necessary.

It is important to remember that it is best to strengthen the body and create stronger neural connections but there are some additional ways that you can create a safe environment decreasing your risk of falling.



Modifying your home can be as simple as rearranging some furniture or putting in a few handrails in strategic locations.

Create a well-lit home by adding additional lamps or replacing current bulbs with brighter lighting.

On the outside, make sure the path from the vehicle to your front door is well lit and clear of objects.

If you have stairs in your home, make

sure there is a sturdy handrail -- on both sides, if that helps. Adding a second banister on the other side can make a huge difference, especially if one side of the body is more impaired than the other.

As you increase the strength of your body and improve your balance with the help of this program, you will be able to move with confidence and decrease your chances of falling, even if you have limited mobility.



CHAPTER 8 INDEPENDENT LIVING & COMPRESSED MORBIDITY

Earlier in chapter 3, I addressed the significance of the mind-muscle connection and how movement itself is what keeps this relationship strong.

ACTION is what gets you going in life.

"The body will become better at whatever you do, or don't do. If you don't move, your body will make you better at not moving. – Daniel Wolpert, Neuroscientist

Movement is what keeps people young, strong, confident and healthy. Sitting idle is not what the body wants or needs, especially as we age. And in a matter of just days, the body begins to break down, weaken and fall prey to atrophy and disease.

It's through movement that study after study indicates that the brain is more stimulated and new neural pathways are created compared to just doing Sudoku and Crossword puzzles.

Movement of the body also positively

affects digestion, circulation, metabolism, immune function, mood and all other major processes of the body.

I've purposely gone out of my way to express the importance of daily activity centered around balance-based movement. I hope my passion and desire to keep you moving literally jump off the page at you!

The key for the aging population is NOT to sit and instead to move.

With the key being to focus on doing new things, challenging things to keep the brain and body stimulated and learning new forms of exercise. Like for instance, taking things we do in a seated position all the time and then do them standing which feels different or vice versa. You need to THINK about the movement in a whole new way. Balancing ties right into this.

Feeling secure, stable and sure on your feet is overlooked and often taken

for granted by most young people.
Understandably so. But for a man or
woman at any age who begins to doubt
their steps in getting from A to B, life
changes for them immediately.

Simple tasks become stressful moments. And nothing about that helps your mental wellness. Going upstairs, downstairs, to the bathroom, to the car, to the store and the list goes on and on.

This mental shift is exactly what takes us from living life freely and on our terms to living with hesitation, fear and relying on others to help facilitate the day to day. This is not what I want for you or what you deserve.

Independence in life is something we long for from a very early age. To be able to do things on our own. Even children have a deep-rooted desire to be able to do things on their own and not always need help from mommy and daddy.

To then lose that at a certain point in our lives as older adults has to be one of the hardest things to accept. I've seen with my own eyes what older men and women go through when their independence is stripped away. It's very hard on everyone and both sides have to adapt to this new way of life.



But there's one more concept that's applicable here and really drives home the point of living life on YOUR terms and that's the idea of Compressed Morbidity.

What it means is that you live a very long, full, healthy life and substantially decrease that time at the end of your life where you'd be sick, unhealthy or have disease. Actually, squeezing down that unpleasant period in your life and maximizing your healthy years.

Dying at age 87 while hiking in the woods (doing something you love) from heart failure versus dying at home at the same age after spending 5 years in your chair or bedridden.

There are many people who experience this compressed morbidity. They

achieve phenomenal physical fitness late in life (EVEN IF THEY WEREN'T VERY ACTIVE IN THEIR YOUNGER YEARS) and just don't wake up one day or suddenly pass away in the midst of doing something they love after a very healthy life with relatively little disease or illness.

By the way, the actual definition of disease is:

Dis-ease - a disorder of structure or function in a human; a particular quality, habit, or disposition regarded as adversely affecting a person or group of people. Oxford

So, by minimizing that 'sick period' in your life, when you die it's just from old age and often times it's a sudden death...like in your sleep or while exercising.

Your body just finally gives out at the mature age of 80, 90 or 100 versus living in a diseased state for years prior to death.

Death is something everyone is afraid of...or at least thinks about from time to time. When am I going to die? How will it happen? Will my life still be

enjoyable when I'm 76 years old? Will I be in a wheelchair or hospital bed OR will I be physically active every day, enjoying my hobbies, playing with my Grandchildren and making the most of my time on this planet?

We are all going to do die. The real question becomes, how great can we make our lives from A to Z?

Healthy aging pioneer James Fries maintains there is no one way to compress morbidity, he suggests everything in moderation, except physical activity, which he stresses as the key to delaying the onset of morbidity.

And in my humble opinion based on years of experience working with older adults, the #1 way to fight off disease is movement of the body.

It doesn't have to be anything outrageous either.

In fact, simple motions of the body like what you will find in the Exercise Guide Workout Sheets (pdf) are what will do the trick. So now let's take a closer look at the many benefits of doing balance exercises regularly.

CHAPTER 9 MORE BENEFITS OF DOING BALANCE EXERCISES REGULARLY



While a lot of us may think that balance issues are something left to the senior years or when we are rehabilitating from an injury, I am going to suggest a new mindset here. Balance training and balance exercises really need to be a part of your every day and/ or your regular training schedule regardless of your age.

So far, I've mentioned several reasons why movement is essential to healthy and quality living, and as a result why having great balance plays a massive role in that. Balance, like most things, requires our attention and consistent practice if we are going to do our very best to maintain it at a level that allows us to enjoy moving with confidence into

our senior years.

The benefits of incorporating balance training into your daily routine and your regular workouts include:

Joint Stability

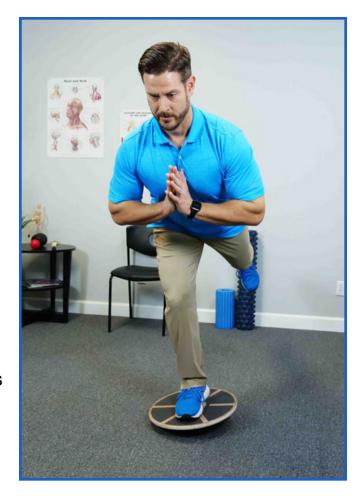
Balance training exercises reinforces stability in your ankles, knees, hips and shoulders. Joint stability helps to support good range of motion in your joints as well as keep you much more SOLID on your fee. Having good joint stability also helps to reduce the risk of sprains and serious joint-specific issues with your knees and shoulders.

Body Awareness

What I'm specifically referring to here is proprioception. Proprioception is having a secure sense of the movement of your limbs in the space around you. Good proprioception is key in helping to reduce the risk of falls and therefore serious injury as a result.

Reactionary Time

How many times have you caught yourself when you were about to slip and fall, just in time to regain your balance?! This is reaction time and having good balance supports this. When your body loses its' balance, it has to recover quickly to avoid an accident. By incorporating balance exercises into your daily routine, you



are supporting your body's ability to do this effectively.

Long Term Health

This goes without saying and I've discussed it throughout this report. Balance exercises, practiced consistently, will have a tremendous influence in promoting and supporting good balance well into your senior years. Thus, playing a big role in greatly reducing your risk of injuries like fractures due to falling.

ABOUT THE AUTHOR

Chris Wilson specializes in all kinds of strength modalities; especially functional fitness exercise designed to restore balance and stability which improves body movement patterns. Chris has been passionate about exercise and human performance for decades and is a lifelong advocate for staying strong in body, mind and spirit.



Chris became a Certified Personal Trainer in 1999 with the National Academy of Sports Medicine (NASM) and has trained over 15,000 hours with clients of all ages, especially older adults and seniors. He's also certified with the American Sports & Fitness Association (ASFA) in Balance and Stability Instruction, is a certified Russian Kettlebell Instructor (RKC) and a Specialist of Sports Nutrition with the ISSA.

Chris resides in the sunny Clearwater area of Florida with his wife Samantha and their beautiful children Kellan and Camryn.

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