Back Pain Learn To Use Your Body To Overcome Pain





To say that back pain is an HUGE PROB-LEM is an understatement! the most common type of pain that people experience and the leading cause of disability worldwide. Upwards of 85% of people will sufferer from back pain over the course of their lifetime.[1] Unfortunately, once you've experienced back pain, the odds are very good that you're going to have it again.

Back pain is nasty for a lot of reasons but one of the worst things about it has to be the recurrence rate. Remember Arnold Schwarzenegger's famous line: "I'll be back." Back pain is a lot like that - the vast majority of the time, even when back pain goes away, it comes back, again and again in a vicious cycle. After an exhaustive review of all the data, the American Journal of the Medical Sciences, found that even when back pain subsides it comes back a staggering 85% of the time. [2] One very large-scale study out of Europe found that just 6% of back pain sufferers experience a single, non-recurrent episode. [3]

Over the past 15 years of clinical practice, I've seen firsthand that a significant portion of chronic pain sufferers – and people with back pain in particular - are unknowingly creating and perpetuating their problem(s) with the movements, positions and activities they perform on a daily basis.

Many of the patients in my clinic tell a similar story. They arrive at the clinic feeling worn out, defeated, frustrated and very often confused because they've been putting in time and effort towards resolving their problem for months or years and they are not getting better. They've tried to fix their problem. They've already been to see other doctors and they've worked with physiotherapists - the average number of practitioners a new patient in my practice has seen before they arrive at my clinic is six! Strategies that have worked in other aspects of their life - like powering through -don't work (and usually end up making things worse). More often than not, by the time people get to me they're at the end of their rope. They've already had advanced imaging, they've tried the drugs and the injections. Many have already had a surgical consultation and are seriously considering going under the knife in a last-ditch attempt to resolve their problem.

The truth is that most of these problems can be resolved without surgery. Often, the only thing that's needed is some education and training to ensure that the person's therapy/rehabilitation efforts and their activities of daily living are pointed in the same direction as their goals.



The vast majority of mechanical back problems can be resolved through understanding your individual pain mechanism, properly applied rehabilitation and activity adjustment/ modification

Indeed, a limited or incomplete understanding of their individual pain mechanism (and pain in general) is probably the one unifying theme that all my chronic patients have in common. Many have gotten themselves to this place by following bad advice about the types of exercises and stretches that they choose to use to try and improve their problem.

KNOW YOUR PAIN

I have to admit, I'm a little jealous of what the dental profession has been able to accomplish. They just don't see the same issues with tooth pain that are so common with back. For decades, the dental profession has presented the same clear and concise message to the general public –

"Avoid sugary drinks / food and brush and floss your teeth 3 times a day."

As a direct result of this campaign, there is huge amount of public awareness about what causes problems with teeth and gums as well as what's required, on their part, to prevent and avoid these problems. It would not come as a surprise to most people if, when they go in for a check-up, their dentist says something like: "Oh, there's a problem here. Have you been brushing and flossing?" My aim in writing this book is to clear up the confusion and provide you and the 1.5 billion other people in the world currently suffering with chronic pain [4], with a rock-solid methodology for understanding your situation. I'm also going give you a simple, cohesive strategy that you can put into practice immediately that will help you to move easier, feel better and finally get rid of your chronic pain.



STRANGE TIMES

We are living in a time that in an anomaly in many ways when compared to any other period in the history of our species. Nowhere is this more apparent than when it comes to patterns of physical activity. Most jobs nowadays are sedentary. A 2013 study tracked the movement patterns of office workers and found that over 80% of the work day was spent seated at a desk. [5] Three-quarters of Americans adults fail to meet even the bare minimum recommendation for physical activity (30 minutes 5X/week). [6] Making matters worse is the fact that instead of moving our bodies, people in modern societies around the world are spending an inordinate portion of their lives in what are called "flexion-based positions".

Flexion-based positions (like the one pictured here) are positions in which:



Hands in a closed / grasping position

- You're seated
- Your head is down
- Arms are out in front of you
- Shoulders are internally rotated A
- Upper back is rounded
- Lower back is rounded
- Hips are folded inward
- Knees are bent

I think that any time of great pain is a time of transformation, a fertile time to plant new seeds -Debbie Ford The flexion-based position that people nowadays spend so much time in nowadays bears a striking resemblance to a position that you were once very accustomed to - a long time ago. Just look at the striking resemblance between a flexion-based position and the fetal position. Fetal position is a necessity in the earliest stages of your life. The only curve that's present in this position is the primary "C"- shaped curve. For as long as you are in this shape, prior to the formation of your secondary curves (neck, lower back and foot arches), you are completely dependent on others to fulfill even your most basic needs. It's not until the first of your 3 secondary curves from that you develop the ability to begin doing things for yourself. The formation of you secondary curves is what sets the stage for all your future functionality and independence.



Flexion-based positions create a cluster of biomechanical problems which challenge your ability to become/remain a fully functional human being. First and foremost, the normal secondary curves of the spine are reduced or lost altogether by going into a flexion-based position. Second, the pressure inside of your spinal discs is radically increased – by as much as 190% [7]. Third, it weakens the muscles responsible for stabilizing and supporting your spine by placing them in a mechanically disadvantaged position. [5] Fourth, it elongates the ligmentous support structures at the back of your spine that are responsible for maintaining stability of the spine – these ligaments are your body's last line of defense.

It is for exactly those reasons that flexion-based positions are so closely tied to back pain. This is critically important to understand because once you know this - you can make way better choices when it comes to the movements and the exercises that you use to overcome your pain. Let's go through some of those movements right now.

STOP IT BEFORE IT STARTS

By far, the most effective way to treat back pain is to stop it before it starts. So, the first thing to do is to immediately discontinue and avoid all movements where you're actively moving your body into a flexion-based position. This would include things like the standing toe touch, the old classic, the seated toe touch, which is a modified version of the same movement that people are often given, and then things like a Figure 4 Stretch where you cross the leg and reach down and in between.

For a person with back pain, unsupported bending forward at the waist is a disaster waiting to happen. Among other things, bending like this neurologically down-regulates and places the muscles responsible for supporting your spine into a weakened position. This position also creates a massive increase pressure in your spinal discs while simultaneously forcing the gelatinous center (nucleus) in the very direction where discs are the weakest. The posterior aspect of the disc is the most susceptible to damage and this is the same region where most disc bulges and herniations occur.

One of the reasons that people get sucked into performing movements like these is because they provide some short term pain relief. Doing these kinds of stretches is the equivalent of scratching when you have Chicken Pox. As satisfying as it feels, it makes things worse for you in the long run. These kinds of stretches will absolutely stretch out tight muscles. But like I always tell my patients: Before rushing in to stretch a tight muscle, you need to ask "why is the muscle tight?"



Key Points

Before stretching a tight muscle, you need to ask "why is the muscle tight?"



Muscle tone is regulated centrally, by your brain, and the resting tension in your muscles is based on demand. When one of your muscles is very, very tight (when compared to the other muscles in your body) there's always a reason. Maybe the muscle was overworked and damaged. Maybe the joint that the muscle crosses was injured (like when you sprain your ankle and your body tightens surrounding muscles). This is your body's way of protecting you and preventing the damaged tissue from being damaged further - like putting on cast. The point is that when a muscle is tight - the tightness was put there on purpose. Very often with chronic back pain, the increased muscle tension occurs is your body's attempt to try and stabilize a chronically unstable structure. If you recognize this pattern in your body then it becomes easy to understand that the last thing in the world you'd ever want to do is spend time and effort with stretches or exercises that will further destabilize an already unstable structure.



The first order of business, when you're suffering with back pain, is to cut out all forward bending stretches. Naturally, this same recommendation will extend to the active exercise as well.

Things that you want to be sure watch out for and avoid are classic abdominal (or "core") strengthening movements like:

- Sit-Ups
- Crunches
- Leg Lifts
- Flutter Kicks



Anytime you're flat on your back and you're drawing one or both hips toward your torso (or vice versa) that means you're going into flexion. When you do that, especially against resistance, you are actively pushing your spinal discs backwards on every repetition. Doing this repeatedly, over time will only serve to weaken the structure of your spinal discs and destabilize an already unstable lower back. So make sure to eliminate those types of movements from your routine.

YOU ARE WHAT YOU REPEATEDLY DO

Aristotle once said: "We are what we repeatedly do." Well, in modern society, what people repeatedly do is engage in marathon-length bouts of flexion-based activities on a daily basis. There are consequences to spending so much time in this position and one of them is the deterioration of your physical structure. Nearly 70% of people nowadays are walking around with a Forward Head Position and other overt signs of major postural dysfunction. [8,9,10,11,12] These physical signs are indicative of a much bigger problem, something I call "Posture Prolapse".

"Posture Prolapse" is the progressive deterioration and collapse of all of your body's secondary curves and the corresponding loss of functionality that's associated with having those

> curves. -Dr. Yoni Whitten

People in modern society are losing their secondary curves at a rate that is downright scary. And, as a consequence of this they're shrinking back into that shrimp-like fetal position with which we're born into the world. Posture Prolapse doesn't just look bad; it can actually be used as a means of predicting future health problems and even mortality! [13

Long before those issues show up, people with Posture Prolapse have to deal with a host of other problems – starting with aches and pains that never seem to go away.





Long before those issues show up, people with Posture Prolapse have to deal with a host of other problems - starting with aches and pains that never seem to go away. Posture Prolapse has been linked to the most common chronic pain conditions in the world. It's been tied to everything from headaches & migraines, to TMJ, to various neck and back syndromes, to rotator cuff tears, to chronic muscle strain, disc problems (bulges & herniations) as well as nerve compression syndromes like thoracic outlet and carpal tunnel.

[14, 15, 16, 17, 18, 19, 20, 21]

Thankfully, before you get to these really serious health conditions, there are little signs along the way. Things like loss of functionality, decreased range of motion, stiffness and difficulty performing your activities of daily living - things that used to be easy for you become difficult. New patients will often report things like: struggling to turn their head to back out of the driveway or change lanes while driving, difficulty reaching to grab something on a high shelf or an inability to get down and up from the floor.

When this happens a person's world shrinks and an ever-growing list of positions and activities, things that used to be effortless, now become not only difficult to do but, actually scary. So, the natural response is to avoid and stop doing these scary things. And this is the beginning of the end. Once you begin avoiding the simple activities of daily living, your quality of life tends to deteriorate pretty rapidly.

FLAUNT YOUR CURVES

Now that we've identified a big part of the problem, I want to introduce you to one super simple movement strategy that you can use every single day to help restore and maintain the normal secondary curves in your back.

The movement is called the Press-Up and in many ways, it's that exact opposite of a flexion-based position. The Press-Up is an effective yet, gentle mobilization for the lower back that helps to gently restore normal extension motion to the spine and encourages a healthy secondary curve (lordosis). The only thing that you're going to need to perform this movement is a comfortable surface to lie on.



Start off in a face-down position. Your hands should be positioned with your palms facing down along the sides of your body as if you were performing a push-up. From there, you should separate your feet as wide as you can comfortably go, and then point your toes inward. This places your hips into internal rotation and helps prepare your spine to go into extension. It's critically important that your back muscles remain completely relaxed throughout this movement. All the power that's used to perform the Press Up should come from your chest, shoulders and arms. So before starting, make a conscious effort to completely relax the muscles in your butt, lower back, and abdomen. To initiate the movement, you will push down into the floor while keeping the back and the butt relaxed, and create a nice big curve in that lower back. If you feel any stretching in your lower abdomen or along the front part of your hips – it means your hip flexors are tight.

Once you get to the highest point in your range of motion, you're just going to hang out for a 3-5 seconds, breathe deep, allow your pelvis to gently sink into the ground, then slowly, lower your-self back down. Repeat 5-10 times.

Again pushing up with the hands, keeping the lower back and butt muscles and abdominal muscles completely relaxed. Create a nice little arc in your lower back. At the top of the movement, you should drop your shoulders down and back. Think about putting shoulder blades into the back pockets of your pants and this will help to elongate your neck. Hang out for a few moments at the top. Breathe. Allow your abdomen to sink into the floor. Then slowly reverse the movement using the muscles of your chest, shoulders and arms only to lower you gently back down to the floor.

If you experience any difficulty performing this movement, you have a few options:



NOTES



If, for whatever reason, you find that the Press-Up is not a good fit for you, don't worry! The Standing Backbend is a fantastic alternative that will still allow you to get many of the same benefits of the Press-Up without having to get down and up from the floor.



To do a Standing Backbend:

- a. Stand with your feet hip-width apart.
- b. Place your hands right on top of the wing bones at your hips.
- c. Your thumbs should be pointing towards the rear.
- d. Use your hands to apply gentle pressure from back to front in this direction while simultaneously leaning backwards.
- e. Exhale as you slowly move into extension (bend backward).
- f. Hang out there for a second or two, and then slowly return to the starting position.
- g. Repeat 6-8 times

If you experience difficulty with this movement, you can try taking a wider stance. Sometimes, I may position a patient's feet 3 feet apart to relieve pressure and make the movement easier.



- You should only move through a range of motion that is pain-free.
- You control the range of motion by how much you straighten your arms. Only straighten your arms as much as you can while remaining comfortable in the lower back. If you start to experience discomfort, bend your elbows and back off a little bit to find your comfort zone. Then just work with that range of motion.
- Each week you should try and increase your range of motion by 1 to 2 millimeters. If you can straighten this far in the first week, try to go that far the second week. Really small incremental changes where you're pushing yourself in the direction of the goals.
- This is going to create the adaptive signal in your body to condition it to expect to go backwards into extension. Now that's going to help drive that secondary curve back into your spine, get you into a more efficient position to resist the pull of gravity, and reverse Posture Prolapse.

Now that you know which types of movements to avoid and more importantly why you're avoiding them, I want to give you a simple strategy that you can use to decrease pain and increase stability in your lower back immediately. The best part is you'll be able to accomplish these things doing something that you probably spend hours each day doing anyway!.



USE SITTING TO YOUR ADVANTAGE

In the last few years, sitting has received a ton of negative press. Government health agencies around the world have even started using a catchy new phrase: "Sitting is the new smoking". [22,23] So at this point, pretty much everybody has heard that sitting is not good for you.

Sitting is harmful to your health in several ways:

- Cardiovascular health – Reduced muscles activity allows body to pool and leads to a massive increase in risk for blood clots

- Metabolic health - Prolonged sitting in traditional chairs diminishes muscle activity and contributes to insulin resistance

- Body Composition - Stagnation combined with external support leads to increased body fat storage

All of those issues are, of course, critically important. But while they're stealing the spotlight in mainstream media, something insidious is lurking below the surface, contributing to multitude of chronic pain conditions and ruining lives of hundreds of thousands of people.

So what is this hidden monster that's causing so many problems? It's the destructive effect that sitting has on your physical structural. You see, sitting rots your spine in the same way that sugar rots your teeth.

Here's the spine in its normal shape. Notice how the spine curves inward in the neck and lower back and how that curve contrast with the outward bowing curves of the midback and pelvic regions? Those inward curves are critically important to your ability to feel good and function normally. A reduction or loss of those normal inward curves - what are called "secondary" curves - is directly linked to pain. Reduction or loss of these curves has been tied to:

- Eighteen times more likely to suffer chronic neck pain [16]
- Twenty-Two times more likely to tear a rotator cuff [20]
- Greater frequency, intensity & duration of headaches [15]
- Significant increases in Mid & Lower Back pain [14]

The normal (neutral) position for a human being is standing. When a person is in a standing position, the curve in the lumbar spine should be about 49° from top to bottom. [24] In this position there is 100kg of pressure pressing down on your lumbar spinal discs. [25]

Any time you sit, you are automatically taking the spine out of its' neutral position. Let's take as an example what happens when you sit in traditional chair with a hard back: your hips go into flexion, your legs move toward your torso and your butt tucks up underneath you.

The amount of curve in your lower back can be reduced by as much 70% in a seated position. [24] And the pressure in your spinal discs can increase by as much as 190% in a seated position. [25] To make matters worse, research has shown that the further forward you bend (into flexion), the less active the support muscles along your spine become. [5] This is why the natural tendency for many people is to lean back and/or arch their back to get some relief. When you do this, you're activating the muscles that have been shut down, reducing pressure in the spinal discs and most importantly, pushing the normal curve back into your spine.

The problems people experience when sitting don't stop in the lower back. Sitting sets off a chain reaction of harmful effects throughout the body. Anytime you sit, you are, to some degree, pulling the normal curve out of your spine. [24] One of the side effects of decreasing the amount of curve in your lower back is that your head and neck will shift forward. Take a walk around any office and you'll see that by the end of the day, many people's heads have fallen so far forward that their faces are practically pressed against the screen.

I am going to give you one simple strategy that you can use to make sitting way healthier. But first, let's do a little experiment:

- 1) Stand in front of a chair and place both hands in the small of your back.
- 2) Slowly sit down onto the chair.
- 3) Feel what happens to the curve in your lower back as your weight transitions onto the seat of the chair.



Assuming you had your hands in the correct place, what you will feel when you go through this movement is the concavity (or inward curve) of your lower back will push outward. When you sit, depending on the chair/position you use, your back will either flatten out or push in the opposite direction completely – the concavity will actually become a convexity.

When you sit, not only are you training the curve out of the lower back and pushing the discs backwards the most common direction that disc bulges occur but you're also pushing the curve out of the neck and pushing the head into a forward head position. And by staying in that position for six to eight hours a day, five days a week, for months, years and decades, you will effectively train your body into Posture Prolapse.



What we need to avoid this problem, is a way of maintaining the normal curve in the lower back while sitting, even when we're not using the best chair. Thankfully, there's a simple, inexpensive device that accomplishes that. That device is a seat wedge. This awesome tool is something we use and recommend to patients every day in my clinic.

Perhaps because of its' simple design, the seat wedge is totally unappreciated but do not discount what this tool can do for you if you've got chronic back pain. We use it for everybody that has Posture Prolapse as well as for most people with chronic disc problems. The seat looks just like a normal piece of foam when you're looking at it from the top or bottom, but when viewed from the side you can see that this piece of foam is cut in a very specific way. A seat wedge is designed to be thicker and wider on the back and to taper to a very narrow front end. This unique shape enables you to maintain the normal curves in your spine while sitting.

A seat wedge works by angling your pelvis downward (into an anterior pelvic tilt) and this allows your knees to drop below the level of your hips – closer to the position that your hips and pelvis are in when standing – while you're seated. You'll notice when using a seat wedge, that if you repeat the same sitting experiment, you will retain a pronounced curve in your lower back curve even after your weight has settled onto the seat. This simple tool can help you turn a very harmful activity into something that can even be helpful for somebody who has a history of disc problems in the neck or the lower back and certainly, anybody with Posture Prolapse.

GET MOVING

Back in 2016, The Journal of the American Medical Association (JAMA) set out to find the answer to a very big question: "What is the most effective method for preventing back pain?" To figure out the answer, these researchers performed an exhaustive review including more than 20 large-scale, randomized controlled clinical trials and 30,850 participants.

Walking strengthens and increases stamina of the muscles responsible for stabilizing and supporting your spine. Your core, diaphragm, pack extensors, pelvic floor and gluteal muscles all play a role in the creation and maintenance

of upright posture. These muscles are also responsible for the enormously complex task of keeping you stable as you move through life.



The modern lifestyle and flexion-based activities in particular, have a devastating effect on these muscles. When the majority of your day is spent in flexion-based activities, these muscles weaken and atrophy which leads to an inability to hold yourself in an upright position and an inability to stabilize your spine. Over time, this stagnation day-in and day-out leads to progressive weakening and shrinkage of your muscles and connective tissue as well as a build-up of metabolic waste products (toxins).[28,29] These tissues will now fatigue and reach the point of failure even faster which almost inevitably results in injury, and pain. [28] Walking by itself can help you to prevent and even reverse many of these degenerative changes.[28]

Among other things, walking leads to:

Improved Fluid Dynamics: Lack of physical activity causes stasis of your blood. When your blood isn't moving nutrients can't get into your cells and waste products can't get out. This is what those pamphlets on airplanes warn you about when they give you the exercises to perform in your seat when you fly. You see, humans were made to move constantly. Veins can only move blood in the presence of muscular action and when we stay still for too long, blood flow into and out of tissue is reduced which starves your body of critical nutrients (and puts you at risk for clotting). The rhythmic movement of walking dilates blood vessels and creates muscular contractions of some of the most powerful muscles you've got which dramatically increases the supply of oxygen and nutrients to cells throughout your body. It's also critically important for flushing out metabolic waste products/toxins.

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Increased "Kinetic Flow": Did you know that much of the power needed to operate your brain and nervous system actually comes from movement? That's right – your brain functions in much the same way that an automatic watch does.

Automatic watches run based on movement of an internal rotor. Any time the watch wearer moves his or her wrist, the rotor spins and this spinning motion is converted to energy that winds the watch's motor. As long as the watch is being worn daily (and/or moved on a daily basis), everything works great. But if you take that same watch and leave on the dresser for several days, it stops running. No movement, no power.

Your brain works in exactly the same way. Rhythmic movement of the body (especially of your spine) creates a massive influx of neurological input - this is what I call "Kinetic Flow". These waves of Kinetic Flow provide the raw fuel that's required to "power" your brain & nervous system.

To get an idea of how important Kinetic Flow is to your body, know that more than ½ your spinal cord functions as a dedicated pipeline for delivering this nutrient to your brain! [30] World-renowned medical authors Guyton and Nolte have indicated that if Kinetic Flow signaling were ever to be cut off completely, the body would be incapable of functioning in a conscious manner and would actually approach a permanent state of coma. [31]

Because the interruption of Kinetic Flow is so catastrophic to your health /survivability, your body has intelligently developed a warning system to let you know if and when things are heading in the wrong direction. The body does this with all essential nutrients – if you're starved of oxygen – like when you hold your breath under water – your torso will begin to ache as your diaphragm rapidly convulses and contracts. Your muscles will start to burn and you'll begin to shake uncontrollably as they involuntarily contract. [32] Your body does all this to try and force you to breath – and it stems from our innate drive for self-preservation.

The moment you get to the surface and take that first breath of air, the state of panic in your body and the pain associated with it, disappear instantly and a state of euphoria washes over you to replace it. The same type of warning system is in place to protect us from insufficient input of Kinetic Flow. When you fail to move your enough, your body will begin sending your warning signals to try and get you to move.

Tissue Conditioning: Lack of physical activity allows the muscles, ligaments and joints in throughout your body to stiffen and shorten. When your tissues are unused, your ligaments and joint capsules contract in on themselves (via a process called ligamentous creep). When they are not expanded and contracted, your muscles and tendons accumulate little deposits of scar tissue in them called adhesions. You can think of adhesions like cobwebs in a room that never gets used. They can cause pain and prevent your tissues moving the way they would normally.

In your spine, the shortening of connective tissue can progress to the point where it actually alters the shape of your spine, blocks normal movement, increases the pressure in your spinal discs, and accelerates the degenerative process. [33]

Walking rhythmically moves the joints in your feet, ankles, legs, pelvis, spine, shoulders and arms (yes, your upper body also moves when you walk) through a range of motion in expands and contracts muscle tissue throughout your body. This back and forth between pulling your tissues apart and pushing them back together prevents ligamentous creep and the formation of adhesions. The net result of all this motion is more flexibility, greater range of motion, stronger ligaments & bone as well as increased strength and endurance. [33,34,35]

Key Points

- Your walking speed can influence pain levels be sure use a pace that feels good to you
- Your stride length also influences pain levels: shorter strides can be used to reduce the demand on your body's stabilizing system and decrease pain (as your comfort and strength levels increase, you can try to lengthen your stride a little)
- Start off slow. If you're not accustomed to walking and especially if you're in a lot of pain, go easy.
- Try walking for 1-2 minutes. If that's too easy, shoot for 3-5 minutes.
- Once that's comfortable, you can slowly increase the duration of your walks, but you should absolutely avoid exhaustion. The goal would be to finish the walk and be feeling good.
- For people with back pain, I will usually cap walking time at 15-20 minutes per outing.
- Multiple short walks throughout the day are better than one long walk.

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USE IT OR LOSE IT



One of the most damaging effects of the modern lifestyle is very little muscular effort is required these days to get through life. You remember what happens when you don't use stuff, right? When you combine this with spending hours every day in flexion-based positions that stretch out the muscles along the backside of your body, you've got a recipe for disaster. The muscles on the back side of your body are collectively known as the "Posterior Chain" and they are responsible for supporting and stabilizing your spine in an upright position all day long. Unfortunately the modern lifestyle allows those tissues become weaker and weaker and weaker, and then one day, you bend down to put on your socks, and BAM, you can't get up.

If you want to eliminate back pain, achieve and maintain beautiful upright posture and help ensure the longevity of your spinal joints throughout your lifetime, you need to place some heavy emphasis on maintaining the normal secondary curves of your spine every single day. A multi-layered approach using the tools and strategies we've talked about so far – finding ways of sitting that cause less damage, keeping the spinal joint mobile in the right direction, and moving regularly throughout the day are all part of the equation.

But what you're up against here is gravity. Gravity is constant and relentless. If you are going to stay upright and keep the secondary curves intact, you're going to need strength and you're going to need stamina. Specifically, you're going to need to enhance the fitness level in the muscles of your "posterior chain". Your "posterior chain" includes all the muscles on the back half of your body. Thie major players here are the calf muscles, the glutes and the muscles that run along the sides of your spine – the spinal erectors. One of the main responsibilities of these muscles is to resist the pull of gravity and keep you upright (erect).

The muscles of this chain must be accustomed to dealing with loads greater than what's required to hold you up again gravity – and they must be trained this way 2-4 times per week. There are lots of fantastic exercises for developing these muscles but when it comes to simplicity and effectiveness, the Hip Up & Hold has to be placed near the top of the list.

The only things that you need to perform this movement are a comfortable surface to lie on and a sturdy chair or couch. Once you've got those two things, simply position the chair out in front of you and lie flat on your back. From this position, elevate your feet on top of the seat of your chair. Place your hands out to the sides of your body about 30° to 45° outward. Your palms should be facing down and your head and neck should be completely relaxed and resting comfortably.

There should be zero tension from the top of your chest up. Once you're in this position, you're going to squeeze your butt muscles as hard as you can. Before any body movement is initiated, you should be slowly ramping up a strong contraction in your rear-end - clenching the muscles together. Sometimes it helps to pretend like you're holding a pencil in between your butt cheeks, you're going to feel that tension build and build. Eventually, it'll be enough to raise your hips and your lower back up off the floor.

Your feet may want to turn outward (externally rotate) as your butt muscles shorten and this is okay. Allow your feet to go there. At the apex of the movement, your abdomen and your thighs should be in line with one another. Once you're here, continue squeezing your gluteal muscles and using that tension to keep you up off the ground. Then you're just going to hold. A good starting point for time would be 20 to 30 seconds of continuous holding, with big squeeze going on here in your rear end. Once you get good and comfortable with this motion and your stamina begins to increase, you can push as high as 90 seconds or even two minutes.

If you find that the Hip Up & Hold is too challenging for you, you've got a couple of different options to make this movement workable. First, you can reduce your time. I've started patients off with as little as a 1-2 second hold on this movement. Another option to make the movement easier is to move your body closer to the chair or couch. By moving closer to the chair, you slide more of your leg onto the chair/couch and this will reduce the amount of weight that you're lifting and it make the movement much easier.

With people who are deconditioned, I will often set them up so their entire lower leg is supported on the couch. The back of their knee or lower hamstring is positioned at the edge of the cushion. This is a great way to build confidence and increase your strength early on. Then as you get stronger, you would progressively increase your time in this position. When you get to the point where you can hold this position for 60 seconds, you would move yourself further away from the chair/couch, reduce your time and start with 10-15 seconds and build up again.

SUMMARY

If you're struggling with back pain and you're ready to get rid of it. You got to begin by asking and answering some basic questions. When is your pain at its worst? What activities, movements or positions were you doing before it got so bad? When does your pain impact you the least? What activities, movements, or positions were you in before that happened? What I described here, is the most common chronic pain pattern seen in the modern world today. Posture Prolapse is affecting 70% of the population nowadays. If you can identify, avoid and/or find ways to modify the activities that are causing/contributing to your problem while simultaneously introducing therapeutic movements that can restore normal function and balance to your body tissues and overall structure, you'll be well on your way to resolving your chronic pain.

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