# BULLET PROOF YOUR LOWER BACK



In order to stop your low back pain, you have to first understand what causes and perpetuates it. For the majority of the population, low back pain is caused by countless, cumulative stressors over your lifetime that build up and then culminate into back pain, whether it be intermittent or chronic in nature. In other words, with the exception of severe trauma, it is rarely just one particular event that causes back pain. After personally witnessing thousands of cases and reading the cited research, the typical trend is: someone injures themselves doing ordinary daily activities like getting into the car, picking up a laundry basket, or grabbing something out of the refrigerator. Ordinary tasks like these are not the cause of the back pain, but they prove to be the "last straw that broke the camel's back." When you take into account all of your past macro traumas such as sports injuries, car accidents, slips, falls, etc. and then add the continual day-to-day micro traumas such as sitting, repetitive motions, poor sleeping positions, poor posture, improper lifting, etc., we have created the perfect storm for spinal weaknesses, abnormal muscle function, altered spinal mechanics, tissue damage, chronic inflammation, and progressive degeneration.

This process and pattern can only be corrected/stabilized through a three-step process.

#### **Restore Movement and Alignment**

#1 Correcting the mechanics (movement and alignment) of the spine A.K.A Correcting **Vertebral Subluxation**. This promotes normal movement and nutrient exchange within the joint, breaks up adhesions, decreases inflammation, reduces nerve irritation, and allows for proper feedback to the brain so it can react appropriately to its environment. In turn, this helps restore normal muscle function and activation. There is only one way to specifically address this mechanical component, and that is through a series of specific chiropractic adjustments. So step #1 is to establish and maintain a corrective rhythm of adjustments to maintain normal motion and alignment of the spine and stop any damage that is occurring. This is what Vital Life Chiropractic specializes in.

#### Strengthen and Retrain the Supportive Tissue

#2 Strengthen and stabilize the spine with specific corrective exercises. The muscles around the spine are going to need to be trained to properly support and stabilize the spinal column. This is done through safely and properly strengthening the core muscles and progressing to more functional movements where you incorporate multiple muscle groups. This is the point of Vital Life Chiropractic's *Exercise Video Library*.

#### Stop/Modify Damaging Activities

#3 Correcting your bad habits. We need to find out what got you in this situation in the first place. Is it your posture? Bed? Sleeping position? Repetitive motions? Improper lifting mechanics? Do you sit too much? Is it your chair and workstation? Remember, it is these seemingly small things over an extended period of time that typically causes and perpetuates the real problem. That is the point of our Special Consultations--to provide instruction on correct ergonomics for sleeping, the office, your daily commute and more! To get specific adjustments you need a skilled chiropractor, but to correct your movement patterns and strengthen the spine you need to be coached. Your consultation will help teach you to limit, alter, or even stop your bad habits so that your back stops "going out" more than you do. For even more tips, sign up for this FREE 90 day health transformation program from Bonfire Health!

In the meantime, the following is a list of the most common inquiries that we see in our practice, along with our best recommendations for correction.

# Posture:

What is the best posture? When we look at an individual from the side, ideally we should see the following:

- ear directly above the shoulder
- the shoulder in line with the hip
- hip in line with the side of the ankle

This is the sturdiest position for the spine. If we look at the spine from the side it should have an "S" shape. This means there should be a "C" shape in the neck, a "C" shape in the middle back going in the opposite direction, and then a "C" shape in the lower back that mimics the neck. It is this curved system in the spine that allows us to bear weight. It is the shock absorbing system of the body and literally acts as a giant spring for our bodies. The loss of these normal curves, due to poor habits and traumas, places excess demand on the discs in the spine and over time contributes to subluxation patterns (misalignments), degenerative changes (arthritis), disc herniations, and nerve irritation. "Being conscious of your posture and what your posture should be is a great start."

Helping reinforce these curves requires specific exercises and spinal molding techniques. However, much can be done though conscious awareness and avoiding the bad habits that lead to poor posture. When you are sitting, standing, or walking you should focus on keeping your shoulders back, so they are not rounded forward, and slightly pushing your chest up and out. Pull your neck back slightly so that your ear lays over your shoulder and your chin is parallel with the floor. Then stand up straight as if you had a string coming out the top of your head and someone was pulling it straight towards the sky. To further stabilize the spine, slightly brace by tightening at the core. Knowing what proper posture is and making a conscious effort to maintain it can do wonders for the health of the spine, especially if you are glued to a chair all day with a monitor in front of your face. When we look at a person from the front we should see the following pattern

- The eyes level with the horizon
- Shoulders level with the horizon
- Hips level with the horizon

If the head, shoulders, or pelvis is tilted when examining one from the front, this serves as an indicator of a possible abnormal curvature &/or tilt in the spine. This is a weakness in the spine that could set one up for injury, and needs to be confirmed with an x-ray. These curves and tilts have to first be detected so that you can raise your level of consciousness around those areas, and so you can do the appropriate exercises to strengthen those areas, and avoid the activities that are going to excessively stress those areas. Once again, being conscious of your posture and what your posture should be is a great start.

#### Stop sitting on your wallet: \*GASP\*

Many men wear their wallets in their back pockets. If they spend anytime sitting this does two things.

1.) Creates un-leveling of the pelvis. The side on the wallet will sit higher than the other, tipping the pelvis to one side. The body compensates for this by bending toward the side of the high pelvis. This will create a sideways curve in the lower back that puts abnormal stress on the spine. This is especially a problem if the person is bouncing in this position, like in the instance of truck drivers or when riding on a tractor or horse. This creates a condition known as vertebral subluxation, which is abnormal alignment and movement of spine segments, and abnormal tissue stress or wear and tear.

2.) Puts direct pressure on the Sciatic Nerve. The Sciatic Nerve is a large nerve that runs down the back of the leg and supplies the structures in the leg. With constant pressure, it can aggravate and contribute to Sciatica symptoms (pain down the leg).

It is best to get in the habit of placing the wallet in your front pocket, shirt pocket, coat pocket, glove box/console, or your wife's purse. ©

# Correct "bracing":

Many fitness programs tell people to stabilize the core during exercise by drawing the navel (belly button) into the spine and flexing the abdominals. While this does activate the core muscles it actually creates a "hollowing" effect and can lead

"The best way to think of this movement is if someone was going to hit you in the stomach."

to decreased Lumbar (low back) stability. The correct way to prep for lifting is to do the exact opposite. This means flexing the abdominal muscles by pushing everything out. You want to push all walls of the abdomen out which will brace the entire lumbar spine. The best way to think of this movement is if someone was going to hit you in the stomach. You would instinctively bear down and push everything out. If you brace properly before lifting, this will keep your spine in a "NEUTRAL" position and will aid in preventing the risk for injury or irritation to the lower back.

# Stop Sitting and Start Walking:

Generally speaking, as a society, we sit the majority of the day. The average American sits over 10 hours a day, and excessive sitting has even been labeled a risk factor for chronic illnesses like heart disease and cancer. This is why sitting has been labeled "the new smoking." Over time excessive sitting can also lead to vertebral subluxation, deconditioned spinal musculature, poor posture, and decreased nutrients and fluid production within the joints of the spine. The typical posture is leaning forward in front of a computer screen. Over time this puts extra pressure on the discs leading to greater wear and tear, disc herniations, and

nerve irritation. So... STOP SITTING so much! If you currently have a "desk job", our recommendation would be to purchase a standing desk that can vary from a sitting to a standing position. We also recommend purchasing an anti fatigue mat, which will decrease some of the pressure on the feet, knees, hips, and lower back while you stand. While you



are sitting it is best to have a surface that requires you to sit up straight and activate the core. This could be a Yoga ball, wobble disk, or special ergonomic stools. The more comfortable the chair, the easier it is to slouch. Walking requires an upright posture and creates a natural pumping effect of the spine. This promotes normal spinal movement, activates important receptors in the spine and soft tissues, and promotes nutrient/fluid exchange within the vertebral disc. This nutrient/fluid exchange promoted by normal movement is what keeps your discs healthy. Healthy discs are crucial in overall spinal health and nervous system health, as disc irritation and damage is the number one culprit of low back pain.

# Move your FEET FIRST:

Many people have jobs that require bending and twisting. If you keep your feet planted during this process and only move at the spine, then you are massively increasing your risk of injury. The most common way to injure your lower back is to bend forward at the spine, twist, and do it under load or while picking up something heavy. The key is to move the feet first, square up, and then bend at the hip and knees. This removes the twisting component and if you bend at the knees and hip (hip hinge) this creates a stable position for the spine. So, when you move your hips make sure the feet follow (hips and feet pointing in the same direction).

# Construction Vest over Belt:

The construction profession comes with many stressors on the spine and if you are in this field you need to be conscious of the way you are lifting and bending, which is described in this booklet. If this is your trade, I am sure you want to stay working for a while. Something that is overlooked within this particular population is how you carry your equipment. Some tool belts can become quite heavy, thus putting abnormal load on your pelvis, which will also translate into abnormal mechanics and stress on the lumbar spine. The best option would be to switch to wearing a tool vest instead. This will distribute the weight more appropriately, and can help keep heavy objects closer to the body, which is much safer for the spine. Heavy belts are also a concern for law enforcement, and is something that requires modification if you wish to diminish the compound effects of heavy tool belts. "It needs to hold your britches up but do not cinch it so tight that you can't slip your fingers between your belt and skin."

# BYE BYE Skinny Jeans:

Over the years, "skinny" jeans have become very popular. They might look fashionable, but they are not what your lower back desires. Whenever we have tight fitting pants this limits the movement of the hip joints and pelvic joints. If we do not move at the hip and Sacroiliac joints, guess who makes up for the motion? Your lower back! This creates abnormal movement patterns and abnormal muscle activation in the lower extremities and back, leading to fatigue and increased risk of injury. This also puts pressure on the superficial nerves in the leg which can lead to numbness, tingling, and altered sensations in the legs. For overall health wear proper fitting clothes that allow for proper movement.

# Tight belts:

Make sure that your belt fits you appropriately. It needs to hold your britches up but do not cinch it so tight that you can't slip your fingers between your belt and skin. If the belt is too tight, it will lock down the sacroiliac joints. This will create abnormal movement patterns stressing the lumbar spine. Over time this will create tissue irritation and weakness within the lumbo-pelvic complex.

# Ditch the Back Brace:

Many people like to wear a back brace while performing a physical task such as yardwork, however, their perpetual use comes with a consequence. Can a back brace support the back? YES. However, they should only be reserved for extremely heavy lifting and in the case of an acute injury. Regular use of a back brace creates artificial support, which means you don't need your muscles as much for support. If you are not stressing your muscles regularly, then they will begin to weaken. "If we don't use it we lose it!" The extended use of back braces will lead to greater chance of injury and dysfunction in the long run.

#### High Heels:



There is nothing natural about heels, and I promise you ladies are just as attractive wearing flats. Chronic use of heels can permanently shorten the calf muscles and hamstrings. This will alter the pull on the pelvis and lower back contributing to lower back pain. Typically heels will also shorten your stride, and to maintain adequate movement of the Sacroiliac joints it is important to maintain a long stride.

# **Bags and Backpacks:**

Some females like to carry large bags or purses with them wherever they go. When carrying a purse, you are loading one side of the body. If you have a significant amount of weight in that purse or bag it can create a great demand on the spine and supportive musculature. This is an activity and motion that should recruit a lot of the core muscles (and can actually be a good exercise when done properly). The problem is when you never switch the purse, bag, or briefcase to the other side! This will eventually create muscular imbalances making you more prone to injury. So keep the purse if you wish, but just switch sides regularly, maintain a neutral posture (don't lean), and don't shrug your shoulders up by your ears.

When it comes to backpacks we want to adopt the military philosophy, "high and tight." The heaviest objects should always go closest to the body, with the lighter items further out. The bottom of the backpack should not go below your waistline, and the shoulder straps should be cinched tight. When picking a backpack one with a waist strap and a strap that connects the two shoulder straps is best. If you keep the bag tight towards the body and snuggled up, the spine can handle a great deal of load.

It has been recommended that you not carry more than 10% of your body weight in your bag, especially for kids. This is a good rule of thumb if you have a significant scoliosis or are overcoming a bout of back pain, however, if the individual has a strong core, a well-adjusted spine, and follows the recommendations above they should be able to carry a significant amount of weight with no problems. The major issue with backpacks is children have deconditioned their spines from sitting too much and not being upright playing and moving like they are supposed to – but that topic is for another time!

"When it comes to backpacks we want to adopt the military philosophy, "high and tight.""

#### Pushing Chores (vacuuming, mowing, etc.):

Think center of gravity! Or the points where the mass of an object is balanced. As humans our center of gravity changes as we change body positions, but in normal upright posture is just below the belly button. Whenever you are pushing a light object such as a broom or vacuum, you want to keep the force at your center of gravity.

For example: when vacuuming, many people will do it one handed and reach out and then pull the vacuum back to their side. This is a one sided motion and involves slight bending of the spine, twisting, and all while under load. Remember this is the most common mechanism to injure the lower back. The safest way to vacuum is to hold the vacuum handle with both hands at your center of gravity. Keep an upright neutral spine, and walk in a straight line. When you need to turn, move your feet first, then your hips. Do not twist or bend, but stay upright and move in a straight line.

# Don't take NSAIDs and other pain meds:

Non-steroidal Anti-inflammatory Drugs carry obvious risks, such as GI bleeding, and increased risks of cardiac events and stroke. Other pain medications such as opioids have led to recreational drug issues and countless numbers of deaths (Opioid overdose has surpassed Car Accidents in the US on the leading cause of death list). These medications inhibit normal brain function and our chemical messaging system. The American Heart Association has stated that if you are taking NSAID's for longer than 10 days, it needs to be under the supervision of a physician. However, millions of people take NSAID's such as Aleve, Advil, etc. every single day as part of their normal routine and even for "prevention." By doing this you are putting yourself at greater risk for illness and advanced degeneration. The research has shown us that though these drugs can bring down pain and inflammation in the moment, they will increase your risk of degenerative joint disease which will further increase your risks for chronic pain.



The reason is because you are silencing the body's warning signal that tells you what you can and can't do, allowing you to create more tissue damage without any knowledge of doing so.

Research also shows that habitual use of over the counter anti-

inflammatories pose similar risks as Vioxx, a drug taken off the market, due to it CAUSING well over 60,000 deaths. The intestinal irritation that they create will also promote leakage of certain proteins and enzymes into the bloodstream, causing "systemic inflammation" increasing your risk of chronic illnesses like heart disease. If you feel like you need to take something we encourage you to try some specific supplements that can work with your body to naturally decrease inflammation and promote tissue healing, growth, and repair. Ask your chiropractor for specific recommendations.

#### Bend at the HIPS and the knees:

When lifting objects from the ground it is essential to use good squat and deadlift form. This means keeping a neutral spine, creating a good hinge at the hip joint, and lifting with the legs and HIPS. You always hear people say "lift with the knees." In reality, we need to lift mostly with the hips as this is where the power is generated. It doesn't matter if you are bending down to put clothes in the dryer or lifting a cinder block, you should follow the same guidelines when it comes to lifting things lower than your waist. Remember: "hips, knees, neutral spine."

Making sure that you can do a proper "hip hinge" is essential for the prevention and correction of lower back pain. A personal trainer, one of our movement experts, or doctors can help you with this movement. Ensuring that you have good hamstring flexibility is essential for this movement to be productive, so don't forget about stretching and mobilization as part of your regular movement routine. "Always follow our rule of 15's: Warm up for 15 minutes, pull weeds (garden, yardwork, etc.) for 15 minutes, and then take a break and ice for 15 minutes."

# Shoveling on both sides:

One-sided motions are a major contributor to muscle imbalances, faulty motor patterns, and a progressive degenerative disorder known as Vertebral Subluxation. Whenever shoveling snow, dirt, mulch, etc. you need to make sure you are keeping a neutral spine position, bending at the knees, and hips, and alternating back and forth with which side you are shoveling. This can be extremely awkward for some but is important to prevent an injury or aggravate an already injured back.

# Pulling Weeds/Gardening/Yard Work:

This task can be difficult any time it is performed, as it requires bending, pulling, and twisting (all while bearing a load). Most people feel sore after weeding, gardening because it is a motion they don't do regularly. First of all, buy a pad for your knees and switch your posture regularly when performing this task. Don't be afraid to take frequent breaks and stay well hydrated while completing these tasks. Always follow our rule of 15's: Warm up for 15 minutes, pull weeds (garden, yardwork, etc.) for 15 minutes, and then take a break and ice for 15 minutes. Or just hire a 15 year-old and pay him \$15! You choose! If you are able to get in a deep sumo squat this is the safest and most effective way to pull weeds. Remember to keep a neutral straight spine, bend at the hips (hip hinge), and the knees. Point the toes out 45 degrees and angle the knees out 45 degrees. If you gain the strength and flexibility this is not only a safe position but a good stretch and exercise. When you are pulling weeds or working, keep your project between your knees so you can easily work without changing the



position of your spine. If you don't have any significant knee or hip injuries, you should be able to work into this position. If you need a good example of what this looks like, watch a toddler squat down to play, they usually do this movement perfectly.

#### Car Seats and Kids:

To set your children up for long term spinal health it is essential that you let them move. If they are not in the car then they do not need to be in a car seat. The chronic crunched up C-shape created in their spines while in these seats is the opposite of what we want to try and promote for healthy development. Holding their heads up while on their belly "tummy time" helps create and promote the normal C-shape curve in their neck as they learn to balance their head. Crawling is important in the creation and promotion of the lumbar curve, as the belly comes down to the floor and is an integral process in brain development. Then when they learn to walk, this pattern helps solidify the curve system and neurologic circuitry. All of these milestones are important and should not be skipped or implemented early. For example, a child NEEDS to crawl before walking and early walking should not be promoted as the spinal structure and neurologic wiring is not ready for it. In summary to prevent spinal issues from an early age and set your children and grandchildren up for success when it comes to spinal health, take them out of the car seats and let them move. Also help promote the normal progression of development with "tummy time," crawling, and plenty of play.

### Car Seats and Adults:

Not only are car seats less than ideal for children to be in all the time, they wreak havoc on the adult spine both while carrying and taking the seat in and out of the car. My best advice is to leave the car seat in the car and only take the child out of the car when going places. If this is not possible or if you have a sleeping child that you really don't want to wake, take advantage of this Chiro car seat carrying secret: The typical way you may see someone carrying a car seat is by the handle at the side swinging it out to the side of the body. This is just awkward and dangerous to the spine. We want to try and get the car seat close to the body and up towards our center of gravity. In order to do this place the car seat facing you. Bend down and stick your arm through the handle. Then curl your wrist down under the bottom of the car seat so that it cannot slip. Then stand up with a neutral spine lifting at the knees and hips. If you do this correctly the car seat will sit around your waist, closer to your body and center of gravity and will keep the seat from swinging away from your body placing an awkward pull on the spine.

"If this is not possible or if yo<mark>u have a sleeping child</mark> that you really don't want to wake, take advantage of this Chiro car seat carrying secret."

#### Getting into the car:

I bet you never think about how you get into your vehicle. Most people just throw in one leg, twisting the spine, and then drag in the other leg. When they get out they follow the same pattern. If you struggle with lower back pain, stand with your back to the side of your seat. In good squat form sit in your seat. Maintaining a neutral spine pivot your entire body at once swing both legs under your steering wheel while maintaining an upright spinal position. The key is to have no flexion or twisting in the spine. Do the same thing in reverse order while getting out.

### Crawl:

Crawling is a vital milestone for the development of the spine and for proper wiring of the nervous system. If this was a step that someone skipped or they did not crawl long enough you can still implement it as part of neuromuscular integration. Crawling is also important in developing your cervical and lumbar curves that help stabilize your structure and protect your nervous system. Make sure your kids crawl and for the appropriate length of time to prevent any injuries. Exercises such as the "bird dog" and "dead bug" are good exercises for the adult that can mimic this type of motion.

#### Read on your Belly:

This is a great position for children and adults. When we assume the forearm belly position this reinforces the normal lumbar curve, creates some extension in the thoracic spine to reconcile our sitting postures, and it also reinforces the cervical curve. This is a much safer position than the hunched spinal position most people adopt while reading. General rule of thumb: "read on your belly, sleep on your back."

#### Sleeping and Mattresses:

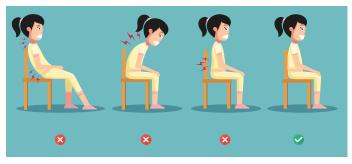
The best mattress to sleep on is one that is going to promote a neutral spine position. You want to find a mattress that is firm enough to keep a straight spine but one that does not create excessive pressure on other areas of the body. This is going to be determined by the individual person's size and build. Mattresses are not a one size fits all, they do have to be personalized to sleep position, weight, and personal comfort. General rule of thumb... "as firm as you can tolerate." My best recommendation with mattresses and pillows is to go Organic. This is obviously more expensive, however from a long-term health perspective, it will massively decrease your toxic load. Just think, we spend one-third of our lives on our mattresses; if they are filled with toxic foams, we are breathing that all night long! Some mattresses and pillows are also treated with harsh chemicals and fire retardants on their surface, further adding to the toxic load. If you can afford organic, make the switch. Urban Mattress in Ft. Collins has some good selections in mattresses and pillows – check them out. There are also many online vendors to buy from, but if you are like me you have to try it out first.

As far as sleeping position, the safest position is on your back, with your knees bent. The best way to achieve this is by placing a pillow under your knees. This will create slack in the large nerves going down the back of your leg and will also help promote a natural lumbar curve.

Your second-best option is to sleep on your side with your knees bent and a pillow between your legs. The pillow between the legs will be especially beneficial to the person with a pelvic/sacroiliac problem because it will take the stress off of those joints while you sleep. Make sure that you have a large enough pillow to support your neck in a neutral spine position. The primary goal with sleep is to make sure that the spine is straight a.k.a. "neutral spine."

#### Workstations:

Sitting for prolonged periods of time is the worst thing you can do for your spine. In fact, sitting has been labeled the new smoking and the majority of people sit for over 10 hours a day. If you have to sit all day you want to have your workstation set up in a fashion so that your screen is straight in front of your eyes (not down or up at an angle). Your keyboard should be set so that your hands can be relaxed and your elbows are bent at 90 degrees. You should have a chair that allows you to sit straight up and the height of the



chair should create a 90 angle at the hips and knees. An exercise ball can serve as a great office chair as it will force you to sit up and will help you engage your core muscles throughout the day, stabilizing the lower spine. There are even chairs on wheels built out of exercise balls which are extremely comfortable. If this is not an option for you, buy an exercise/wobble disc. They are about 12 inches in diameter and a couple inches thick and you can place them on your existing chair. This will also help you engage your core as you sit at your workstation, and you can "wobble" back and forth keeping your pelvic joints mobile.

As stated earlier in this booklet, a better option would be to have an adjustable standing desk that allows you to go from a sitting to a standing position periodically throughout the day. Once again, your screen should be directly in line with your field of vision when you are standing straight up. It is much easier to keep a healthy posture in a standing position. However, standing in one position all day can also be problematic so you will want to get a soft standing desk mat/ anti-fatigue mat to take the stress off of the feet and knees. This is also why you will want to get a desk that aoes from a sitting to standing position, and not one that is fixed in a standing position. Your body will let you know when it is time to switch positions but the majority of your day should be spent standing and moving. Another good option is to stand on a wobble board or an exercise disc while at your desk. This will force you to activate your core throughout the day, helping stabilize the low back.

#### Driving:

Just like with your work station you want to make sure that you are sitting straight up and down, your hips are bent at 90 degrees, elbows at the side and bent to 90 degrees. Make sure that the back of your seat is straight up and the seat cushion is not angled and is parallel with the floor. If possible lift or lower your entire seat so that you can see out of your windshield without leaning forward or bending the neck. Once your seat and posture are aligned appropriately, set all of your mirrors so you can see out of them in your correct posture. While driving, if you notice that you cannot see out of your mirrors it means that you lost your posture and is your cue to sit up and brace the core, or stop and walk for a little bit.

For longer rides, extra lumbar support can be helpful. If you need a cheap and quick-fix to provide some relief find two pair of crew cut socks. Lay all 4 socks on top of each other and roll them up. Then hold them together by wrapping them with a couple rubber bands. If you feel like your lower back is bothering you on long rides, take the sock ball and place it right between the two bumps you feel on the left and right side of your beltline and use that for added lumbar support in your seat.

# Never heat a joint:

When people injure their back, many times their first instinct is to put heat on it. Heat will provide a muscle relaxant effect, however, it is also a vasodilator (widens blood vessels) . Short term, this may make things feel better, but in a couple of hours it will increase stiffness and pain. Since heat dilates the blood vessels it will result in increased inflammation, resulting in more nerve and tissue irritation. When in acute pain, always ice . We always tell your patients, when in doubt, ICE. Ice acts as a natural analgesic and it will also decrease inflammation which will ultimately speed up the healing process.

# "When in doubt ICE."

Always make sure that you have some type of protective barrier between your ice source and the skin to prevent frostbite. Icing should not last longer than 20 minutes. If you need to ice multiple times in a day, ice for 20 minutes, then take it off for 40 minutes, repeating the processes and icing every hour on the hour. This can be extremely beneficial with a brand new injury or back "flare-up." "One of the largest problems we face in society is lack of movement!"

# Safe Sofa?

I know the Lazy Boy is comfortable, but I have never seen a couch that is spinal friendly. If you are struggling with lower back pain, do your best to limit time on the couch or soft living room chairs. Your best option is going to be a solid rocker chair that keeps you upright and does not allow you to slouch. Since these chairs are solid, you will also be reminded to get up and move regularly.

# Golf tips:

Always warm up with some easy light swings to both sides. Perform a one legged deadlift to put your tee in the ground and place and pick up your ball. This means bending at the hip and the knee with one leg while keeping your other leg straight and extending it behind you all while maintaining a neutral spine with no flexion or twisting (this is a great core exercise and may take practice). When done for the day take some time to swing your club in the opposite direction to compensate for your day of a one-sided repetitive motion. (If you swing the club right handed take some swings left handed at the end of the day or between each hole.)

#### Exercise:

Obviously, specific corrective exercises will help stabilize the lower back, specifically the core and pelvic musculature. However, research proves that general exercise can be just as effective as specific tailored plans in relieving lower back pain. One of the largest problems we face in society is lack of movement! We are sedentary as a society, and lower back pain is in part a movement deficiency syndrome.

# Rules around exercise:

- Injury most commonly happens with fatigue, not enough preparation, going too fast, and going too heavy. The key with all exercise is CONTROL and form. Work hard, but maintain integrity through your movements. If you have to slow down or decrease the weight to maintain proper form, then do it.

- Avoid abdominal exercises and back exercises that involve high repetitions of lumbar spine flexion (bending forward at the spine). Do not perform abdominal exercises that involve flexion and rotation at the same time (especially with weight), this is begging for a disc injury. There is a proper way to do a back extension and crunch, however, most people do not know how to do them appropriately. If you need help with these movements or need alternatives please ask our team or refer to Suart McGill's "curl up" exercise as well as his "Big 3" for safe core exercises.

- As a general rule, train movements not muscles. We want to be productive in daily activities, our work, or sporting activities, so train for them. Large biceps do little for you unless your career of choice is bodybuilding. You want to have endurance, power, strength, agility, stamina and durability in movement patterns such as squats, deadlifts, lunges, pull ups, etc. Involving multiple joints and muscles in your workouts will serve you well as opposed to isolating one muscle group and creating imbalances.

- Listen to your body! If it hurts, don't do it.

- Always start with a warm up, a 10-minute light jog is a great general warm up

- Stretch after your workout, not before



# Reduce Systemic inflammation:

Chronic low grade inflammation is lurking in the large majority of our population. This is a cause, contributor, aggravator, and promotor of all chronic diseases such as Heart Disease, Arthritis, Cancer, Digestive Disorders, Immune Disorders, and PAIN Syndromes. Carrying excessive body weight is a sign and symptom of excessive inflammation and obesity creates a two-fold problem for the joint pain sufferer. The added weight stresses the joints within the body more and the inflammation contributes to tissue damage, nerve irritation, and excitation of pain receptors. This not only contributes to increased pain but accelerates any degenerative processes. The major cause of inflammation in our population is the way we eat. Grains, Dairy, Sugar, feedlot meats, and bad fats/industrial seed oils are the base of the Standard American Diet (SAD) and they all contribute to inflammation and chronic illness. The science and the Dr.'s at Vital Life Chiropractic recommend an Alkaline/Paleo Diet as part of a healthy lifestyle. For many people, this is a confusing space and can be extremely difficult. We also recommend the diets listed on Dr. Axe's website. For starters, we recommend simply choosing one and sticking to it 80% of the time.

# GET ADJUSTED:

This one is obvious! To prevent lower back pain one of the best things you can do is get under regular chiropractic care. To correct lower back pain, the best step you can take is to get under regular chiropractic care. By improving the alignment and movement of your spine this takes stress and irritation off the surrounding soft tissues, decreases inflammation, restores range of motion, and reduces nerve irritation. This is the best way to reconcile your traumas and your day to day bad habits.



# Dr.'s Tips Dr. Zak Alfstad

Dr. Zak had originally aspired to attend medical school, but after being poisoned by a prescription acne medication he knew that he did not want to be a part of possibly causing someone else that pain. He knew upon entering chiropractic school that he had chosen the right path.

- Keep your adjustment rhythm
- Take frequent walking breaks if desk-bound
- Replace chair with an exercise ball or a standing desk
- Start and keep a regular fitness program
- Do daily spinal hygiene and corrective exercises (we will give you these)
- Set mirrors in your car so you can only see out of them with perfect posture. When you cannot see out of your mirrors anymore, you know it's time to sit up straight.
- Pick a physical hobby that requires you to be outside moving
- If wearing a tool belt, switch to a tool harness
- Don't pack backpacks with more than 10% of body weight and keep the heavy items closest to the body, cinch the bag up so that the bottom of the pack does not go past the top of your bottom
- Limit all tech time including TV, tablets, video games, movies, computer time and cell phones
- Maintain a positive mental outlook
- Eat more whole, real foods than the bad stuff.
- Drink enough clean water