

# BACKS DO NOT JUST “GO OUT”

Jon Burras

Imagine reaching for a can of soup on a shelf high above. You might strain a bit to extend your grasp. Suddenly, and for no apparent reason, you feel a sharp pain in your lower back. A raging “knifelike” pain rips through your spine. You crumble and drop to your knees. Beads of sweat immediately begin to pour from your brow. Your breath is ripped away as you grimace in pain. You are frozen in your painful deluge. You dare not move, bracing yourself from the gripping pain. As you lay in agony on the floor you wonder why this terrible ordeal has happened to you.

If this frequent episode has ever happened to you then you know about that horrible pain. The pain is like Jack the Ripper coming to town. You fear venturing outside or too far from home, lest the grim reaper of back pain return. You wonder how this could have happened to you. You cannot understand why your back has suddenly decided to “go out”.

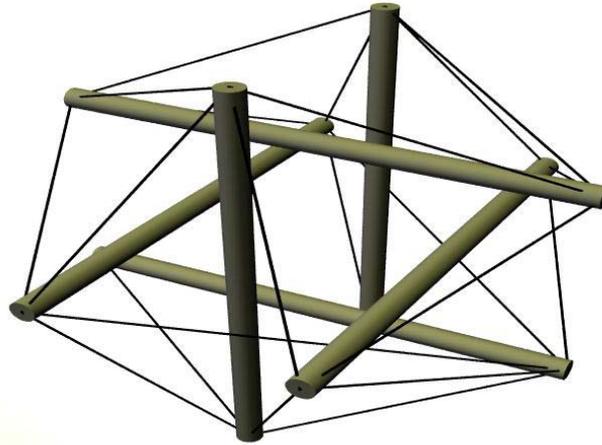
Unfortunately, the cruel joke is on you. Despite what many medical authorities might teach, the back does not just “go out”. You are not the victim of your body and the butt of an angry God. A whole series of events has occurred over time to lead to your back exploding in pain at the slightest twist. Reaching for a can of soup or bending down to pick up that box was just the “straw that broke the camel’s back.” Your back has been out of balance for a long time. You have just chosen to ignore the warning signs along the way.

## **Anatomy of the Back**

When we think about our back we are often swayed into believing that the back is a specific location or a place. Just like Italy or France have specific locations on the globe we often consider the back to have geographical coordinates in our body. The back is not necessarily a place. Rather, the back is a function.

I like to think of the back as an organized system of muscles, bones, ligaments, tendons, and fascia that begins around the bottoms of your feet and ends at the top of your head. Somewhere in the middle is where we commonly refer to as the “back”. This anatomical system provides a network of cables and pulleys, designed to lift us up and provide movement in our life.

The human body is not a series of blocks stacked one on top of the other, as many have suggested. This model teaches us that our skeleton is the framework that holds us upright. This is not true. One of the reasons bones exist is so that the muscles and fascia can anchor onto them to provide us with all the lift we need. We are more like a *tensegrity* model than a stack of blocks.



Tensegrity Model

A tensegrity model is a series of cables and pulleys. Within our bodies bones are places where the muscles and fascia can anchor onto. When these cables are in balance the system has integrity. When the muscles and fascia become overly tightened in one or several areas then the whole integrity of the system becomes jeopardized.

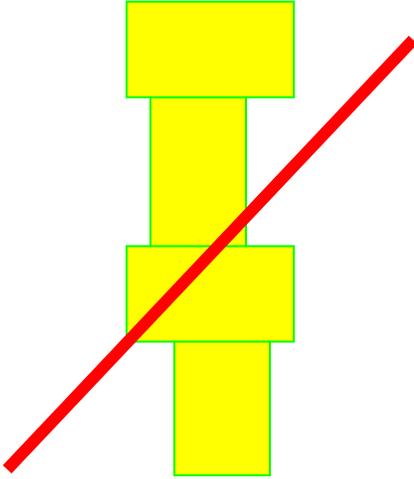
Bones are held in place by the tensional pull placed on them by the network of muscles and fascia. Bones do not move out of place by themselves. Something is pulling on the bones to create a distortion in the balance of these cables. The body is much more like a suspension bridge than a concrete building. The roadway of the bridge is lifted up by the tension from the cables. The body is not a pillar like a tall skyscraper. The body is a series of interconnected cables and pulleys.

## **Anatomy of Back Pain**

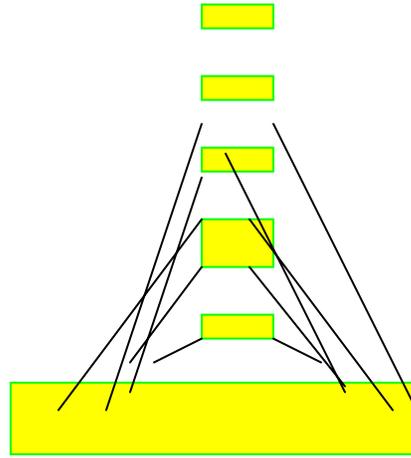
### **1. Beliefs**

The beliefs that we carry with us often dictate the course of action that our body will take. To heal or to remain frozen in pain are often choices that begin with our beliefs. These beliefs can be wide-ranging and diverse but are still instrumental in our recovery.

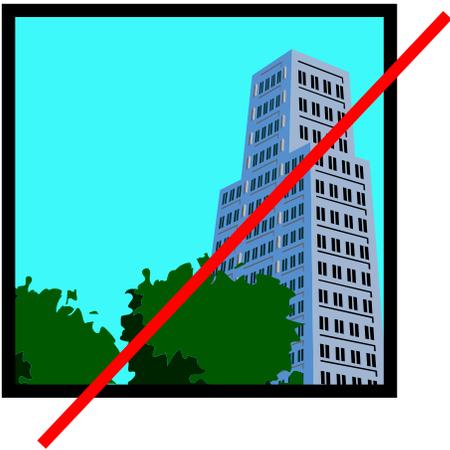
A person who holds the belief that it is not acceptable to express one or all of his emotions might have a difficult time healing. He might use this belief to contract his own muscles to hold the emotions in tightly. Muscles are used to express emotions. Muscles are also used to repress or hold back the wave of emotions. It is very common for someone who holds the belief that it is not acceptable to express anger to tighten up his own back muscles in order for the anger to not escape from him. In this case the belief has begun a chain reaction of events. Some other beliefs that are common initiators of back pain might be that it is not okay to wiggle your hips, move your body rhythmically, or the belief that one must always remain in control. Yes, it might be hard to imagine, but back pain might originate with your beliefs.

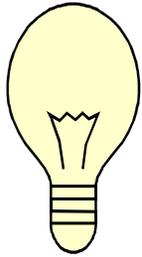


Column theory



Tensegrity model

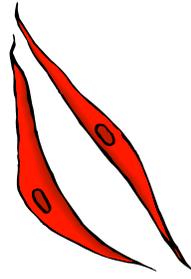




1 Beliefs

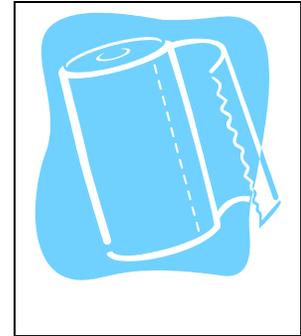


2. Stress  
Repression  
Physical Trauma



Muscle cell

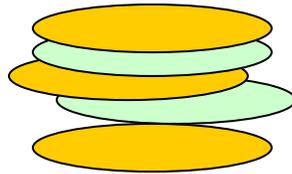
3. Muscles Shorten



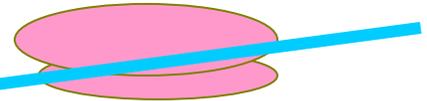
4. Fascia hardens



5. Bones pulled out of place



6. Disk compression



7. Nerve Entrapment

## **2. Physical Trauma, Stress, Repression**

The three primary forces that affect us the most in our lives are Physical Trauma, Stress, and Repression. It is these forces that coincide and continue to throw our bodies out of balance, leading to back pain.

### **Physical Trauma**

When we bump ourselves, collide with another object, or fall down we are said to experience physical trauma. This trauma is the energy of impact as it comes in contact with us. The more strongly we experience an impact the more physical trauma is stored within us. Often, our backs take the brunt of this trauma.

For instance, you are working on your roof and you slip and fall. Your body careens ten feet to the ground. You are in agony but a little surprised that you are still alive. After a few anxious moments to catch your breath and a laborious trip to the emergency room for an X-ray, you feel relieved. You are told that nothing is broken. With a few pain pills in hand you hobble home. In a few days most of the pain has subsided. You assume that this episode is behind you.

Not so fast. Just because an X-ray machine cannot detect anything wrong does not give you a clean bill of health. The energy of impact from the fall has lodged in your back. There is a muscle memory being created that prevents the back muscles from letting go. The rest of your body is now compensating by tightening up other areas to get you around.

Every fall and impact that has ever happened to you is most likely still in your body. Each car crash and sporting blow has settled into your body like a sponge soaking up water. Often the back muscles become the primary culprits in this holding. While not detected by Western medical devices your body is significantly out of balance. You are now locked into a distorted pattern that will keep you stuck at the level of that event. Your body may continue to brace itself from the fall, even years after the initial incident.

### **Stress**

Nature gave us stress to ward off any physical danger to us and to help us survive. It is our Stress Response that quickly moves us away from danger and helps to protect us. Unfortunately, most of our present danger is not an actual life-threatening event but an imaginary danger experience. Instead of being threatened by a wild tiger now most of us are threatened by not having enough time to do all the things we want to do.

Whether real or imagined, our bodies still respond to danger in the same manner. One of the ways we respond to a danger stimulus is to tighten our muscles. Often these muscles include those that support the back. Many people continue to suffer from debilitating pain in their backs because they are locked into their Stress Response. Their body is hyper-alert to danger. Most often they are worried about something that is not a real danger, but an imaginary life-threatening experience.

As the body remains frozen in the Stress Response, the muscles hold on even tighter. The opposite of stress is relaxation. For the back muscles to let go it is often necessary to enter into our Relaxation Response, reminding our body that the danger has passed and we

can relax now. It is through the state of relaxation that the body will let go of its holding and come back into balance.

### **Repression**

Repression is a behavior of holding on to emotions and not letting them out. Emotions are a form of energy that need to flow out of us. We use our muscles to express these emotions and release them. We also use our own muscles to hold back these very emotions from being discharged. Often we hold this repression in the back muscles.

Muscles holding on tightly are often doing so in order to prevent our emotions from leaking out. Back pain is often created when these muscles do not let go. Our own muscles become the damn that prevents us from releasing our emotional energy.

### **3. Muscles Shorten**

As we have previously seen muscles will shorten for a variety of reasons. While a behavior like this is in and of itself not a problem, the fact that the muscles remain in a shortened state for a long duration becomes a significant problem. We begin to imprint a memory of holding on into the muscles and nervous system. We continue to reinforce this behavior. In a way we create our own cast around our own muscles. Muscles will seldom have the opportunity to relax and return to a healthy state.

### **4. Fascia Hardens**

Fascia is a seran wrap like substance that surrounds and passes through each and every muscle, (as well as many other parts of our bodies). As the muscles remain tightened and shortened for a long duration the surrounding fascia will begin to harden like glue. This hardening prevents the muscles from completely relaxing as well.

As the fascia in your back begins to harden it also begins to dry out, along with the muscle tissue. Once this happens your fascia and muscles start to take on a “beef jerky” like quality. Movement is necessary to keep the bodies’ tissues hydrated. A dried out muscle/ fascia system begins to feel congested and stringy. As fluids leave the ability for the tissues to accept nutrients and remove waste products is also hampered. As well, the ability of energy to be transported through the tissues becomes compromised.

### **5. Bones Pull Together**

One of the primary purposes of bones is to provide a place for muscles and fascia to anchor onto. The cable system of the body, as represented by the muscles and fascia, connect to the bones. If these muscles and network of fascia are already shortened and tightened they will begin to pull the bones closer to each other.

Bones are held in place by a balanced system of cables and pulleys, as represented by the muscle/ fascia system. Any disruption in this system will create an imbalance in the bones. Bones do not move by themselves. Something is pulling on the bones. That something is the muscles and fascia. If shortened, the muscles and fascia will create havoc in the interconnectedness of the skeletal system.

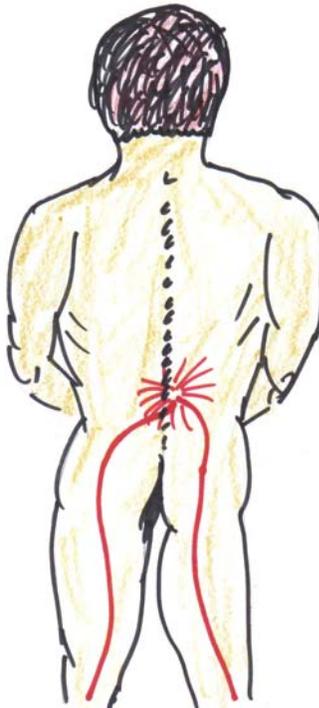
## 6. Disk Compression

As the bones begin to pull together you begin to have physical changes starting to occur in the bones themselves. The spinal vertebrae are pressed together and the spongy cartilaginous disks that reside between the vertebrae may begin to bulge out to one side. This is often called a “slipped disk” or a “bulging disk”. Once most or all of the fluid in the disk is pressed out by compression the vertebrae in the spine often begin to grind together. This is referred to as bone on bone. Often called “crepitace”, this bone grinding on other bone begins to wear away the bone.

Many people often shrink in size through the compression of their spinal vertebrae. This has little to do with aging. It does have to do with the forces that are squeezing the fluid out of the disk and causing the vertebrae to be pressed together. (This process can also be reversed and one’s natural height returned once the pattern is corrected.)

## 7. Nerve Entrapment

Within the spinal vertebrae emerge nerves that travel to remote areas of the body. As these nerves pass through the compressed disk space they are often inflamed by the pressure around them. This is where most back pain is felt. The nerve does not have enough space to pass out of the spine freely. Often, one of the primary nerves in the lower back is “pinched” in this compression sequence. This creates a knifelike pain that drops one to his knees in an instant. Any movement only adds to the agony. Pain or numbness shoots down one or both legs. This nerve is called the Sciatic Nerve and the condition is referred to as Sciatica.



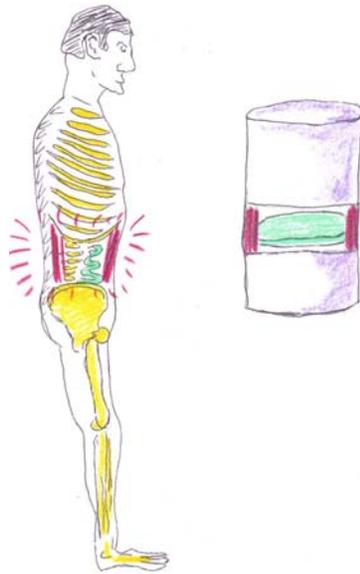
**Sciatica**

## Myths of Healing

There are many myths and much misinformation when it comes to healing from back pain. Many times back pain sufferers are forced to endure a lifetime of even greater pain inflicted by the treatment choices that they choose. Many of these myths are promoted by mainstream physicians, personal trainers, and medical clinics. Unfortunately, when we do not update our mythologies, we continue to pass on outdated information. When it comes to healing from back pain this is exactly what continues to happen. The following are some of the myths that continue to be spread.

### 1. Tighten your stomach to protect your back

A common myth that many believe to be true is that if your back hurts then tighten your abdominal muscles. Unfortunately, when you do this you not only do not correct the initial problem you end up making it worse. The abdominal cavity is like a barrel. You have muscles on the front, sides, and back. If the back muscles are tight it is pulling this barrel even tighter. By contracting the front of the body you are now magnifying the tightness in the trunk of the body. Not only have you squeezed your abdominal cavity even tighter you have added further compression to your spine and underlying organs. The pain may be gone, (because you have stabilized the trunk), but you have healed very little.



### 2. If there is no pain then you are healed

Pain is an indication that something is wrong. We are warned by our body to take action to correct a harmful situation. Just because you are not in agony does not mean that you have healed the problem. If left uncorrected, the body often shuts down nerve impulses after awhile and the area takes on a numb feeling. You may be numb in the area that once caught your attention with tremendous pain. Lack of sensation in an area is not necessarily an indication that the problem has gone away. It may mean that the body has stopped sending nerve impulses to the muscles.

### **3. Surgery is the only option**

Surgeons love to operate. There is a common belief among the surgical community that surgery will fix almost anything. Unfortunately, this is another myth. There *may* be times when surgery to correct a back injury becomes the best choice. This may include fusing damaged bones together or splinting the space between the vertebrae after a serious car accident. Those times are rare. Most people who elect to have back surgery do so unnecessarily. They are often far worse off then when they started.

### **4. Spinal manipulation alone will heal back pain**

Spinal manipulation, when thought of as a relationship between parts, is best served when those other parts are addressed as well. When treated holistically, the bones are realigned and the underlying causes contributing to the misalignments are addressed, as is practiced by Applied Kinesiology. Bones being out of alignment and pressing on nerves are not the first thing to have happened in your back crisis. It is one of the last. In order to heal your back you must move beyond the symptoms.

### **5. Back pain is about the muscles in your back**

We often think about back pain as a fire in the lower back area. We assume that something is wrong with the muscles located just above the sacrum. Back pain may be experienced in the lower back region but it may also originate from someplace else.

For instance, the fact that you broke your left foot in a horse riding accident when you were twelve years old might affect your back by the time you are in your mid-twenties. Tension is pulling from the hardened connective tissue in your foot all the way up into your left leg and into your back. This may create an imbalance in one hip and eventually lead to your pain. If one just thinks about the back when dealing with back pain then the real problem might go unnoticed. Compensations from the original injury begin to show up in other areas of your body, including your back.

Repetitive activity over time might also be the source of back pain. Many times, tight hamstrings caused from years of running and other sports, leads to back pain.

### **6. Fitness will heal back pain**

Fitness is a concept developed by the media and clothing manufacturers to make us look a certain way. Most often, fitness has very little to do with health. In fact, the fitness industry is more closely aligned with the beauty and cosmetic industry than with the health and wellness business.

Many medical authorities and personal trainers continue to promote fitness as a tool to heal back problems. They incorporate strength training as one of their primary tools. What ends up happening is that after the back is already tight these methods only add further tightness to the torso. Abdominal “crunches” and back tightening exercises are the norm in this case. Unfortunately, more tightness does not necessarily create health in an already tight muscular system.

There is a common myth that a tight core will create a healthy back. This is not true. A tight core creates a wall of rigid musculature and hardened fascia tissue. One may feel less pain. This is because you have now built up a wall of hard muscles around your back

to prevent it from moving. You have not healed from the source of your back pain though. You have just added another layer of compensation.

### **7. Back braces cure back pain**

Placing a brace around your mid-section may help you make it through each day. However, this will not heal the nature of your back problem. Braces only keep something from moving. In order to have health movement is necessary. Braces only weaken back muscles by not allowing them to move. In the short run, these braces may be very helpful just to get by. In the long run, they are detrimental to the back's health.

### **Treatment Choices**

The best way to treat back pain is to attempt to go back to the source of the initial pain and work from there. This may take months and even years to achieve this goal. There are three primary treatment options that I would suggest. These could be used separately or in conjunction with each other. It is best to try to blend the techniques but doing something is better than nothing at all.

### **Process Work**

Process Work entails getting to the source of your pain. Is it an emotional wound that locks your back in place? Is there a physical trauma in your body that causes the pain? Is there an old injury in your leg or foot that initiated the problem? Has your back pain been compounded by doing the wrong types of exercises?

Process Work could involve a detailed analysis of your history. How many car accidents have you been in? Where did you land when you took that fall while skiing? Which emotions might you repress by tightening up the back muscles? Working with a body/mind therapist, kinesiologist, or mental therapist are often good supportive roles in this process.

### **Expansive Movement**

Movement to heal must be expansive in nature. This means that the intent is to lengthen the soft tissue. Most movement in our culture is contractive in nature. It tends to tighten and shorten the muscles. This only makes the problem worse. Expansive movement will begin to lengthen already shortened muscles.

A couple of key techniques are yoga and Feldenkrais. Take a beginning yoga class or a specialty class like "Yoga for your Back". Enroll in a Feldenkrais class or get a private lesson. Both of these will help reeducate your back. The back muscles "know" how to be tight. You must reeducate them on how to be relaxed.

### **Bodywork**

A very important tool is quality bodywork. The muscles and connective tissue are in spasm. Massages and hands on therapy will tend to release the rigid patterns. Usually a series of work might be needed to achieve the desired results. With time the muscles will soften and the nerve being compressed will begin to let go. A skilled bodyworker may be able to trace the source of your pain, perhaps originating in a shoulder or a knee. Where you feel the pain is often not where the injury is coming from. Acupuncture and other

hands on modalities may also be helpful. A visit to a chiropractor to realign the bones might also work well in conjunction with other types of bodywork.

### **Conclusion**

By the time you are laying on the floor in agony there have been many missed opportunities to heal. Remember that pain is only a messenger reminding us that there is something out of balance. Coming back into balance is not just about removing the pain and keeping your back braced for life. Full functional movement and a balanced muscle/fascia system are also important.

It does not matter how long you have suffered from back pain. What matters is your willingness to do something about the problem and seek out the resources to accomplish this. Doing nothing or doing the wrong types of treatments may only make matters worse. The choice is yours. You do not have to live your entire life with back pain. You do have to take the steps to do something about it.

## Resources

[JonBurras.com](#) Articles and a host of information on holistic healing.

Yoga Place and Yoga Works, regular yoga classes as well as Yoga for your Back class.

[YogaPlace.com](#)

[Upledger.com](#) Cranial Sacral bodywork website and referral source.

[Rolf.org](#) Rolfing bodywork referral source

[Rolfguild.org](#) Rolfing bodywork referral source

[Hellerwork.com](#) Hellerwork bodywork referral source

[Feldenkrais.com](#) Movement and bodywork referral source

[NETMindBody.com](#) Applied Kinesiology referral source