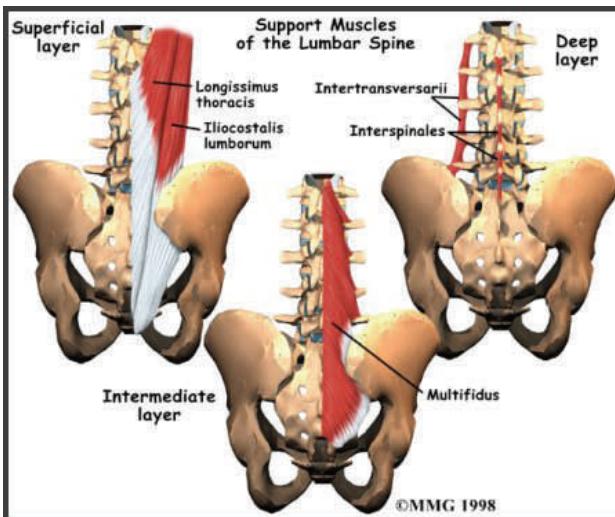


# A Patient's Guide to Low Back Pain



## Who is affected by Low Back Pain?

Eighty percent of people will have low back pain in their lives. Nearly all who have low back pain once, will have it again.

## What parts make up the Low Back?

The lumbar spine is made up of five vertebrae (bones of the spine). Between each of these vertebrae are small shock absorbers known as *intervertebral discs*. These discs protect the spine against the daily strain of gravity or any activity that puts a force on the spine, such as bending or lifting. The nerve roots that exit the lumbar spine travel to the lower limbs and pelvis. This is why people with low back pain can also have symptoms that run down the legs or into the feet. The lowest vertebra of the lumbar spine, L5, connects to the top of the *sacrum* (tailbone), a triangular bone at the base of the spine that fits between the two pelvic bones. Where the pelvic bones and sacrum connect are called the *sacroiliac joints* (SI Joints). The SI joints are the largest joints in the body and are responsible for transferring the weight of the upper body into the legs. The lumbar spine is supported by ligaments and muscles that connect the bones of the lumbar spine to the sacrum and pelvis. There are three layers of the muscles of the low back. The outermost layer is the *erector spinae* that run the length of the spine and are responsible for gross movement. The middle layer consists of the *multifidus* which connects the bones of the low back with the pelvis and sacrum. The deepest layer of muscles coordinate the actions of the muscles of the abdomen with those of the low back. This helps hold the spine steady during activity, giving the entire structure stability.

## What causes Low Back Pain?

An injury to any of the above listed structures could cause low back pain. The vast majority of back problems are a result of wear and tear on the parts of the spine over many years. One of the more common causes of pain in the low back is due to a lack of proper motion of the spine and the SI joints. This improper motion will cause a change in proper biomechanics and increase muscle tension. Changes in biomechanics cause increased stress, internal pressure and increased friction that leads to inflammation, and eventually the formation of scar tissue within the low back musculature. Scar tissue restricts the translation or movement of adjacent tissues, causing friction, and leading to inflammation and pain.

## What is the treatment for Low Back Pain?

In our office, we use a combination of chiropractic treatments, Active Release Technique (ART) soft tissue manipulation and rehabilitation to allow restoration of proper biomechanics to the spine, sacrum and pelvis.

## Ways We Treat Your Low Back Pain:

### Chiropractic

- Chiropractic is a natural healing approach that promotes a healthy, pain-free lifestyle without the use of drugs or surgery. An adjustment is a hands-on therapy that delivers a controlled pressure that restores proper motion to a restricted joint.

### Active Release Technique (ART)

- ART is a manual therapy that corrects muscular and soft-tissue problems caused by the formation of adhesive or scar tissues. Adhesions/scar tissue occur naturally in the body in response to overuse or cumulative trauma.

### Flexibility

- Good flexibility enables muscles and joints to move through their full range of motion. Poor flexibility leads to a higher chance of injury to muscles, tendons and ligaments.

### Strength

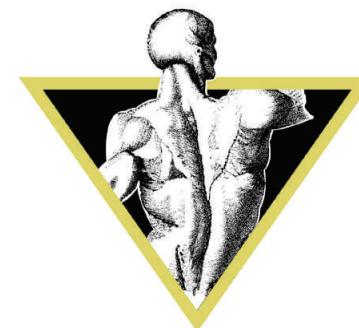
- Strength training is essential for the rehabilitation of any injury. When new tissue is laid down to repair an area, it is very thin and weak. If this tissue is not properly re-strengthened, it can lead to re-injury.

### Proprioception

- Proprioception describes the body's ability to react appropriately to external forces. It also helps rebuild proper motor patterns of the body. Proprioceptive exercises form the basis for the agility, strength, and endurance for complete rehabilitation.



With our combination of different treatments, resolution can be seen in over 90 percent of low back cases. Effective treatment of the back and hips, or any soft tissue injury, requires an alteration in tissue structure to break up the restrictive cross-fiber adhesions and restore normal function to the affected soft tissue areas. When executed properly, this process substantially decreases healing time, treats the root cause of the injury, and improves athletic performance. Active Chiropractic and Rehabilitation Clinic is very successful at treating this type of injury. Our therapies remove restrictive adhesions between both the superficial and deep tissue structures along the entire kinetic chain. This comprehensive approach creates a complete, time efficient healing process.



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