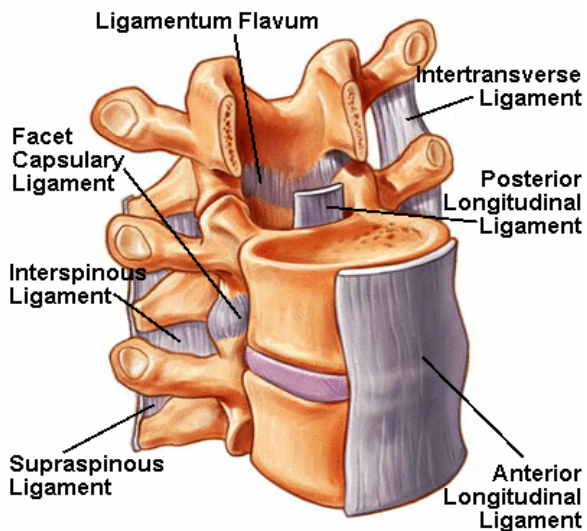


## Taking Care of Your Back

In modern society, back pain is the most common cause of lost activity among adults under 45. It's estimated that over 80% of all workers suffer back pain at some time during their careers.

### Your Back

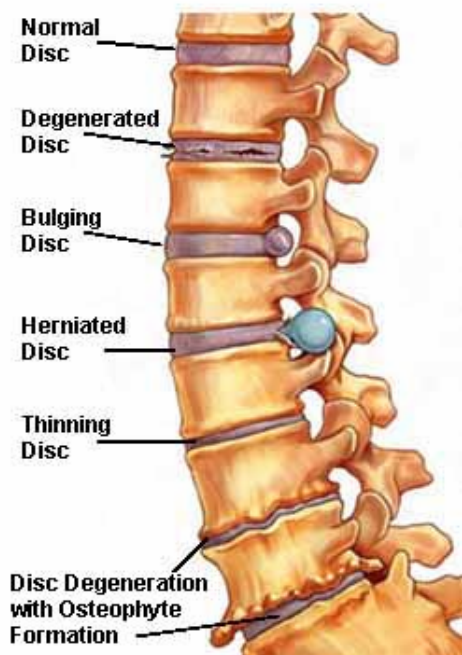


Your body depends on the spinal column for structural stability. The shoulders, rib cage and pelvis are anchored to the spine for strength and support. You also depend on the spine for mobility- the ability to twist, bend and flex your body for different activities.

The spine is constructed of 24 jointed bones, or vertebrae, stacked from the pelvis to the skull in a gentle "S"-curve. Between the vertebrae are spongy discs that cushion the bones and bond the stack together. Pairs of bony projections, called *facets*, connect the rear of each vertebra to form a series of interlocking joints. The column is wrapped tightly in ligaments and supported by muscle.

Openings in each vertebra align to form a protective tube, the *vertebral canal*, for the spinal cord. Major nerves, connecting the spinal cord with other parts of the body, pass through spaces between the vertebrae.

### Examples of Disc Problems

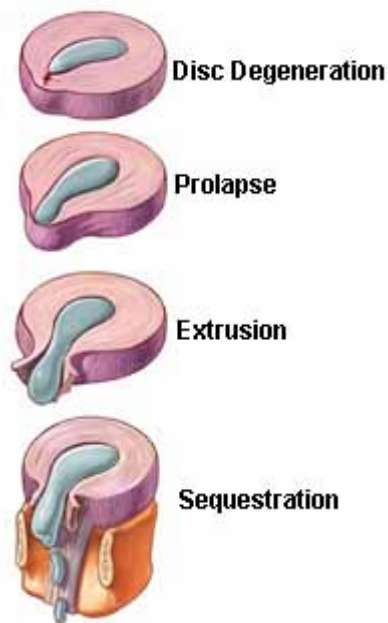


### Your "Bad" Back

By far the most common site of back pain and injury is the lumbar region - the low back. Your lumbar spine bears the brunt of bending, stooping, sitting and worst of all, lifting. Low back pain usually comes from degenerative changes to the lumbar discs.

With aging, the disc material dries out, shrinks and loses some of its "spring". Under the stress of lifting, coughing or sitting improperly, the deteriorated disc can bulge or even rupture, spilling its spongy pulp into the surrounding space.

This *herniated* disc can press on the adjacent nerve root. This irritation can cause pain, numbness and tingling, or painful muscle spasms. Loss of disc thickness can also cause wear and arthritic enlargement of the facet joint, constricting the space between the vertebrae leading to abnormal pressure on the nerve.



## Avoiding Back Injury

Everyone is vulnerable to back injury, but certain occupations present added risk. Truck drivers sit for long periods while being jostled by vibration; they lead in back injuries. Nurses are also at high risk; bending over bedsides and lifting and moving patients are hazardous to *their* health.

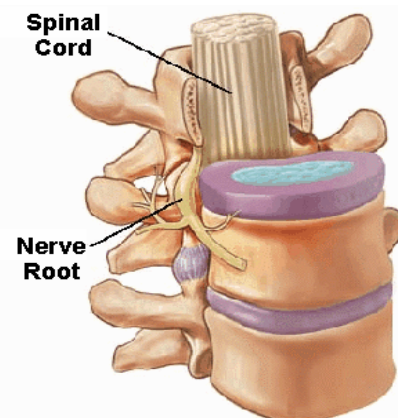
Everyday activities can be dangerous; even sitting puts an added load on the lumbar spine! We can't avoid every stressful activity. The key to avoiding back injury lies in minimizing the risk inherent in any activity by applying these simple principles.

**Work on your posture.** Don't slouch. Maintain the natural "arch" in your lower back whether standing or sitting.

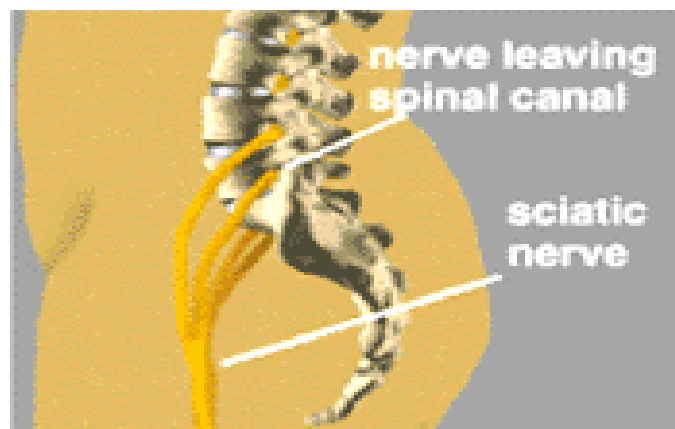
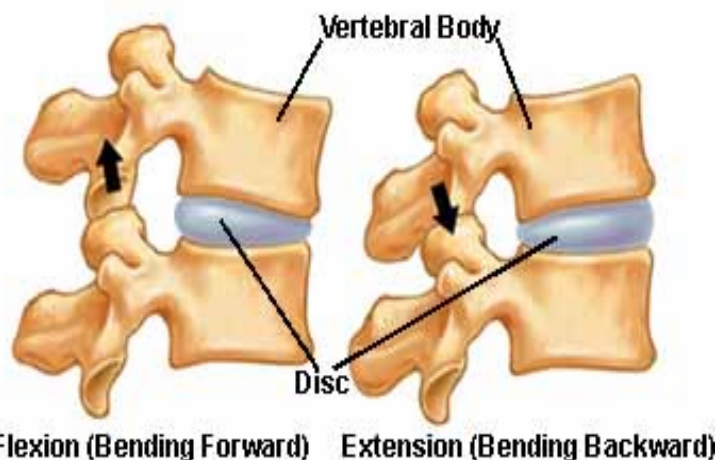
**Lift with your legs.** Don't bend over the object, bend your legs and keep your back straight. And most important, don't twist as you lift!

**Sit with care.** Prolonged sitting in one position is a back hazard you might not suspect. Lumbar support and periodic breaks to move around are essential.

**Control your weight.** Being overweight, especially if you have a "pot belly", puts added stress on your lower back.



## Facet Joints in Motion



## Usual symptoms of back pain include:

- Pain in the back and occasionally in the legs
- Difficulty in moving e.g. can't straighten up or uncomfortable sitting
- Sleep can be disturbed with pain rolling over
- Slumped positions such as sitting in a car seat cause pain
- Pain sometimes on coughing and sneezing
- Pain on weight bearing
- Changes in sensation in the leg

## What Physiotherapy can do to help

- Manual therapy to get the spinal segments moving
- We use acupuncture or electrotherapy to relieve muscle spasm and promote healing
- We retrain your posture
- We strengthen the muscles of your back to support you
- We advise you on physical fitness and ongoing activity
- We advise you on ways to prevent recurrence of back pain