

## How Can Physiotherapy Help

- Physiotherapists are specifically trained in musculoskeletal assessment. This makes them the ideal health professionals to treat injuries or problems with joints, bones, muscles, tendons and ligaments. They can recognize contributing factors to back pain
- After a detailed **assessment**, a **treatment plan** would be designed to meet the needs and goals of the client. This may include:

### Education

- on the condition, injury
- on proper posture, body mechanics with specific functional activities required (ie bending, lifting, reaching as well as ergonomics for various work actions)
- on prevention of re-injury
- on assistive devices such as braces, orthotics, back supports

### Manual Therapy

- techniques to help assist the body to loosen and promote proper healing of specific tissues such as fascia, muscle, ligaments, nerve, bones and joints

### Modalities

- machines used to help decrease pain/swelling and promote healing ( ie ultrasound, acupuncture, TENS, heat)

### Exercises

- stretching, strengthening, stabilizing, balance, co-ordination, aerobic conditioning

**For more information or, should you require physiotherapy treatment, please contact**

### *Physiotherapy Plus*

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PHYSIOTHERAPY. IT'LL MOVE YOU

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# Back Pain



## What You Should Know

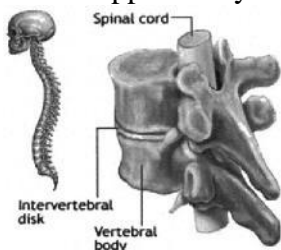
**Look inside to see how Physiotherapy can help you to..**

- Return to normal activity as soon as possible
- Prevent re-injury or disability.

## How your Back Works

Your back is a complete system of interlocking components

- The bones or vertebrae that make up the spinal column are separated by discs, which act as shock absorbers that support and distribute the weight of the body
- The spinal cord is housed and protected within the spinal column and major nerves, pass through spaces between the vertebrae
- The spinal column is wrapped tightly in ligaments and supported by muscle



- Deep muscles help stabilize the spine (keep the vertebrae in place) while larger muscles produce the power to move and lift things. It is important to have proper co-ordination of the muscles to prevent injury.

*'No two individuals with back pain have the same problems and therefore individual management plans are developed'*

## Causes of Back Pain

- **Postural Stress** – poor posture stresses your spine. The soft tissue becomes overstretched, muscles tire and joints and nerves are put under pressure.
- **Muscle strains** – excessive work loads, repetitive strain, quick movements can cause muscle injury and activate protective mechanisms which keep muscles in spasm.
- **Disc Injuries** – discs are the shock absorbers of the spine, and are anchored to the vertebrae. The disc has a soft jelly-like interior that can bulge, herniate or even rupture in response to such mechanical stress as lifting or twisting.

The disc is especially prone to injury when small stabilizers of the spine do not control a neutral vertebral position

- **Joint** – a joint can be 'kinked' (displaced), restricted or move excessively producing strain on the ligaments surrounding the joints.

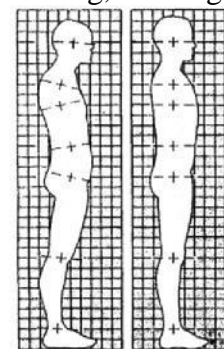
**Nerve** – abnormal pressure on the nerve can produce damage to the nerve, giving pain, numbness/tingling, or inability to activate muscle or reflex activity. The nerves in the low back supply the back and the legs

Other – inflammatory conditions (arthritis) kidney dysfunction, tumors, infections could also cause back pain

## Tips to Prevent Back Pain

**Lifting** – hold object close to your body, tighten your stomach muscles and use the strong muscles of your legs as you lift the object.

**Posture** – think tall with your chest lifted, shoulders relaxed, chin tucked in and level. Posture should be stable, balanced and relaxed when sitting, walking or standing.



**Sitting** – don't sit for long periods of time; stand up, stretch and walk around. Use a back support in your chair if necessary, but make sure it fits you. Make sure your seat is the proper height.

**Exercise** – a healthy body weight puts less strain on your back

**Driving** – position your car seat so that your back is supported and your legs are relaxed and slightly bent. If you need extra lower back support, use a lumbar roll or rolled up towel

**Sleeping** - Your mattress should be firm enough to support you in a neutral position