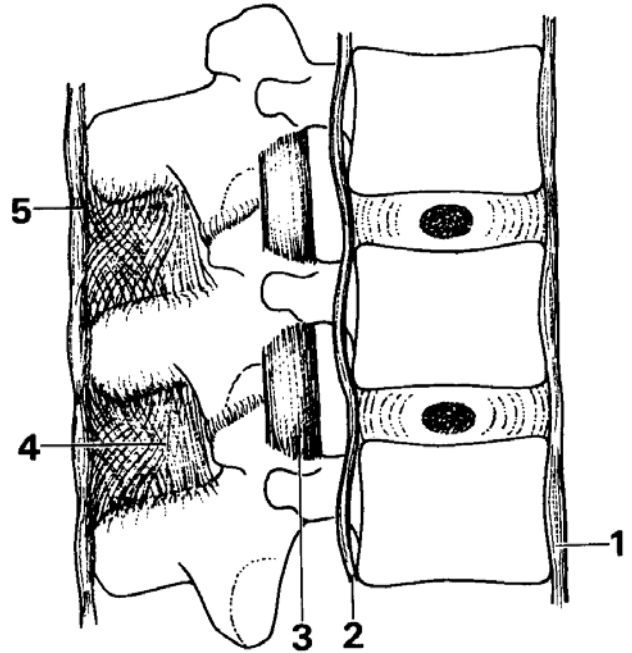


“My Aching Back!”



STATISTICS

- Every year, more than 1,500,000 Canadians see their family physicians about back pain; at least 8 out of 10 people will experience some degree of low back pain at some point in their lives!
- These numbers are mind-boggling, but they are REAL.
- Back pain is by far the most common problem we as physiotherapists treat in our everyday practices.
- There are many opinions about why back pain is so common and many different ways to deal with back pain.
- However, one thing is certain ~ **Prevention** is the key to a healthier back.
- This includes education in various areas - posture, lifting, fitness, dealing with pain, proper treatment, and the list goes on!
- The spine consists of 24 mobile vertebrae stacked one on top of the other.
- The majority of back problems occur in the lower five vertebrae - **the lumbar spine**.
- The lumbar region bears the majority of 'the load' with bending, sitting, stooping and worst of all lifting.

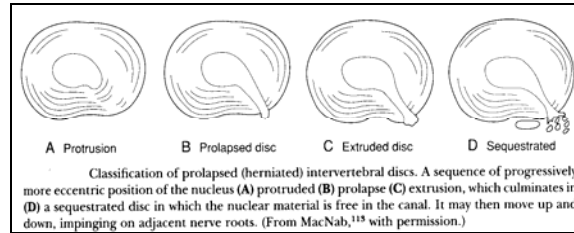
SPINAL HEALTH DEPENDS ON:

- Genetics
- Muscle strength and muscle balance
- Flexibility
- Posture
- Body weight
- Adaptation to stresses

SOURCES OF BACK PAIN

Intervertebral Discs

The spongy cushion between the vertebrae

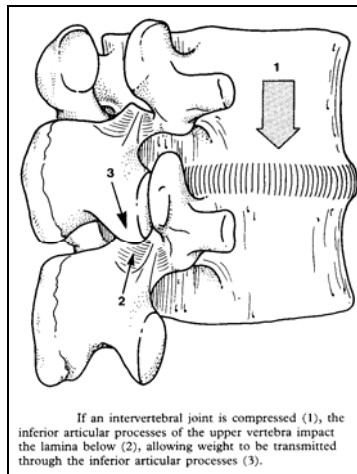


PRESSURE WITHIN THE DISC

Condition	Pressure (kg)
Relaxed standing	95
Sitting	125
Lifting 20kg --good technique	240
Lifting 20kg -- poor technique	400

Facet Joints

The bony 'link' between vertebrae forming interlocking joints



**Joint Capsules, Ligaments,
Muscles, and Nerves
can also create pain**

There are many causes related to problems with these structures, including:

- a 'major injury' ie. lifting, trauma
- a series of 'minor injuries' or multiple stresses / micro trauma ie. repetitive lifting, strain, or even a poor posture maintained over an extended period of time (during sitting, standing)
- degenerative or 'wear and tear' changes of discs or facet joints due to normal aging, repetitive stresses and / or previous injury

- poor fitness level, overweight,...

TIPS FOR SAFE LIFTING

- Your back is strongest when it's in its natural position - ie. when the normal curve (lordosis) is neutral; so keep your back 'straight' when lifting!
- Use your leg muscles not your back muscles. Keep your back upright, bend your knees, and keep the object close to your body (if you lift a ten pound load that's fourteen inches in front of you, the stresses on your spine are the equivalent of about 150 pounds!).
- Twisting with bending and lifting puts enormous strain on your back; move / turn your feet with your body instead of twisting the spine (if you have to twist while lifting several things, at least alternate sides).
- Be careful lowering something as it can be just as straining as lifting ie. proper mechanics still apply, and if the object falls - don't lunge for it, let it go!
- An odd-shaped object is a lot harder to lift ~ because apart from the weight, your muscles must balance you and the object and it also makes proper mechanics more 'challenging'. Get help with these ones!
- Think ahead. Plan each lift before you begin:
 - minimize work and reduce the carrying distance when possible
 - clean up slip and trip hazards
 - switch hands or sides of your body to balance things out
 - use a full hand grip; use gloves if it's slippery or hands are sweating

FITNESS

- keeping fit is one of the best ways to prevent low back pain
- the fitter you are the easier it is for you to deal with everyday "stresses"
- posture and fitness work together ~
 - A program must include:
 - flexibility / mobility
 - strength
 - endurance
 - aerobic capacity
- aerobic capacity and muscular endurance are more important than pure strength for repetitive or low intensity tasks over a long period of time
- it's not realistic to expect your back to be so fit that it can do anything without risk of injury, but:

A BETTER FITNESS LEVEL WILL
SIGNIFICANTLY REDUCE THE
RISK OF INJURY AND ALLOW YOU
TO BETTER COPE WITH MINOR
INJURIES AND NORMAL AGE
RELATED CHANGES OF THE
SPINE

- not all exercises are ideal for everyone
- ESPECIALLY IF YOUR COPING WITH AN INJURY OR HAVE HAD PREVIOUS BACK PROBLEMS

SOME KEY POINTS TO REMEMBER

- Back pain can come from many different sources or a combination thereof
- the longer there has been pain, the more likely the chance that different structures are contributing to the problem, which means ~ **more than one 'thing' may need to be treated**
- Just because you've had back pain for a long time (chronic back pain), does **NOT** mean that it **can't be helped**

It is very possible to

- Significantly decrease pain (frequency and intensity)
 - Allow you to manage and deal with it much better, preventing flare-ups
 - Prevent it from getting worse
- Even with education, instruction, work place changes, and a good back exercise program, there is no **ABSOLUTE GUARANTEE** that you will never suffer back pain or back injury ~

BUT: These things will significantly reduce the chances of injury and allow you to cope much better with the stresses involved in work, sports, and everyday activity

MANUAL THERAPY BASES TREATMENT ON THE CLINICAL PROFILE OF
DYSFUNCTION
IT IS A PLANNED, LOGICAL, SAFE, AND EFFECTIVE APPROACH

AT THE CENTRE FOR MANUAL PHYSIOTHERAPY
WE FEEL THIS IS WHAT OUR PATIENTS DESERVE

YOUR PHYSIOTHERAPIST CAN HELP YOU WITH THE REST...

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