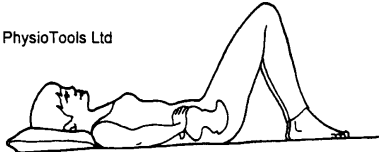


**Exercises.** They are designed to strengthen the back and stomach muscles as well as improve the flexibility of the back. A little pain is OK during these exercises. Stop or decrease exercises that cause pain or linger for more than 30 minutes. Exercises should not increase any legs symptoms.

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**Lower abdominal strengthening.**

Commonly called abdominal bracing, because they act like a “brace” or corset to keep the back stable.

Place the fingers inside the bony points of the pelvis at the front. Gently ( 40% effort) draw in the lower stomach towards the spine without breathing in. You should feel the lower abdominals contracting under your fingers. Hold for 3 breaths. Repeat 10 times.



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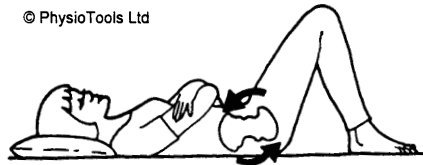
**Hamstring stretch.**

Slowly straighten one knee until a stretch is felt in the back of the thigh. Keep the lower back straight and do not lean backwards.

**Pelvic tilt.** To stretch the lower back muscles. Try either position shown



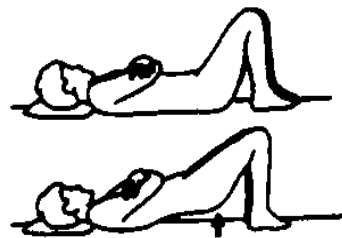
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Slowly tighten the lower abdominal muscles and hollow the stomach to push the lower back into the bed. Start the movement by tilting the pelvis. Hold 10 seconds. Repeat 5-10 times.

**Bridging.**

Hollow the stomach as above then gently squeeze the buttocks to tuck the pelvis under further and slowly lift the pelvis just clear of the floor. Hold for 3 seconds. Repeat 5-10 times.



**Lower back mobilising.**

Roll your knees together from side to side. Repeat 5-10 times.

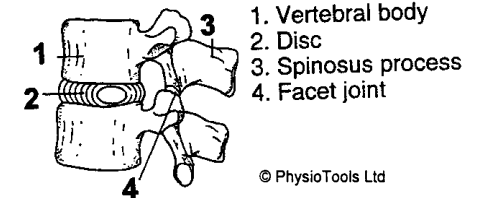
**NON ACUTE LOW BACK PAIN**

Non acute low back pain is pain for more than six weeks.

Most back pain is not caused by serious disease. It is called “mechanical”, that is something has gone wrong with the mechanical workings of the spine.

**ANATOMY**

The spine looks complicated, but in fact it consists of a series of bones called the vertebrae joined together by the discs.



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The disc’s purpose is to allow movement between the vertebrae. Injuries to the disc are fairly common. Strains caused by repetitive lifting, bending and twisting add up over the years. This may cause disruption and tears in the back of the disc, its weakest part.

At the back of the spine are small joints called facet joints which control movement. As with all joints facet joints may suffer from “wear and tear”.

Osteo-arthritis increases in frequency with age and in many cases follows misuse causing abnormal wear and tear to the discs and facet joints.

Ligaments are fibrous tissue which join bones together, giving stability to the spine. Ligaments have a protective function to limit movement and if overstretched they become painful.

The spine is completely surrounded by muscles. They have two purposes:

1. To keep your spine stable so that your arms and legs can move efficiently. The abdominal muscles are especially important for this.
2. To move your spine. Back pain causes some muscles to weaken, especially the abdominal muscles. Other muscles can become overactive or go into spasm and tighten.

**ADVICE FOR NON ACUTE LOW BACK PAIN.** Ways of maintaining or improving your spine.

### **GENERAL FITNESS**

Keeping fit and active helps maintain strong back and stomach muscles which support the spine. Walking and swimming are excellent for the back. Swimming is helpful because it tones up the muscles without weight going through the joints. Breaststroke can strain your back and neck, front crawl or backstroke may be better, but try and vary the strokes.

Aim to exercise for 30 minutes 5 times per week.

### **WATCH YOUR WEIGHT**

Being overweight for your height and sex can add extra stress to your spine.

### **MAINTAIN GOOD POSTURE**

The way you sit, stand and work.

There is a surprising amount of pressure through the spine when you sit. This is why sitting for long periods bothers most people with back pain. The pressure is reduced if the low back is supported.

Standing still can be uncomfortable for people with back problems. The longer you stand, the more the low back tends to arch, causing backache. Gently tightening your lower stomach muscles when standing will help.

Vary your activity so that you aren't in the same position for hours on end. For example take frequent short breaks from sitting.

### **CONSIDER YOUR EVERYDAY ACTIVITIES**

Think of your back when shopping, gardening, cleaning, lifting and driving. Do not try to do everything at once—pace your activities.

While shopping carry heavy goods in two bags, splitting the weight between each arm. Consider having your groceries delivered or take someone with you when you go shopping. Get someone else to push the trolley.

Housework can put a great strain on backs. Learn to take frequent breaks between chores. Spread a task out through the week rather than attempting to complete it in one go. e.g. the vacuuming or ironing. Never struggle on until the pain forces you to stop.

In the garden try some gentle stretching before you start. Choose lightweight long handled tools. Switch tasks about so that you only do a little of each at a time. Plant from kneeling using knee pads or a kneeler.

While driving try and maintain correct sitting posture. Power steering puts less strain on the back and neck. Adjust the seat so you can comfortably reach the pedals and steering wheel. On long journeys, stop every hour and walk around for a few minutes.

Become more aware of how you lift, learn the correct principles. Bend your knees not your back. Do not lift anything that is too heavy.

When all your chores are complete, the worst thing you can do is slump in an armchair. Give your spine a rest during the day by lying on your back. Choose a comfortable position. Try lying on your back with a pillow under the knees or lower back.