

# Exercises

## Lumbar Spine (lower back) Stability and Mobility

There are certain activities in the work place that may contribute to developing a sore lower back. These could include repetitive activities at work, sitting or standing for long periods of time, lifting objects or operating machine tools. The nature of these activities can, if not addressed lead to the gradual build up and tension and stiffness in the lower back. These exercises have been designed by our team of Chartered Physiotherapists to assist in preventing the onset of the tension and stiffness or to ease any pain if it occurs

1

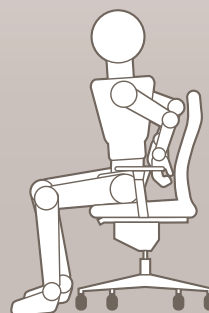
### Lower back stretching in sitting

This is a great overall exercise for your lower back. As some of us sit for long periods and not always in the best position, often slumped rather than sat up straight, this position will put a great deal of pressure and stress on the lower part of the lumbar spine. This simple exercise will stretch out the tissue in the lower part of the back and lift a lot of that pressure and stress on the area.

- Sitting in a chair and place your hands on the lower part of your back just above belt level
- Arch your back as you gently press with your hands to assist the movement
- Hold your back in this arched position for 2 seconds and then return to the start position and then repeat

If you do just 5 of these when sitting every couple of hours throughout a day, it could really help reduce the gradual increase of strain on your lower back.

Step 1



Step 2



2

### Rotation to the left and right in sitting

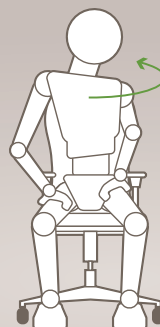
Over time as we get a bit older you can start to lose some movement in the lumbar spine and rotation is one of those movements. Sometimes people become aware of this when they are trying to reverse the car.

By doing this simple exercise each day you can maintain this very important movement.

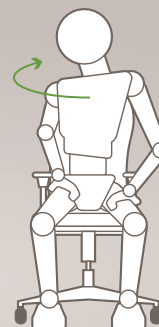
- Sit up straight with a slight curve in the base of the spine
- Sitting in a chair with your hands on your hips, rotate the trunk to one side whilst keeping the trunk upright as you rotate
- Return to the start position and then rotate to the other side

Do 5 of these to each side, 10 in total once a day.

Step 1



Step 2



3

### Lumbar spine stretching in standing

Again another great exercises for stretching the lumbar spine and reducing the build up of tension in this area.

When we sit for a long time or work in a manual environment, the pressure in the disc can gradually increase throughout a working day. This simple extension exercise can quickly and easily reduce that pressure to a more normal level.

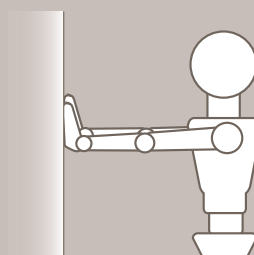
By keeping the disc pressure at a more normal level, you reduce the likelihood of the onset of low back pain and stiffness.

- Stand facing a wall with your feet shoulder width apart and hands on the wall at shoulder height
- Allow your back to arch until you feel a gentle stretch in the base of the spine
- Slowly return to the starting position and repeat

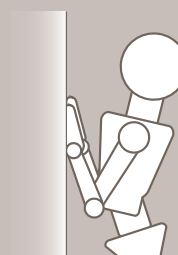
As with all the exercises do this gently and carefully.

Repeat this 5 times at intervals throughout a day.

Step 1



Step 2



4

### Lumbar spine side bending

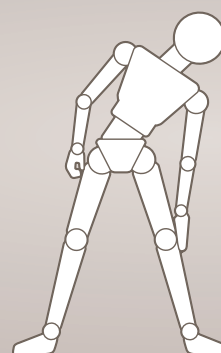
The lumbar spine is prone to becoming stiff and tight and therefore the movements can become restricted and when this happens it can cause more stress on the lower back. It is important therefore to maintain the movement in this part of the spine.

- Stand up tall
- Arms on the outside of your thighs
- Slowly bend sideways by sliding one hand down one thigh towards the floor
- Slowly return to the neutral position and repeat on the other side

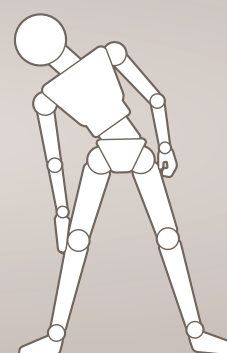
Repeat this 5 times on each side 2 - 3 times per day.

By keeping this part of your spine flexible it can reduce the stress on the area and again reduce the likelihood of pain in the lumbar spine.

Step 1



Step 2



5

### Lumbar spine rotation whilst lying down

The previous exercises can be done in the workplace, where as this one may be best done at home.

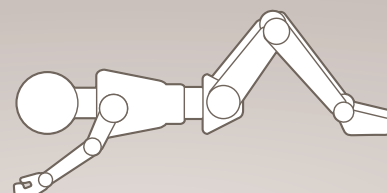
This rotation exercise really helps to improve and maintain the movement in the lumbar spine and the surrounding structures.

- Lie on your back with your knees bent on a comfortable, but firm surface
- Keeping your knees together, lower them to the floor as far as you can on one side and then on the other

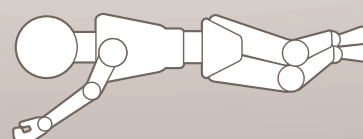
**NOTE:** Do not raise your shoulders off the floor when you lower your knees and do this exercise gently and slowly.

Do this for 1 – 2 mins when you get home.

Step 1



Step 2



## 6

### Strengthening the abdominals

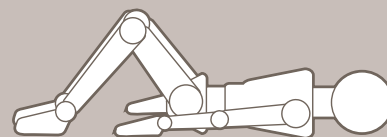
You may have heard of Physiotherapists talking about strengthening the core muscles, well the abdominal muscles form part of this core and it is very important to keep this strong whether your job is sedentary or manual. A strong core really helps to maintain a strong back.

Like all the exercises do this carefully and slowly particularly if you are not used to doing this.

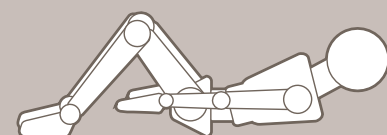
- Lie on your back with your knees bent and your back in a neutral position, this is when the lower back is slightly arched
- Straighten your arms in front of you and tuck your chin in
- Activate your abdominals and curl your trunk up. This needs to be a very small movement and your shoulder blades may only just come off the floor. Slowly return to start position and repeat

Again as this involves lying down you may want to do this one when you get home. Start with doing 1 set of 10 and build up gradually to 5 sets of 10.

#### Step 1



#### Step 2



## 7

### Strengthening the buttock area

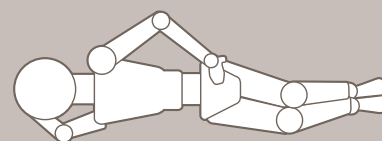
The buttocks, often referred to as gluts by Physiotherapists are a very important muscle for supporting the lumbar spine. By keeping this area strong you will again help to maintain the health of your lower spine.

- Lie on your side with both legs slightly bent. And your knees and ankles touching
- Place one hand over your pelvis to maintain it in a stable position and try to stop it moving around during the exercise
- Lift up the top leg whilst keeping the pelvis stable and keeping the leg slightly bent and the heels together. Separate the upper knee from the lower knee by about 12 inches and hold for 2 - 3 seconds. You may be able to feel the upper glut working

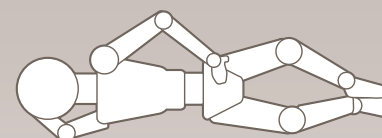
Return to the initial position and repeat 10 times.

Now turn onto the other side and repeat to strengthen the other glut.

#### Step 1



#### Step 2



Overall remember to do these exercises slowly and carefully and also remember by maintaining the movement and strength in your lower back you really will help to reduce the likelihood of lower back problems