Spine Sparing

Positioning the spine in the wrong way when you move or sit can place increased stress on the back, exacerbating pain and limiting recovery. Moving and sitting in positions that spare the spine will allow you to **move more** and with **less pain.**

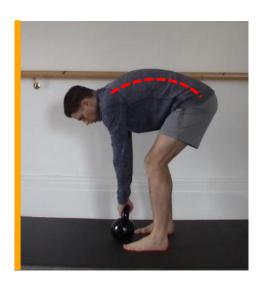
Back friendly movement patterns

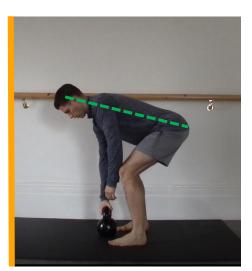
The most common source of injury to the low back occurs when bending. Like repeatedly picking at a scab, repetitive bending of the spine during recovery will result in further damage and irritation.

It's therefore important to spare the spine when bending by **hinging from the hips** instead of the back and keeping your chest tall.

This 'hip hinge' patter can be applied to a variety of daily activities to help protect the back and avoid re-injury:

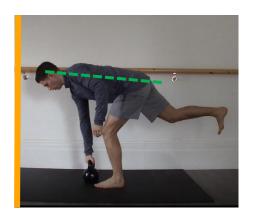
1. Lifting (heavier object):



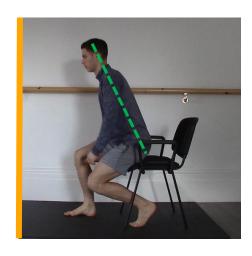




2. Lifting (lighter object)

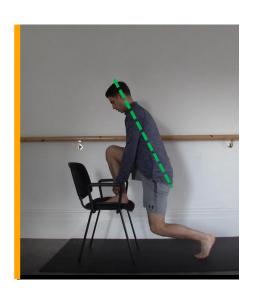


3. Getting out of a chair



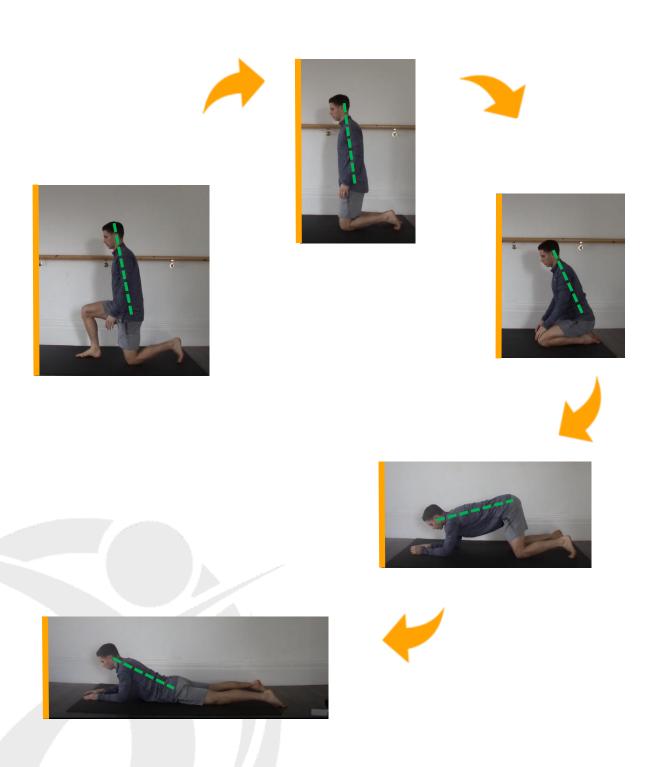
4. Putting on shoes







5. Getting up and down from the floor







Slumped sitting

The human spine naturally forms an S-shape. When we sit however, most of us have a tendency to slump, which reverses the natural curve of the lower back.



In this slumped position the muscles and ligaments at the bottom of the back are stretched and more pressure is placed on the discs. Slumped sitting aggravates many patients with back pain, and if sitting slumped for more than 20 minutes, it can also make the lower back more vulnerable to injury when standing and moving again.

A lumbar roll can help to preserve the normal alignment of the lower back and reduce associated pains. While many chairs have a built-in lumbar support, because they are usually are designed for people of an "average" build, they often fail to properly support the lower back.

If your chair doesn't have any lumbar support, or the lumbar support isn't substantial enough for your body type, a **lumbar roll** is an inexpensive but effective addition. They are also very useful for cars which often have a bucketed seat shape which forces your spine into a slumped position.



Lumbar Roll Options

Rolled Towel

You can fashion your own lumbar roll by rolling up a towel and securing with some tape. Depending on the length of the towel and how many times you roll it, you can modify the size to fit your requirements. There are some obvious drawbacks with this method, but it is certainly better than not using a lumbar roll at all.



Foam Lumbar Roll

Foam lumbar rolls are a good costeffective option. They are responsibly cheap but effective (as long as they are the right size and shape for your spine and the chair you are going to be using it on.)

The <u>66fit Lumbar Roll</u> also comes with a strap to secure to your chair, so you don't have to constantly reposition or replace it.





Inflatable Lumbar Rolls

The very best lumbar rolls are inflatable. Inflatable rolls allow you to:

- i. Individualise the fit to create the perfect support for **your** spine.
- ii. Create small but frequent changes in posture throughout the day, reducing the overall stress on your back.

We recommended the Innotech EmbraceAir Plus and LumbAir Plus (portable).









Prolonged Sitting and Microbreaks

Although holding a good posture when sitting can reduce low back stresses, holding any one posture for a prolonged period of time will still lead to increased stiffness and tension. You should therefore **get up and move regularly** if sitting.

A good rule of thumb is not to sit for more than 20 minutes without getting up. With severe back injuries you may want to get up even more regularly than this. Microbreak exercises are short, simple and safe movements perfect to break up periods of sitting and get the body moving again.

Overhead Reach

- Stand up, take a deep breath in, through your nose, and hold the breath as you raise your arms over head.
- As you breathe out stretch up one arm and then the other whilst letting the spine move side to side, as if climbing a ladder. Repeat 2-3 times.

Hip Circles

- Stand tall, feet together, hands on hips.
- Gently rotate your hips clockwise and then anticlockwise.
- 5 circles in each direction.
- Can also perform with hands overhead.

Shoulder Circles

- Make a fist with both hands with your thumbs sticking out.
- With your thumb pointing up slowly lift your arms forward and up overhead.
- At the top turn your thumbs outwards and bring your arms out to the sides as you lower.
- Repeat 5-10 times

