Office Ergonomics – How to Sit with Back Pain

What is Back Pain?

Back pain, particularly lower back pain, is very common. It usually improves within a few weeks but can sometimes last longer or keep coming back.

Back pain can have many causes and it is not always obvious what causes it.

This guidance has been produced to support guidance for those managing back pain with little to no discomfort. The aim of this document is to provide guidance to prevent discomfort at the workstation.

How Should I Sit To Prevent Back Pain?

Most of us spend a lot of time sitting. How we sit and what we sit on affects the health of the spine. The lumbar region is the most frequently damaged (L4 and L5).
If you suffer from back pain then sitting correctly is important for not only preventing your condition from getting worse, but potentially even improving it.

In the workplace there are a number of factors that will influence back discomfort and it is important to recognize that the way you sit is only part of the solution.

Employees who are sat for most of their working day are encouraged to arrange for a formal desk side assessment. This assessment goes beyond the chair and can provide some useful guidance on other elements of your workstation.

This document is only focused on how we sit at the workstation to prevent or reduce back discomfort. The document is to provide guidance on how using the chair correctly and with the right features you can reduce pressure on your spinal discs.

1. Support Your Back

   Your back rest on your office chair should be touching your spine at all times. Having the back set at the correct height and angle will reduce pressure on your spinal discs.

   Ensure that the lower back is fully supported by the backrest of the chair. In the lower back you should feel a slight inward bend when seated. This needs to be supported by either an ergonomic chair or pillow. Pillows should be a temporary solution until a chair with lumbar support can be provided.

   Identify any periods where the back comes away from the chair and look to close these gaps by adjusting the back rest of the chair.

2. Minimise Awkward Postures

   Minimize any awkward postures such as bending, twisting or slouching by placing equipment at correct distance – screen/phone/mouse/notebooks close enough to avoid these postures.

   - Uncross your legs
   - Keep feet flat on the floor / use a footrest
   - Keep your hips level on the seat pan (avoid using seat tilt)

3. Adjust your Posture

There are many different postures which will keep your back neutral and it would be good to go through different postures throughout your day.
Periodic postural changes gives your joints and muscles a respite from a built up of pressure and allows your blood to circulate in those areas. This can also help with healing.

- Reclined Sitting. With the backrest slightly reclined (100-110 degrees) while the back is fully rested on the backrest. Ensure that the lower back has a slight inward curve to it and that this is supported.
- Declined Sitting. Using forward tilt on the seat pan, sit at a downward sloping angle (ideally around 20 degrees) where the knees drop below hip level. This naturally shifts the hip forward to facilitate a neutral spine.
- Standing. This is an excellent working posture that makes it easy to maintain a neutral spine.

Research shows that switching between sitting and standing helped decrease lower back pain in participates. Participants were following best techniques for sitting and standing and changing posture and position frequently.

4. Get up and Move Often

There is no correct sitting position. Our bodies are designed to stand and move for long periods of time. And we automatically shift our weight and move around while standing. Standing prevents both the repetitive stress and muscle degeneration that is caused by sitting.
Standing, walking, and certain stretches throughout your working day is important to alleviate the pressure placed on your vertebrae whilst sitting.

5. Invest in an Ergonomic Chair

A desk side assessment supported by the central Health, Safety & Welfare Team can help to identify the best ergonomic chair for you.

A good chair would have the following features.

- Adjustable Seat Height. The seat should be adjusted to support a knee angle of 90 degrees to prevent leg discomfort. The chair height should be so that feet are firmly on the floor or footrest.
- Adjustable Seat Pan. When seated your back should be in contct with the backrest. If you are short in the thigh then you can adjust the seat depth so tht you can reach the backrest and reduce pressure on he back of your thighs. Shorter people often perch on the front of the seat, getting no support from the backrest.
  If you are long in the thigh, seat depth adjustment will allow you to support your thighs correctly.
- Seat angle float/lock.
- Tilt tension.
- Adjustable Back Angle. The seat back angle helps to maintain good contact with the backrest. Reclining the backrest whilst not working forward (keying or writing) allows the backrest t take some of the weight of your upper body. This in turn reduces the pressure

on discs and muscles. For example – proof reading a document in the reclined position when there is no need to use the keyboard or desk.

- Backrest float/lock.
- Correct back rest height

  Low Level Backrest – supports the lumbar region only.
  Medium Level Backrest – most popular. Gives full shoulder and back support.
  High Level Backrest – full support of head and neck.
- Adjustable Arm Rests. Supports the weight of your arms, removing the muscle work for shoulders and upper arms. Armrests can be of paritulcar benefit for support when Keying or mousing. However, ifthey are not adjustable they can cause problems when armrests hit the edges of tables. To reduce back discomfort it is important that you are sitting close to the desk, this may mean that armrests are folded down to allow you to do this. Adjustable arms also support different activities including standing up and reclining into the chair when not keying or using the work surface.
- Lumbar Support. This supports the curve of your spine. Ensure that the lower back is fully supported by the backrest of the chair. In the lower back you should feel a slight inward bend when seated.

Before

After

Next Steps

If in discomfort arrange for a referral to Occupational Health.
If little to no discomfort arrange for a formal desk side assessment by contacting the Health, Safety & Welfare Team: safetyadvice@gov.im

Further Information:

https://www.nhs.uk/conditions/spondylolisthesis/
http://www.getbritainstanding.org/