

Safe Lifting

Why is safe lifting important?

One of the most common causes of lower back injury is inappropriate lifting technique. Safe lifting, by ensuring correct lifting technique, is vital to minimize stress on the spine, therefore reducing the likelihood of lower back injury and lower back pain. Safe Lifting is particularly important due to the high prevalence of lower back pain in society. Safe lifting technique can also help to strengthen your thighs, buttocks and lower back muscles, improve posture and burn more calories.

How to lift safely

The following 'safe lifting key points' should be followed whenever lifting to ensure



safety and minimize the risk of injury (figure 1):

Safe lifting key points

- Get your body as close as possible to the object to be lifted
- Position your feet at least shoulder width apart for stability
- Bend your knees to pick up the object, keeping your back straight
- Maintain a nice 'long', straight spine throughout the lift
- Never lift anything that is too heavy
- Always ask for assistance with lifting wherever possible
- Try to minimize the distance and the period of time you are lifting or carrying the object
- Use appropriate safe lifting tools to help with lifting and transporting heavy objects (e.g. trolleys etc.)
- Where possible, try to reduce the weight of the object being lifted or carried so that you can perform several smaller safe lifts, rather than one heavy unsafe lift
- Never lift any object that causes pain
- Avoid lifting anything after a period of prolonged sitting, driving or bending forwards (e.g. gardening, weeding etc)
- Perform appropriate exercises before and after lifting and as a break from repetitive lifting
- Postural Taping may be of benefit to encourage correct posture whilst lifting and to teach correct lifting technique
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Exercises to assist with Safe Lifting

The following exercises are frequently prescribed in clinical practice to help prevent spinal injuries related to repetitive lifting or poor lifting technique.

Since we generally lift objects in front of our body, our lower back, mid back, shoulders and neck typically bend or move forwards to some extent. As a result, exercises moving the body in the opposite direction can help to prevent injuries due to repetitive or poor lifting by giving the body a break from these forces.

You should discuss the suitability of these exercises with your physiotherapist prior to beginning them. Generally, they should be performed 3 - 5 times daily (particularly before and after lifting) provided they do not cause or increase pain:

Shoulder Blade Squeezes

Begin sitting or standing tall with your back straight. Squeeze your shoulder blades together as hard and far as possible without pain (figure 2). Hold for 5 seconds and repeat 10 times provided the exercise is pain free.

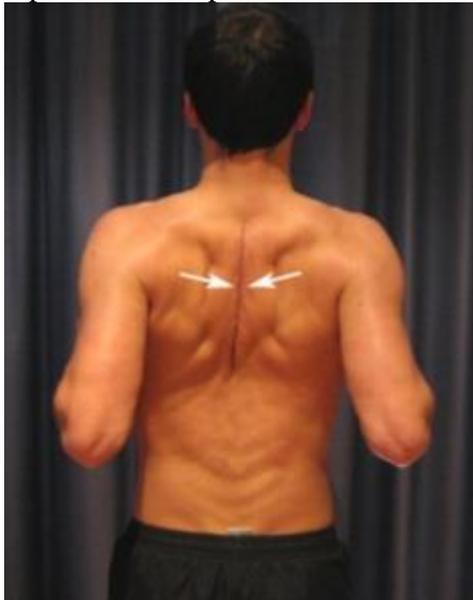


Figure 2 – Shoulder Blade Squeezes

Chin Tucks

Begin sitting or standing tall with your back and neck straight, and shoulders back slightly. Tuck your chin in until you feel a mild to moderate stretch or as far as possible without pain (figure 3). Keep your eyes and nose facing forwards. Hold for 2 seconds and repeat 10 times provided the exercise is pain free.



Figure 3 - Chin Tucks

Extension over chair

Begin sitting tall on an appropriate chair (the top of the back rest should end at the level of your mid back). Place your hands behind your neck and gently arch backwards over the chair, looking up towards the ceiling (figure 4). Move until you feel a mild to moderate stretch or as far as possible without pain. Repeat 10 times provided the exercise is pain free.

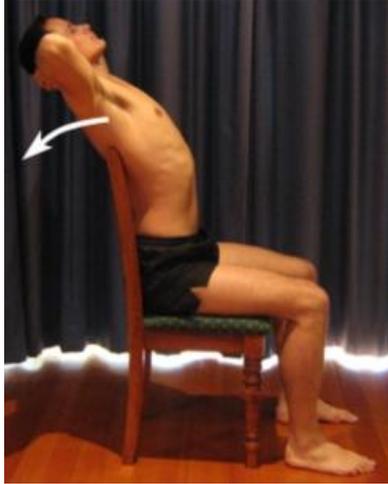


Figure 4 – Extension over Chair

Extension in Standing

Begin standing, feet shoulder width apart, back straight, hands on hips. Gently arch backwards as far as possible pain-free (figure 5). Repeat 10 times provided there is no increase in symptoms.



Figure 5 – Extension in Standing

Transversus Abdominis Retraining

Slowly pull your belly button in "away from your belt line" and breathe normally. Your rib cage should remain relaxed and should not elevate during this process. You should be able to feel the muscle contracting if you press deeply 2cm in from the bony process at the front of your pelvis (figure 6). Practice holding this muscle at one third of a maximal contraction for as long as possible during everyday activity (especially when lifting) provided it is pain free.



Figure 6 – Transversus Abdominis Retraining

Keep Active

Keeping active with regular exercise in general life is important to prevent lifting related injuries by improving general strength, spinal alignment, core stability, flexibility and subsequent activity and lifting tolerance. This is particularly important due to the increasing trend towards sedentary lifestyles, poor postural habits and obesity in society to date.

You should discuss the suitability of any exercise program with your physiotherapist prior to commencing. Generally exercises can be gradually introduced provided they do not cause or increase pain and provided you do not have any medical conditions.

You should aim to perform regular cardiovascular activities such as walking, jogging, swimming, cross trainer etc. ideally in combination with resistance training and flexibility exercises for the major muscles and joints of the body.

Better cardiovascular activities for those who spend large periods of time lifting or in poor postural positions (such as bending forwards) include walking, jogging, swimming, cross trainer (and any other activity whereby the spine is in good posture – cardiovascular activities which involve sitting or bending forwards may not be as appropriate e.g. rowing machine, bike riding etc). General strengthening of the major muscles of the body should be performed in good posture approximately once to twice per week provided they are pain free.

Generally, you should aim to exercise on most days of the week for 30 – 60 minutes, or more, with these sessions comprising either cardiovascular or strengthening exercises in optimal posture. Stretches for the major muscles and joints of the body should also be incorporated into these sessions to improve and maintain flexibility. Build up activity gradually over time to avoid injury and vary your activities to give your body a break from repetitive stresses.

Safe Lifting Summary

- Safe lifting is vital to minimise stress on the spine and reduce the likelihood of injury.
- Always maintain good posture during lifting (i.e. a tall straight spine), keep the object close to the body and use your legs.
- Avoid lifting after repetitive or prolonged sitting or bending forwards and never lift anything that is too heavy.
- Performing regular, appropriate exercises, as a break from lifting, can help to prevent injury by giving your body a break from repetitive or prolonged lifting forces.
- Maintaining activation of the Transversus Abdominis muscle at one third of a maximal contraction during lifting can help to support the spine and prevent injury.

- Keeping active with regular cardiovascular, strengthening and flexibility exercises performed in good posture can help to improve strength, posture and lifting / activity tolerance and prevent lifting related injuries.

If you need expert advice on injury prevention and lifting techniques please call me on +442866328200 or email info@lindaburke.co.uk