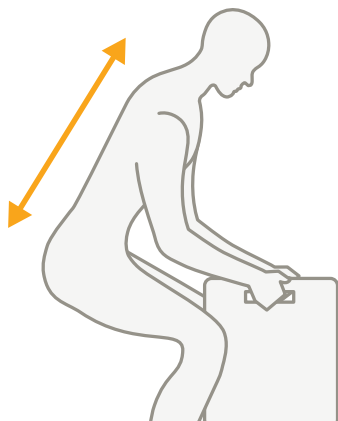
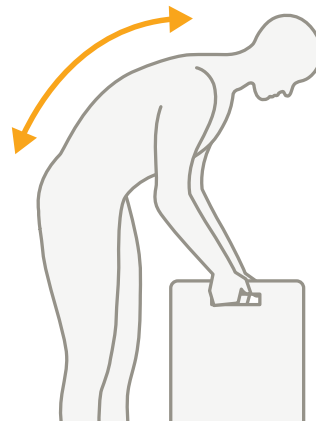


## CORRECT POSTURE WHEN LIFTING AND CARRYING<sup>10</sup>

- When lifting, your back should be flexibly strong, not rigid
- Stand close to the object
- Bend your knees and back the same amount
- Plan your lifts, taking into account the object's weight and surroundings, and don't rush the lift itself
- Get a feel for how heavy the weight is before you lift it



✓ Correct



✗ Incorrect

### Tips to avoid muscle strain while carrying

- Bring the object as close to your body as you can
- It is better to make several trips with lighter loads than one trip with a heavy load
- Use a bag on wheels or a trolley to move your load
- Avoid carrying weight with only one side of the body – if possible, divide your weight (e.g., shopping bags) into two equal but lighter loads and carry one bag with each hand
- If you must carry with one arm only, switch arms frequently
- If you use a backpack, use both straps – one on each shoulder, and keep your backpack as light as possible

This leaflet was created in collaboration with Ian Harris, Principal Physiotherapist at Coastal Physiotherapy and Sports Injury Clinic, QLD, Australia.

**References:** 1. Waongenngarm P, et al. Scand J Environ Health 2021;47(4):306–317. 2. McLean L, et al. Applied Ergonomics, 2001;32(3):225–237. 3. Motor Accidents Insurance Commission (MAIC). Whiplash injury recovery: a self-help guide. 3rd edition, 2019. Available from: <https://maic.qld.gov.au/wp-content/uploads/2020/01/MAIC-Whiplash-Booklet-2019.pdf> (accessed May 2024). 4. Wernli K, et al. J Eur J Pain 2022;26(10):2097–2119. 5. Gordon R, Bloxham S. Healthcare (Basel) 2016;4(2):22. 6. UpToDate. Patient education: Back exercises (The Basics). Topic 143048 Version 2.0. 7. British Heart Foundation. Exercises for lower back pain. Available from: <https://www.bhf.org.uk/information-support/heart-matters-magazine/activity/exercises-for-lower-back-pain> (accessed May 2024). 8. Abdelhaleem M, et al. Bull Fac Phys Ther 2023;28(14):1–9. 9. Beomryong K, Tohoku J. Exp Med 2020;251:193–206. 10. University of Newcastle (2009). MANUAL HANDLING. [online] Available at: [https://www.newcastle.edu.au/\\_data/assets/pdf\\_file/0015/82014/manual-handling-information.pdf](https://www.newcastle.edu.au/_data/assets/pdf_file/0015/82014/manual-handling-information.pdf) (accessed May 2024).

## BACK CARE EXERCISES

Back pain can be caused by poor posture and tense muscles.<sup>4</sup> Specific back exercises and stretching can help to relax tense muscles, strengthen the back and abdominal muscles that support the spine, and maintain flexibility of the spine.<sup>5</sup> Here are some simple exercises that you can do at home. Before you perform any exercises, please confirm with your healthcare provider that they are safe and appropriate for you. Remember – if the movement increases your pain, stop, and avoid that particular exercise.

### STATIC ABS

Strengthens abdominal muscles

**Repeat 10 to 15 times:**<sup>6</sup>



1. Lie on your back with your knees bent and feet flat on the floor
2. Breathe in and as you breathe out, slowly squeeze your abdominal muscles to pull your abdomen towards your spine
3. Hold that tension for 5 seconds, concentrating on contracting your abdominal muscles
4. Breathe in and release the tension

### BACK EXTENSIONS

Strengthens the back muscles and maintains flexibility

**Repeat 5 to 10 times:**<sup>7</sup>



1. Lie on your front with your forehead on the floor
2. Place your hands in a 'push-up' position, so that your palms are flat on the floor directly below your shoulders
3. Arch your back by pushing up with your arms as far as you can without being uncomfortable
4. Hold this position for 10 seconds, while breathing normally and then slowly return to the starting position

If you feel comfortable, you can repeat this exercise holding your arms straight out in front of you – when you arch your back, lift your arms and feet off the floor. Hold for 10 seconds, relax, and repeat.

### KNEE HUGS

Strengthens abdominal and back muscles, and stretches the back and buttocks

**Repeat 5 to 10 times with each leg:**<sup>6,7</sup>



1. Lie on your back with your legs stretched out
2. While keeping the small of your back on the floor, slowly bend one leg and bring it up to your chest
3. Keeping your other leg stretched out in front of you, use your arms to pull your leg to your chest while lifting your head and shoulders off the floor
4. Hold this position for a few seconds, then release
5. Slowly return your leg, head, and shoulders to the floor into your starting position
6. Repeat with the other leg

### CAT COW STRETCH

Strengthens the abdominal muscles and maintains spine flexibility

**Repeat 15 times:**<sup>6,7</sup>



1. Place your hands and knees on the floor – make sure your knees are under your hips and your wrists are under your shoulders
2. Begin the movement with your spine in a neutral position with your back flat and your abdominal muscles engaged
3. As you breathe in, let your belly soften, arch your back, and lift your head and tailbone – this is the 'cow' part of the stretch
4. As you breathe out, round your spine up to the ceiling, pulling your abdominal muscles toward your spine and simultaneously pointing your tailbone down and tucking your chin toward your chest – this is the cat part of the stretch

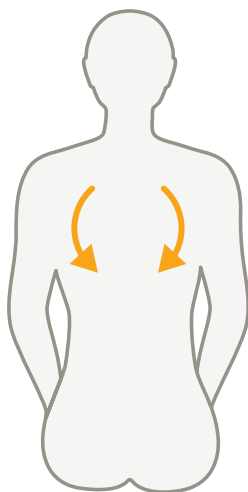
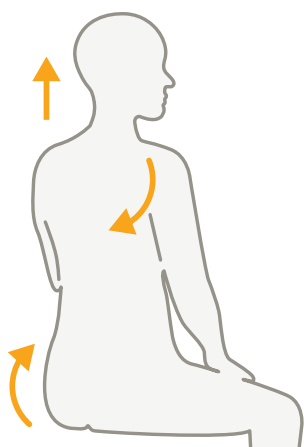
# MAXIMISING YOUR POSTURE AND MOVEMENT HEALTH: TIPS AND TECHNIQUES

## The importance of maintaining good posture

Ensuring correct posture is important to keep your spine healthy and to avoid developing painful skeletal or muscular conditions. If you already experience lower back pain, developing and maintaining a healthy posture may help to relieve some of your pain.<sup>4</sup>

Posture needs to be dynamic rather than rigid, so you should think about dynamically adapting your posture in response to your task and environment.<sup>3</sup> While there is no such thing as an ideal posture, specific corrections for different situations are described below.

## GENERAL CORRECTION OF POSTURE (including when sitting or on phones or laptops)<sup>3</sup>



- Gently grow tall from the lower back and pelvic region to raise your pelvis up out of a slumped position
- Reposition your shoulder blades so they draw back towards the centre of your spine – this can be achieved with minimal effort
- Gently lengthen the back of your neck to get the muscles to work – this helps to relieve your neck from the weight of your head
- Hold this position for about 10 seconds and repeat often during the day (e.g., 3 or 4 times each hour)
- You can perform this exercise when standing or while walking in addition to when sitting
- Try to take regular breaks and regular posture corrections holding for short periods only
- The upper part of the low back should be soft, and the shoulders relaxed
- When sitting, try adjusting your chair and seat height to help reduce strain on the neck
- When using a mobile device, grow tall through your back and lift your elbows up or support the device on a table or cushion to help bring your head up

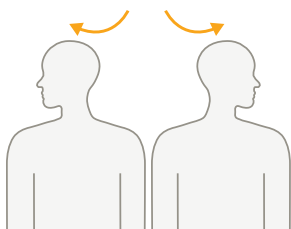
### Tips to avoid muscle fatigue while working

- Do not cross your legs
- Move things a bit further away to help you remember to get up and move
- Keep your mouse in a position where your elbow and shoulder are relaxed – consider using mouse pad to keep mouse in correct position and avoid excessively large movements
- Use a hands-free option with your phone rather than holding it
- Take breaks and stand up and move around – try some of the exercises described here!

# EXERCISES TO RELIEVE **MUSCLE TENSION**

Sitting for prolonged periods puts unnecessary stress on tissues, which increases strain on muscles and joints.<sup>1</sup> To help avoid discomfort or potential injury, it's important to vary postures and/or take a break and move your body regularly – a break as short as 30 seconds can help reduce discomfort, pain or fatigue.<sup>1,2</sup> Below are some simple movements you can try throughout the day.

## NECK CARE EXERCISES

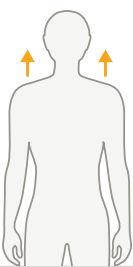


### HEAD TURNS

Helps improve range of motion in the neck muscles

**Repeat 5 to 10 times on each side:**<sup>3</sup>

1. Slowly turn your head to the left, trying to look as far over your shoulder as you can – focusing on an object or a wall may be easier
2. Gradually try to look a little further in that direction with every repetition
3. Do the exact same exercise looking to the right

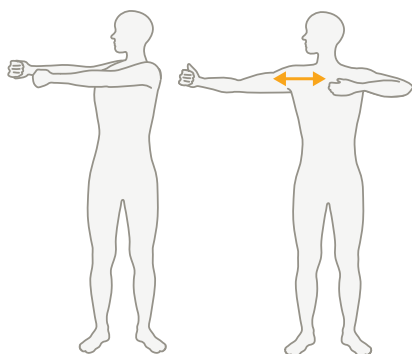


### SHOULDER SHRUGS

Helps strengthen shoulder muscles

**Repeat 5 to 10 times:**<sup>3</sup>

1. Shrug your shoulders by lifting them up towards your ears
2. Hold the tension for a few seconds, then gently drop your shoulders and relax them completely

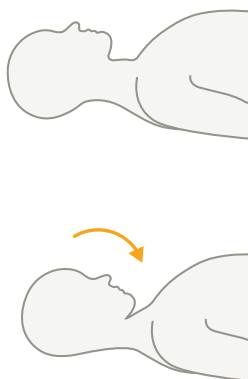


### ARCHERY

Helps strengthen the upper back and neck and maintains flexibility

**Repeat 5 to 10 times, switching sides each time:**<sup>3</sup>

1. Pretend you are using a bow and arrow
2. Hold the invisible 'bow' in your outstretched arm with your eyes fixed to a target directly in front of you
3. Draw the imaginary 'bow string' back as far as you can and hold for a few seconds to feel the stretch across your upper back
4. Repeat the exercise with your opposite arm



### HEAD NODS

Helps strengthen the neck muscles

**Repeat 10 times:**<sup>3</sup>

1. Lie on your back with knees bent (feet on the floor) with nothing under your head and neck – if this is not comfortable, you can use a folded towel to support your head
2. Start by looking straight up at the ceiling, then move your eyes to focus on a spot on the wall just above your knees
3. You should feel the back of your head slide up the floor as you perform a slow and gentle nod
4. As your chin moves up and down, place your hand gently on the front of your neck to feel the muscles – make sure they stay soft and relaxed while moving
5. When looking and nodding down, stop at the point you feel your muscles start to tense, but keep looking down with your eyes
6. Hold the position for 10 seconds and then relax
7. Look back up to the ceiling to reset your head to where you started



**Remember – stretching should not be uncomfortable. If you feel any pain or discomfort while stretching, discontinue that exercise and seek medical advice.**