

POSTURE ADVICE FOR A HEALTHY BACK

Posture

Good posture involves training your body to stand, walk, sit and lie in positions where the least strain is placed on supporting muscles and ligaments during movement or weight-bearing activities.

If any of the following guidelines causes an increase of back pain or spreading of pain to the legs, do not continue the activity and seek the advice of a doctor or physiotherapist.

The spinal curves

Your spine has natural curves that from an S-shape. Viewed from the side, the cervical and lumbar spines have a lordotic, or a slight inward curve, and the thoracic spine has a kyphotic, or gentle outward curve. The spine's curves work like a coiled spring to absorb shock, maintain balance, and to facilitate the full range of motion throughout the spinal column.

The spine has three natural curves, a concave cervical and lumbar curve, and a gentle convex thoracic curve.



These curves are maintained by two muscle groups, flexors and extensors. The flexor muscles are in the front and include the abdominal muscles. These muscles enable us to flex, or bend forward, and are important in lifting and controlling the arch in the lower back.

The extensor muscles are in the back. These muscles allow us to stand upright and lift objects. The abdominal and back muscles are sometimes referred to as the core muscles. Working together, these muscle groups act as guy wires to stabilise your spine.



What is good posture?

Posture is the position in which you hold your body upright against gravity while standing, sitting or lying down.

Proper posture:-

- Keeps bones and joints in the correct alignment so that muscles are being used properly
- Helps to decrease the stress on the ligaments holding the joints of the spine together
- Prevents the spine from being fixed in abnormal positions
- Prevents fatigue because muscles are being used more efficiently, allowing the body to use less energy
- Prevents strain or overuse
- Prevents backache and muscular pain
- Promotes effective breathing using the diaphragm and upper part of the chest
- Improves digestion
- Improves balance, body awareness and co-ordination
- Improves core stability and strength

Proper posture requirements:-

- 1. Good muscle flexibility
- 2. Normal motion in the joints
- 3. Strong core muscles
- 4. A balance of muscle strength on both sides of the spine
- 5. Awareness of your own posture, plus awareness of proper posture which leads to conscious correction.

With much practice, the correct posture for standing, sitting and lying down will gradually replace your old posture.



The correct way to stand

Stand in front of a full length mirror so you can check your posture.

- 1. Hold your head up straight with your chin in. Do not tilt your head forward, backward or sideways.
- 2. Stand with your feet facing forwards, hip width apart and your knees straight.
- 3. Make sure your weight is evenly distributed through each foot.
- 4. Make sure your earlobes are level and in line with the middle of your shoulders.
- 5. Make sure your shoulders are level and keep your shoulder blades back
- 6. Stretch the top of your head to the ceiling, whilst looking straight ahead.
- 7. Tighten your tummy muscles. Do not tilt your pelvis forwards of backwards.

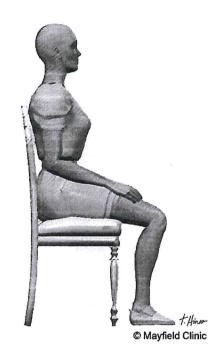




The correct way to sit

Sit on a chair with your bottom back in the seat, your back is supported by the back of the chair, and make sure your feet can touch the floor.

- 1. Sit up with your back straight and your shoulders back. Your bottom should touch the back of your chair.
- 2. All three normal curves should be present when sitting. A small, rolled up towel or a lumbar roll can be used to help you maintain the normal curves in your back.
- 3. To find a good sitting position when not using a back support or lumbar roll, sit at the end of the chair and slouch completely. Draw yourself up and push your back forwards and upwards as much as possible to exaggerate the lumbar curve in your lower back. Hold for 5 seconds. Release the position slightly this is good sitting posture.
- 4. Make sure your weight is evenly distributed through the back of your thighs on the seat of the chair.



- 5. Bend your knees at a right angle. Keep your knees even with or slightly lower than your hips. Your legs should not be crossed. (Sitting on a wedged cushion may help with this.)
- 6. Try to avoid sitting in the same position for more than 30 minutes.
- 7. When sitting at a desk, make sure your desk is at the right height for you to be able to rest your forearms on the desk, keeping your shoulders relaxed. When you're sitting in a good position on the right sized chair, your elbow should be just below the surface of the desk and your tummy button should be approximately at the same level as the desk top to achieve this.
- 8. Using a writing slope to place your work or keyboard when you are writing or typing helps to reduce viewing distance, lessen eye strain and promotes better posture.

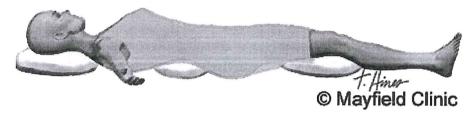


Sleeping position

Check that the mattress isn't too saggy, lumpy or firm. It should be comfortable to lie on and provide enough support for your body.

Sleeping on your back is the best position to keep your spine in line and maintain the three normal curves in your back, with one pillow behind your head, not under your shoulders. A small rolled up towel placed in the pillowcase at the bottom of the pillow may be more comfortable if you have neck pain to give more support under your neck, but make sure your head is not bent forwards and is still in line with your spine.

It may be even more comfortable to place a pillow under the lumbar curve at the lower part of your back to maintain the curve. A pillow under the back of your knees may also help to maintain the lower curve in your back.



If you prefer to sleep on your side, place one pillow under your head. You may need to place a small rolled up towel at the bottom of the pillowcase to support your neck. Make sure your head is central and in line with your spine and not bent to the side.



Bend your knees slightly to maintain the lumbar curve in your lower back. You may be more comfortable with a small pillow between your knees to keep your knees in line with your hips. A pillow may be needed under your upper arm to avoid twisting your spine.



General Advice on Promoting Good Posture Habits for a Healthy Back

- To use a rucksack to carry school work, using both shoulder straps to maintain your spine in line and distribute the load evenly.
- To avoid carrying too much in your rucksack. Help your child to look at their timetables and to organise what books and items they need to carry for each morning and afternoon during the school week.
- Make sure your child does not sit still, play computer games or watch TV for more than 30 minutes continuously. Make sure they take regular movement breaks.
- Encourage your child to walk outdoors as much as possible as integral part of a healthy and active lifestyle.
- Do physical activities regularly e.g. climbing playground equipment, walking, cycling, scooter, swimming, playing sports, dancing, PE etc.
- Pilates, yoga, and martial arts such as karate are excellent activities at improving body awareness, body alignment and good posture.
- Provide regular opportunities to support your child in carrying out their specific exercises and activities as advised by their physiotherapist.
- If any activity increases your child's pain or discomfort contact your physiotherapist for further advice.

Useful Equipment and Resources:

Wedged cushion: LDA Learning.com

Writing slope: Ikea plastic laptop support £3.50 + p&p

or wooden writing slope from Rowley Abbey Tel: 01225 340856 £14.50 + £4.50 p&p

<u>www.thegoodsleepexpert.com</u> – advice, information and products from Sammy Margo, Chartered Physiotherapist