



Hold On. Pain Ends.

About this Online Series

This online series, delivered by qualified physiotherapists from *PhysioAsia*, emphasises the need to exercise responsibly while raising awareness of the need to recognise and manage common injuries, body aches and pains.

It also throws light on the nature of common injuries, how they can be prevented and the importance of knowing when to seek professional help.

Back and Spinal

Most of us know someone who suffers from back pain – even if we haven't suffered it ourselves. A 2018 Well-being of the Singapore Elderly (WiSE) study published in the *Pain Research and Management Journal* found that about one in five people aged 60 and above (20 per cent of the population) suffer from chronic pain.

The GSK Global Pain Index 2017 that surveyed 19,000 adults across 32 countries found that about 85 per cent of the 500 Singaporeans surveyed had experienced head and body pain; almost 4 in 10 suffer body pain on a daily basis.

If you are in pain, you tend to move less because you are afraid that moving might cause more pain. This results in a gradual loss of normal function as you are not moving as much as you used to. This in turn leads to changes in the joint. These changes feed into a compensatory pattern of movement that continues long after the pain has reduced or disappeared.

Addressing the root issue as soon as possible stops the development of compensatory patterns which can result in further complications over time.



Back and Spinal

There are many manifestations of physical uneasiness



Common Causes of Back Pain

- Reliance on incorrect postures during everyday activities (lifting, bending, carrying) and/or a poor sitting posture.
- Overuse linked to repetitive movements (such as bending or lifting) or adopting a static posture for a long period (sitting in one position for too long).
- Overstress linked to doing too much (lifting a heavy object) or doing too much too quickly.
- Degenerative changes linked to aging and wear and tear.
- Trauma linked to a fall or injury caused by a fall.
- Genetic predisposition as a result of conditions such as Ankylosing Spondylitis (AS).

What Can We Do To Address Back Pain?



The following have an impact on whether we develop back pain and to what extent we are affected by it:

- Posture
- Ergonomics
- Sleeping positions
- Movements and stretches
- Tips and strategies



Back and Spinal

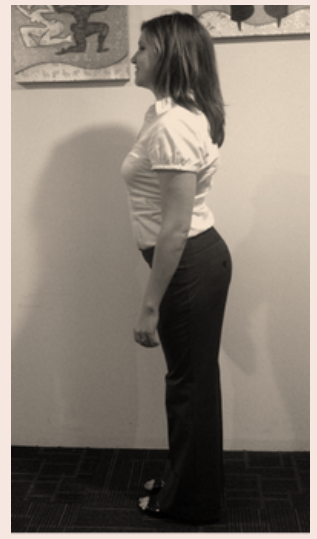
Adopt a better posture



Ensure that your ear lobes are in line with your shoulders which should be in line with your hips.

Your standing hips should be in line with the knees which should be in line with the ankles.

Try not to round yourself so your back is arched up and/or your chest sticks out.



★ ★ ★ Pay attention to the position of the neck

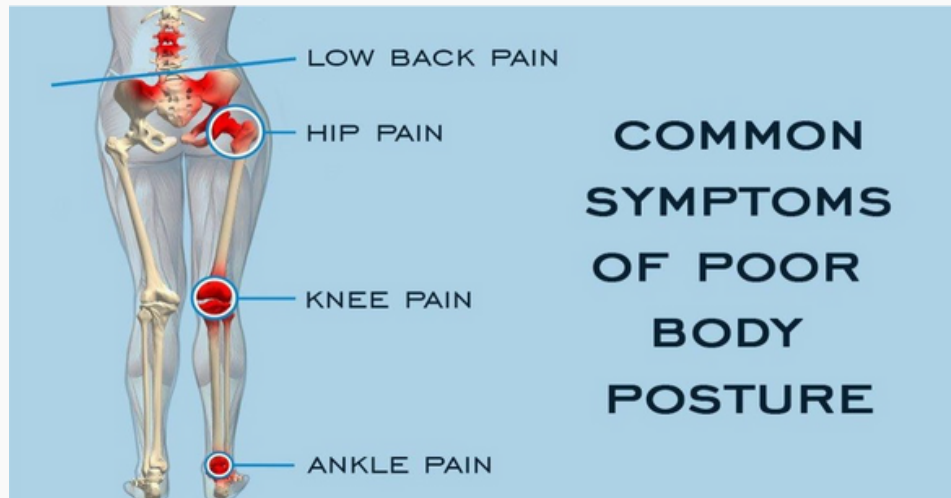
This is of particular importance if you're constantly looking at a screen and arching your head forward.

Your lower neck has to accommodate an extra three kgs of weight for every inch that your head leans forward.

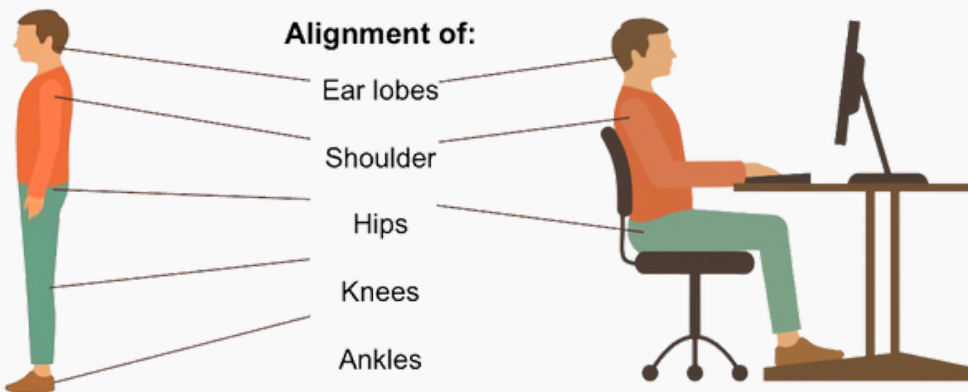


Back and Spinal

Our posture influences back and spinal pain



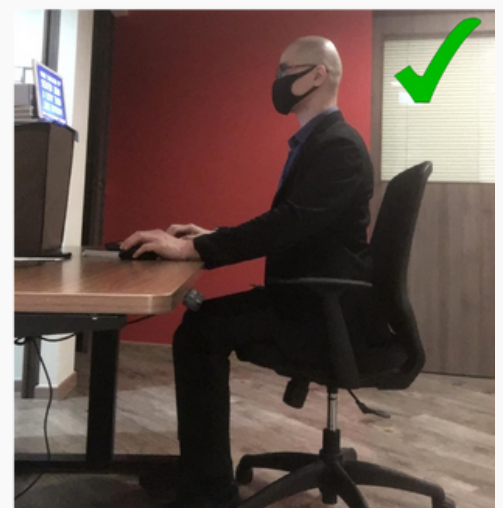
The importance of proper ergonomics



Adopting a neutral posture that aligns the ear lobes, shoulders, hips, knees and ankles both while standing and sitting is least stressful to the joints and muscles and the most energy efficient position for the body.

Being Mindful of Your Posture

Application of ergonomics can prevent work-related aches and pains.

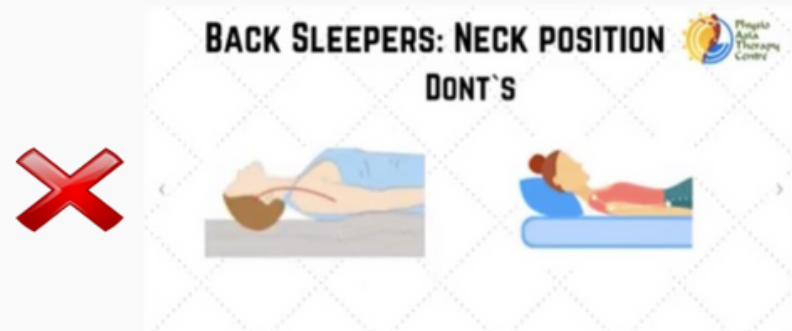


Back and Spinal

Sleeping Postures

If you **sleep on your back:**

- support your neck properly
- ensure that your pillow is neither too high nor too low
- keep your lower back flat and if required, position a pillow below your knees for support



It is important to pay attention to our sleeping posture if you are already experiencing back pain.

If you **sleep on your side:**

- support your neck properly
- ensure that your pillow is neither too high nor too low
- position a pillow in between your legs



Back and Spinal



Not all stretches are suitable for everyone. Please check with your physiotherapist if you have a condition that you are trying to address.



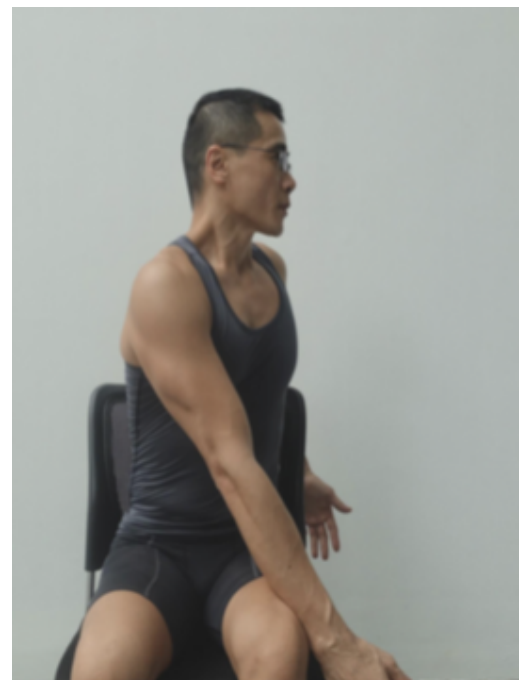
Practical Stretching Tips

1. Stretching may be uncomfortable, but it should never be painful.
2. Exit/release pain inducing positions immediately.
3. Hold the position for a minimum of 12 seconds to ensure an effective stretch.
4. Do not push into pain – move only as far as is tolerable in that range of movement.
5. Sudden movements can result in muscle spasms – enter and exit each stretch/movement slowly.
6. Do not attempt any stretch or movement that triggers or increases pain.



Twisting while seated

1. Plant your feet firmly on the ground to make sure that your legs are not dangling in the air.
2. Stabilise your hips and knees.
3. Keep your shoulders relaxed.
4. Place your left hand on the outside of the right knee.
5. Bring your right hand behind you (as shown) so that if you are sitting on a chair, you are holding on to the back of the chair.
6. Gently turn your trunk towards the right.
7. Keep your hips and knees in the starting position.



Hold the position for 10 seconds and repeat the movement 10 times before switching to the other side.

Back and Spinal



Twisting Movements for mid-back

1. Keep your feet firmly on the ground with the knees bent at a 90-degree angle and shoulder width apart
2. Clasp your hands behind your head and gently interlock your fingers OR place your arms across your chest
3. Keep your shoulders relaxed
4. Gently twist your body to the right – try not to shift your weight and keep both buttocks firmly on the chair

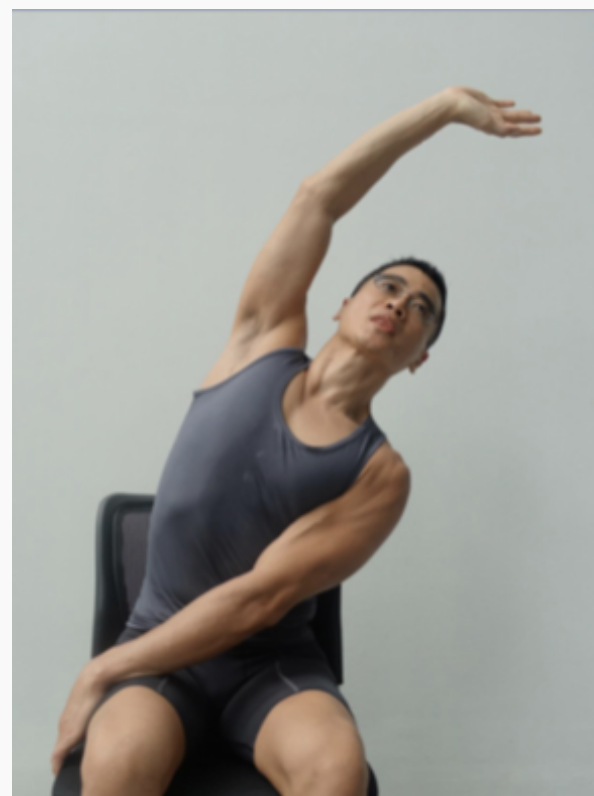
Repeat the movement on the other side



Side Bends

1. Stabilise your hips and knees
2. Place your right hand across your left thigh and hold on to the edge of the chair
3. Keep your shoulders relaxed
4. Raise your left arm over the head and across towards the right
5. Gently bend your body towards the right but do not rotate your spine and try not to lean forward while you bend

Hold the stretch for 10 seconds and repeat the movement 10 times before switching to the other side.



Back and Spinal

Side Bending Movement

1. Keep your feet firmly on the ground with the knees bent at a 90-degree angle and shoulder width apart
2. Clasp your hands behind your head and gently interlock your fingers OR place your arms across your chest
3. Keep your shoulders relaxed
4. Gently bend your body to the right – try not to shift your weight and keep both buttocks firmly on the chair
5. Bend as far as you comfortably can and stop before you feel like your hip is peeling off the chair
6. Make sure that you are bending sideways and not towards the front or the back
7. Repeat the movement before switching to the other side.



This movement can also be done with the hand hanging down by the side of the body.

You can try to bend sideways (as if you are picking something off the floor).

Back and Spinal

Spinal Extension

1. This movement involves a neck extension and must be done with caution. Exit the position immediately if you feel any discomfort or pins and needles in your arms.
2. Stabilise your hips and knees
3. Cross your arms in front of you and use your hands to clasp either elbow (as shown)
4. Arch your back gently and raise your arms to the ceiling
5. Tilt your head gently to look up at the ceiling
6. Try not to exert any movement from the lower back so your lower back is not arched and your head does not drop backwards. Gently bring your arms and head back to neutral position. Use very gentle movements to move in and out of position.



Hold the position for 10 seconds and repeat the movement 10 times.

Spinal Extension

Please avoid this stretch if you have back pain.



1. Stabilise your hips and knees
2. Place your feet firmly on the ground so your weight is equally balanced across both buttocks
3. Cross your arms in front of you and use your hands to clasp either elbow
4. Bend your back forward and gently tuck your chin towards your chest
5. Try as much as possible to not arch the back but keep it straight.



Hold the position for 10 seconds before you raise your head back to neutral position. Repeat the movement 10 times provided there is no discomfort.

Back and Spinal



Piriformis Stretch

Please avoid this stretch if you have back pain.



1. Make sure you are seated comfortably
2. Cross your right leg over the left knee (as shown)
3. Keep your back straight and bend forward from the hips (as shown)
4. Keep the range of movement within your comfort range and think of bringing your chest towards your knees



Hold the position for 10 seconds and gently uncross your legs as you raise yourself back to neutral position. Switch over to the other side and repeat.



Sciatic Nerve Flossing

This is a nerve stretch and unlike the previous stretches, we don't hold the position. It is a movement stretch so we move in and out of the position. The more you repeat the stretch, the less intense should the stretch feel. Stop the movement if you feel like the stretch is becoming more intense with repetition.

First position:

- Sit up tall on the chair with your feet firmly on the ground
- Drop your head down and round your shoulders

Second position:

- Extend one knee as you extend your spine and gently head back into a straight seated posture
- Turn your foot so it is pointing towards your face (as shown)
- Gently lower the foot and return to the starting position



Repeat the movement five times on each side. Make sure that your back is not arched when you perform this movement.

Back and Spinal



Tip and Tricks #1

Ice packs

Ice is typically used to numb pain and reduce inflammation or swelling. It is most effective for about three days after you have had an injury, especially if you notice some swelling and/or bruising with tenderness and sharp pain.

Ice packs should be used for about 10 minutes at a stretch. It is important to wrap the ice pack in a towel or pillowcase to prevent burns.



Tip and Tricks #2

Heat packs

Heat packs are great for soothing tired and aching which are stiff after a long day of activity.

Heat packs can be used for about 20 minutes at a stretch. It is important to wrap the heat pack in a towel or pillowcase to prevent burns.



Tip and Tricks #3

Towels

Towels are very handy to promote good posture when one is seated on a chair which does not offer ergonomic support. They can be placed at the lower back level (as shown).

They can also be placed at the mid-back level (around the bra line for ladies). It helps push the body upright so one is less likely to slump. Towels are also useful while stretching.

Back and Spinal



Tip and Tricks #4

Bending to pick up stuff

This movement is unlikely to cause any problems if you are picking up a light object (pen or piece of paper) from the floor.



Tip and Tricks #5

The Proposal

Bend down on one knee when you are going to pick up something heavy.



Back and Spinal



Seek Professional Help

If the symptoms do not go away within a few days and:



1

The pain gets worse with activities such as sitting, standing, walking, or lying down.

2

You have such excruciating pain that it restricts your normal activities.



3

You have numbness, tingling, burning pain or weakness in your limbs.



When do you see a Doctor?

- You have continuous pain that prevents you from sleeping on your back.
- Your pain is related to a recent injury or impact to the back
- You have numbness in and around the groin
- You have sudden fecal incontinence or an inability to empty the bladder fully
- You are unable to walk properly



Back and Spinal



Take Away Message



1. Pay attention to your Postures



2. Apply Proper Ergonomics



3. Develop Proper Sleeping Positions

4. Keep Moving and Stretching!

