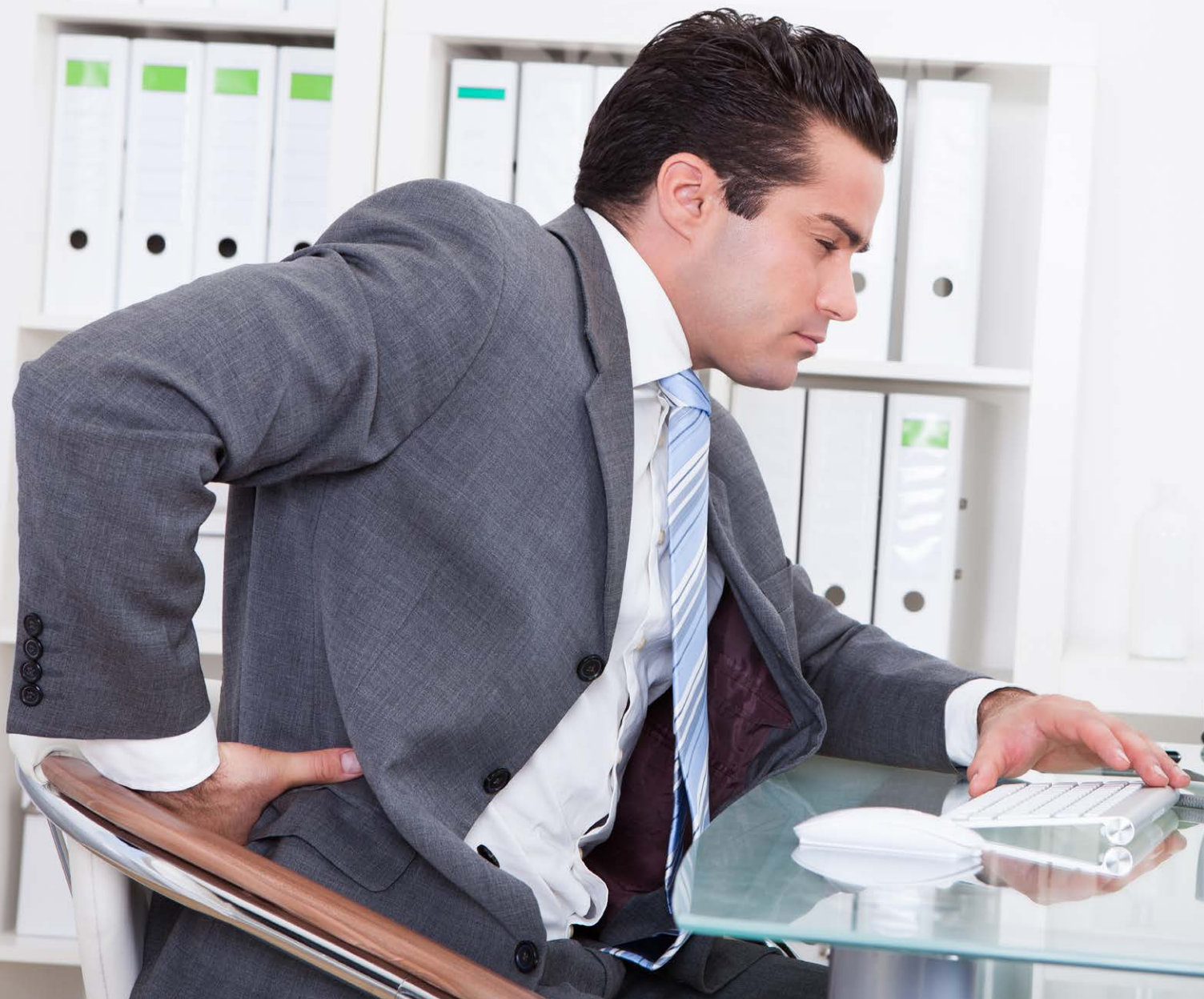


Correct Sitting Posture: **Office**



As more jobs become desk based or sedentary, more and more people are spending long periods of time sitting in chairs. Sitting for five hours a day, five days a week equates to 1,175 hours – or almost 50 days - every year. Multiply that by the number of years you work, then add the time you are seated at home and many people will spend more time sitting than in bed!

According to the ergonomics team at Cornell University, sitting for longer than 20 minutes has negative effects on your body, including an increase in musculoskeletal problems such as back and neck problems. They recommend moving regularly to avoid these negative effects, using the principle of 20/20 - 20 seconds away from the sitting position every 20 minutes. In other words, you should always try to stand/move every 20 to 30 minutes.

Sitting also affects other parts of the body and your health as well.

People who sit for long periods are twice as likely to have heart disease as those who stand. Additionally, when you are sitting still your insulin levels drop by 24% (increasing the risk of diabetes), your good cholesterol drops by 20%, and the enzymes that reduce fat drop by 90% - meaning you are burning fewer calories than if you were just chewing gum!

This suggests that standing up might be better for us – but in actual fact that is not true either.

Standing for prolonged periods has been linked with other vascular problems and increases the risk of varicose veins.

So the best advice is to move from your desk every 20-30 minutes, even if you only stand for a few seconds or walk for a few paces. Conversely, if you are standing for longer than 20 minutes, try to sit for a short time.



How to Sit

The correct seating position and height adjustment of your chair or desk is key.

If the height of your desk can be adjusted, you should adjust the height of your chair so that your feet are on the ground, then adjust the desk so your arms are in the correct position.

If the height of your desk cannot be adjusted, you should adjust your chair so your arms are in the correct position. This compromise will often mean the position of your legs is not optimal but is the lesser of two evils.

Chairs

The optimal sitting position is achieved by keeping the spine in what is known as a neutral position, whilst positioning the legs so your feet are flat on the floor, with feet and knees roughly hip width apart, and maintaining correct arm posture.

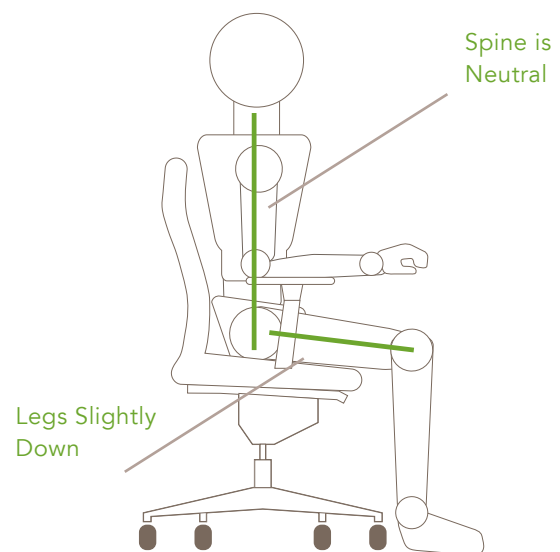
There are many elements to factor into obtaining and maintaining this position, not least what you are intending to do whilst sitting on the chair - such as using a desk, computer or phone.

The correct sitting posture - in terms of the positioning of the spine and legs - looks like this:

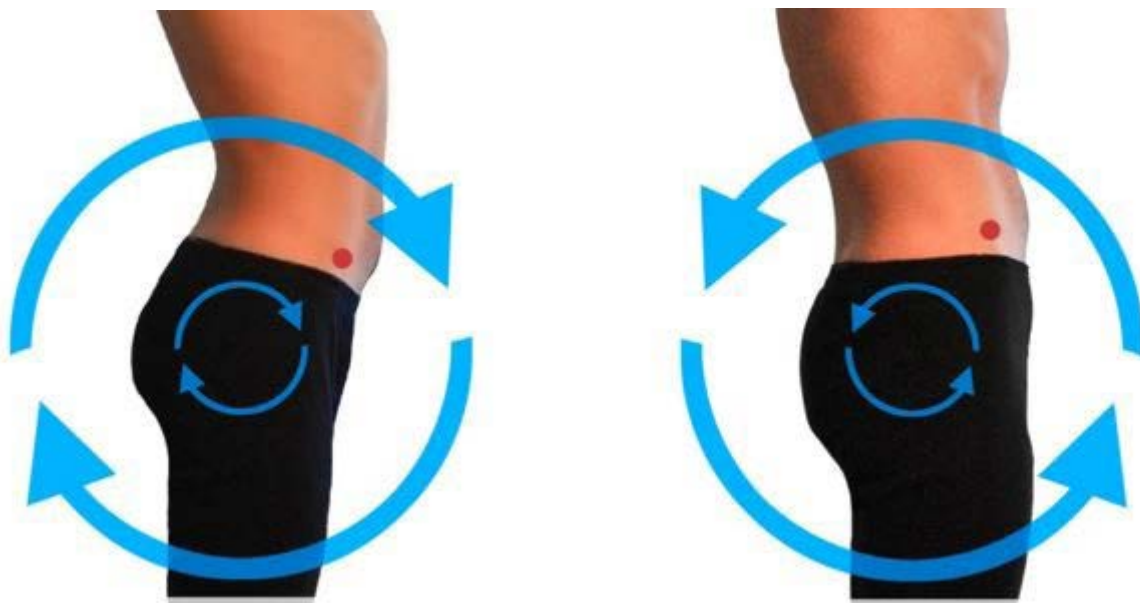
On a normal office chair, adjust the seat height so your feet are flat on the floor (we will come back to foot rests later). Your feet and knees should be roughly hip width apart.

To achieve this, start with your feet together, then turn out your toes as far as you can. Next, bring your heels level with your toes and your feet will be roughly hip width apart. Now bring your knees in line with your feet and you should have reached the correct position for your legs.

Modesty screens can be used if this is a concern.



To set the lower part of the spine (lumbar) in a neutral position, sit on your chair and put your hands on your hips. Now rotate your hips as far forward as you can. Then rotate the pelvis backwards as far as you can. You need to find the middle position so it is best to go all the way forward then all the way back a few times until you get a good gauge for where the middle is.



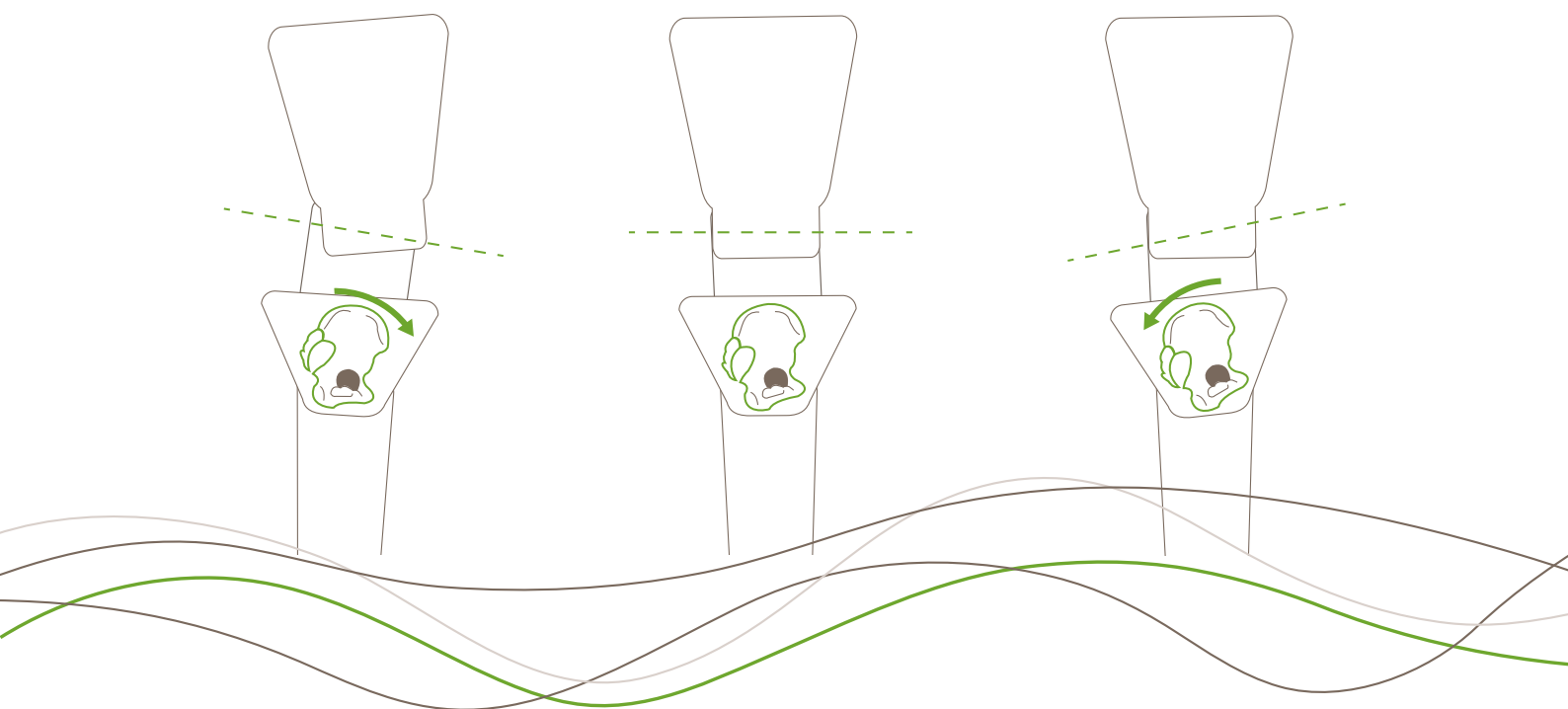
The middle (neutral) posture has been shown to be better than the backwards posture, but slightly forwards of the middle posture is actually the best position for your back.

Holding this slightly forward pelvic posture on your chair puts pressure on the muscles around the pelvis and can be hard to hold, so forward tilted chair seats (FTS) are recommended.

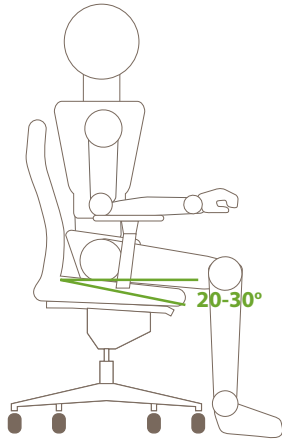
Forward

Middle

Backward



The angle that has been shown to be optimal is 20-30 degrees forward and down. This puts the thighs at an angle between 120-135 degrees. It should look like this:



For those that don't, chair wedges are available to help set to the correct angle.



The slightly down thigh posture with slightly anterior pelvic tilt can take the stress off the joints in the lower back and place the discs in their middle position, which helps keep the back healthy and prevent injury, whilst also easing ongoing back problems.

When sitting in the forward tilting seat position there is actually no need for the use of a back rest on the chair, which is why many 'ergonomic' chairs do not have a back rest at all.

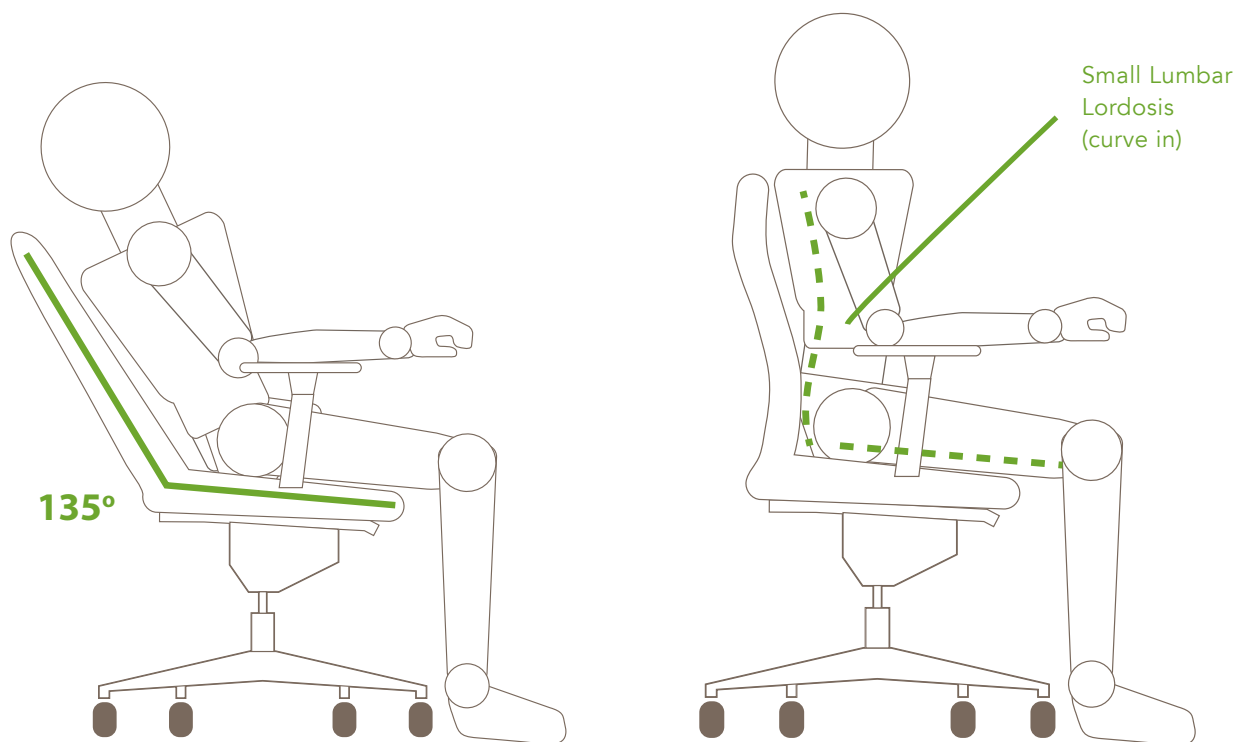
Examples of ergonomic chairs that use this type of posture include: the kneeling chair and the saddle chair.



Some studies have suggested that, to aid the lower back, the optimal position of the pelvis can also be attained by adopting a very relaxed posture.

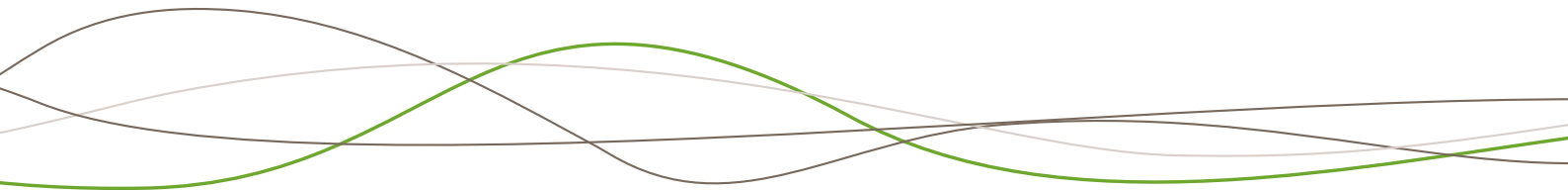
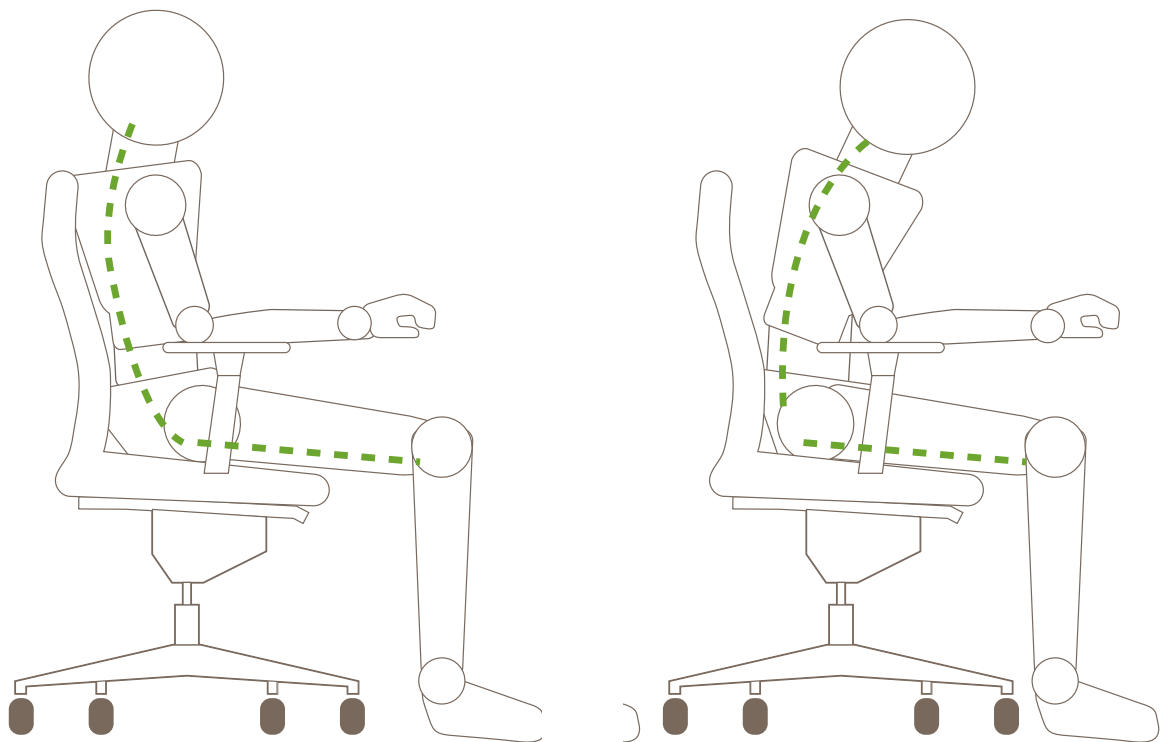
Tilting the back of the chair into a reclined position does decrease the pressure on the lower part of the back and especially the discs. However, this position comes with its own problems, such as putting more pressure on the neck, shoulders and arms, restricting torso movement and causing pain. As a result, this posture is not recommended.

Sitting correctly and protecting the lumbar spine can lead to improvements throughout the whole spine and even your neck and head position too. Once the pelvis is in the correct position, the rib cage needs to be placed in a straight line over the pelvis. This straight line makes the lumbar spine curve inwards (medically known as a lordosis).

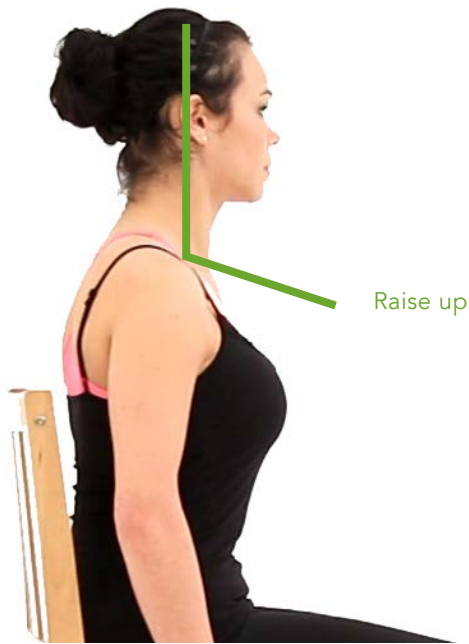


If your chest is too far back, you will need to rest into the back of the chair – and, as we know, you don't need the back on a chair if you sit in it correctly. Leaning back into the backrest of your chair increases the pressure on the three areas of your spine but is particularly bad for your lumbar spine and neck.

If you sit with your weight too far forward, you will either lean forward (using your muscles to hold you there) or, more commonly, lean on your desk. Again, this puts extra pressure on the lower back and neck.



So, to complete the full correct sitting posture, try sitting upright without your back touching the chair back. Now imagine a piece of string is pulling your chest upwards towards the ceiling. Raise up slightly from the chest but do not let your lower back arch anymore (this is often a small movement).



Once your chest is over your pelvis, the next step is to position your shoulder blades (scapula) so that the shoulder joints are in line with the body.

Most people round their shoulders, leaving them with a posture like this



To put the shoulders to the neutral position, start by pulling your shoulders all the way up (shrug your shoulders).



Now relax the shoulders forwards to the mid position where your hand would naturally fall in line with the middle of the pelvis.



Then pull the shoulders backwards from this position.



Then pull the shoulders down from this position.



The step is to set the position of the neck. Most people sit with their heads forward.



This type of posture puts pressure on the lower neck as it is forced into flexion (as if looking down), whilst the upper part of the neck is forced into extension (as if looking up).

Bringing the neck back to the neutral position is a simple process as long as the rest of your posture is already correct.

Whilst looking straight ahead, tuck your chin back as if you are holding a small ball under your chin.

Your ear lobe should now fall within the triangle made up by your collar bone and neck muscles.



You are now sitting with a neutral posture!

Most people find the position hard to hold at first. In fact, most people can't hold the posture for more than five minutes initially. Try the position and increase the hold time gradually until you can hold for 20 minutes. You need to find the middle position so it may be best to go all the way forward, then all the way back a few times until you get a good gauge for where the middle is.





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