



THE ULTIMATE GUIDE TO

SITTING, STANDING & SLEEPING

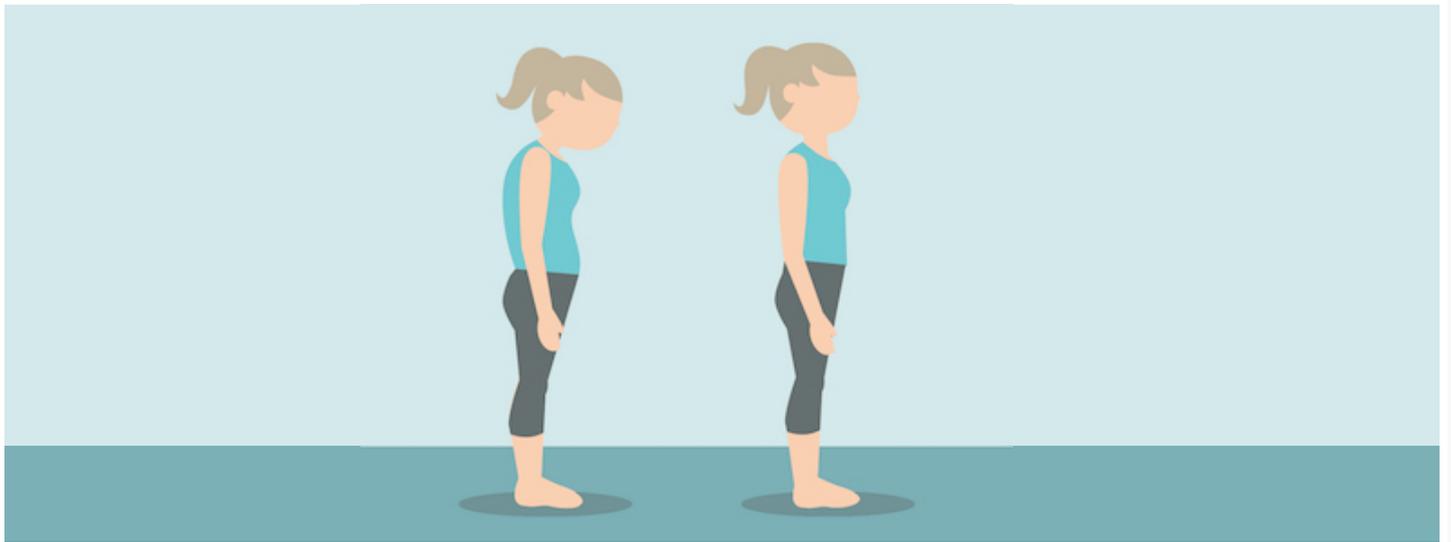
WITHOUT DAMAGING YOUR BODY

Did you know that the way you sit, stand, and sleep could be damaging your body and affect the way you look, feel and move?

Your answer is hopefully going to be 'yes'. I get a lot of questions about how people should set up their chair at work, which mattress or pillow to buy, and about what the best running shoes are. This tells me most people are aware that there are good and bad ways to sit stand and sleep. But did you know some chairs, shoes, mattresses, and pillows are actually making your body worse without you knowing about it?

It can be easy to get lost in all the different options if you don't know exactly what's good and bad for you. Remember that all the stuff you find in stores is not necessarily there because it's good for you! It's there because there's a market for it. If you make the wrong choices for your body, your health will slowly get worse over time. In this guide I'll go through what is best to support your body's structural alignment, also known as your posture.

Let's have a quick look at what posture actually is before I go through the tips for sitting, standing and sleeping. Your posture is the way your body holds you up while you're sitting, standing, and lying down. If I would ask you to stand up so that I could look at your posture, the first thing you would do is show me your best, most upright posture. The problem with this is that this gives a wrong picture. You won't be able to hold this position for long if it's not your natural posture. Your muscles can only hold you up for so long. Once they start to fatigue, you will slump into your natural posture. This is the posture that you have when you're walking around and sitting all day. Therefore a better way to assess posture is to ask you to stand up, breathe in, breathe out, relax and let your body slump. This way you can't 'cheat' by using your muscles, and I get a clear picture of what your structural framework looks like. Go find a mirror now and try it for yourself!



Left: slumped, forward posture. Right: well-aligned posture.

All done? So what did you look like? If you looked pretty good and there wasn't a big difference between your best posture and your slumped posture, you're doing great! Don't stop reading though; you want to make sure to keep it this way. With a couple of simple tricks you can minimize your chances of developing a slumped posture. This will prevent a lot of problems in the future. If you didn't look quite as good, you definitely want to keep reading. Although the advice in this report won't turn back time and fix all your problems, at least you will prevent things from getting worse.

WHY IS POSTURE SO IMPORTANT?

Posture is not just about how you look on the outside; it's about how your body functions on the inside. Unfortunately a lot of people think that a poor posture is just a cosmetic problem. Most people don't know that your posture plays a much bigger role than that, and that a poor posture is in fact a health problem. Optimal posture is essential if you want to be as healthy as possible. Why? It's simple: **a better posture = better nervous system function = improved overall health.**

Let me explain.

STRUCTURE = FUNCTION



malfunction



optimal function

YOUR BODY IS THE SAME.
optimal POSTURE = optimal HEALTH

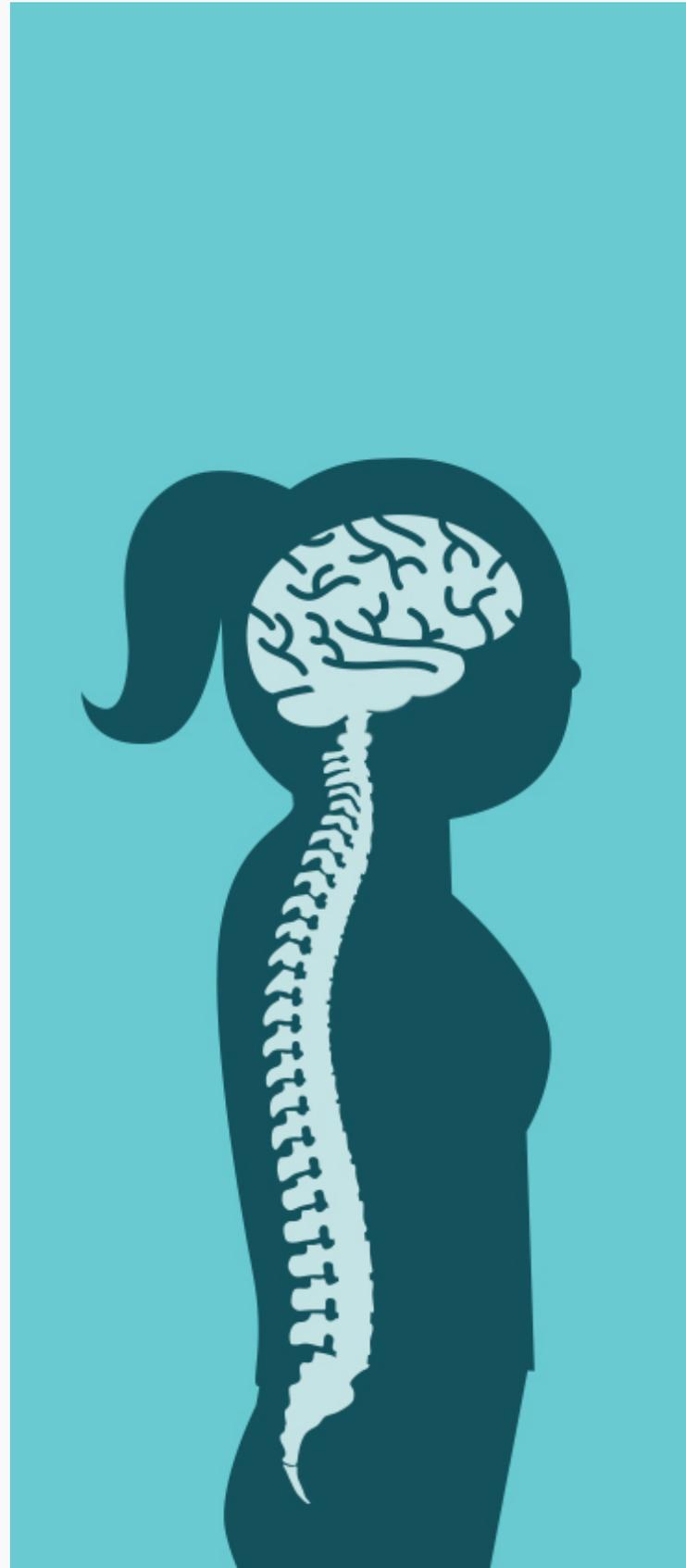
Your skeleton is the structural framework of your body. Your spine provides the structural support to maintain an upright posture. Your spine consists of 24 bones called vertebrae. Within your spine sits your spinal cord, which is the central connection between your brain and the rest of your body. Your brain is the most important organ in your body. It's the central processing unit that forms the central nervous system together with your spinal cord. Important nerves from the spinal cord come out between the bones of your spine and travel to the rest of your body. This way your nervous system controls every cell in your body. The state of your nervous system directly determines the state of your health.

Everyday stressors and overuse of your spine (accidents or falls on your back, prolonged sitting, standing and sleeping in bad positions, etc.) can cause your spinal bones to misalign. This can cause interference in the signals sent between your brain and your body, and decreases your nervous system function. Your body cannot always self-correct these misaligned bones, especially if a bone has been pushed forward. Your spinal bones don't have muscles to pull them back out of a forward position. As a result of this, your posture starts to collapse forward.

A poor posture can put a lot of stress on your spinal cord, further decreasing your nervous system function. Unfortunately most chiropractors, physiotherapists, manual therapists and osteopaths mainly use techniques that push bones forward by pushing on backs. This can give temporary relief of pain, but it will often make your body worse in the long-term. Because these techniques don't get people out of a forward posture, structurally your body will become worse. I only work with techniques that improve your posture as much as possible.

Contrary to what many people believe, a good posture depends on the position and functioning of your spine, not on how strong your muscles are. Of course your muscles help to keep your body upright, but no matter how strong they are, after a while they will fatigue, and your posture will start to collapse. As long as the structural problems in your spine aren't addressed, postural exercises aren't going to have a lasting effect on your posture.

Poor posture can cause all sorts of musculoskeletal problems. When your spine is properly aligned there is the least amount of stress on your ligaments and muscles, making you less likely to have physical injuries and pain. Now that you understand the relationship between your posture, spine, and nervous system, you can probably think of other complaints that could be related to a poor posture. Some examples are: difficulty breathing and decreased blood circulation, hormone regulation, and digestion. A forward posture has also been linked to a poor mental state, decreased energy, high blood pressure, a higher chance of having a heart attack, and dying early of many causes. Do you still think posture is just about looking good?



SITTING 

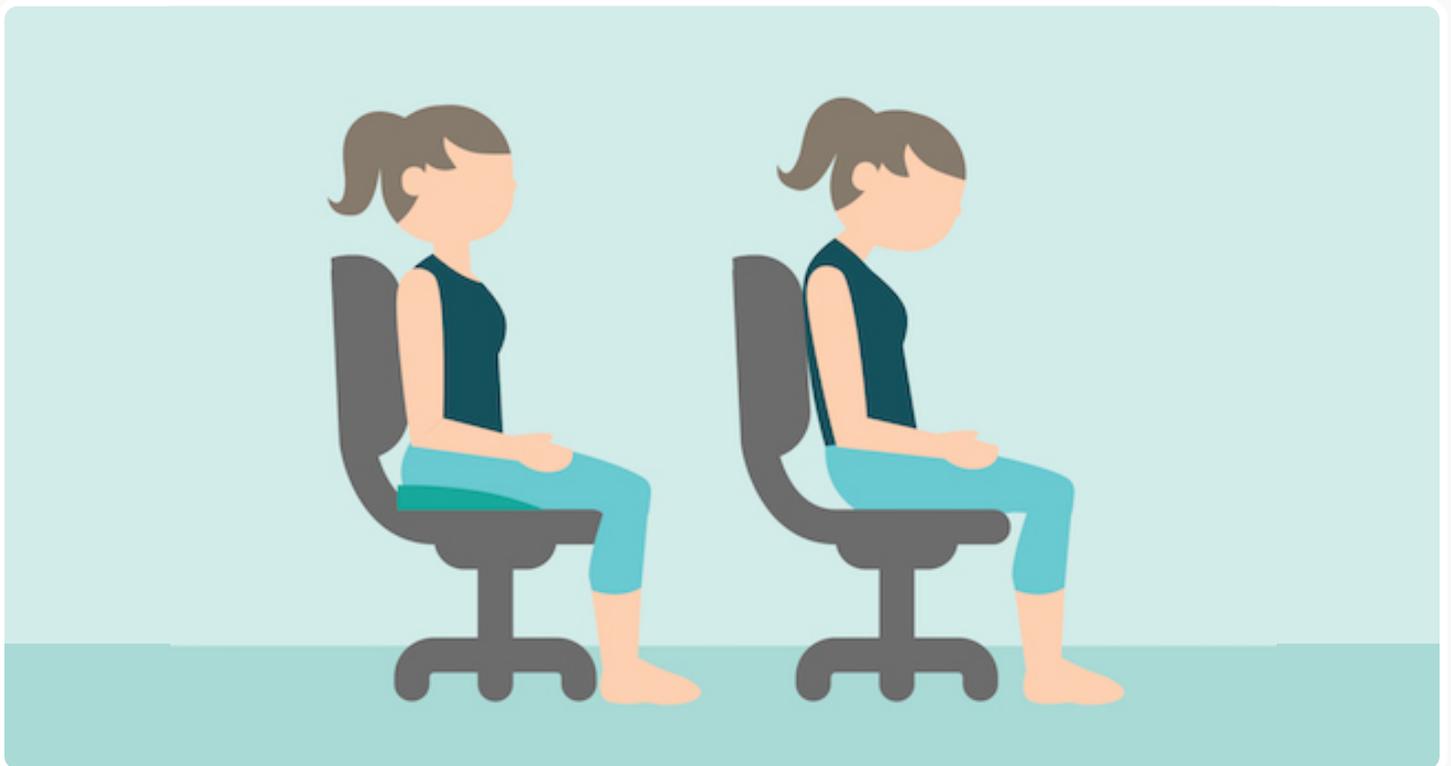
STANDING 

SLEEPING 

We all know we should sit up straight instead of slouched down on our sofas. We also know we need to sit on a 'good' chair. But what is a good chair? Most chairs are designed to look good, not to be ergonomic and good for us. They are also designed for the 'average person'. But look around you. What if the 'average person' has a terrible posture? Yep, you guessed it: most chairs are actually designed to be comfortable for people like that. Think about the chairs on a plane for example. You know how they are curved and push you in a forward position? If you have a terrible posture yourself, you might find those chairs comfortable, since they support your slumped posture. If your posture is still pretty good at the moment but you keep sitting on chairs like that, you will eventually create problems for yourself.

A good chair has a straight, flat and upright backrest. It also has a flat, firm surface for you to sit on, is high enough, and is angled so that the back of the chair is a bit higher than the front of the chair. This is to make sure your hips are higher than your knees. Watch out that you don't sink into the chair. If you sink into a chair it doesn't support your body enough. Unfortunately most chairs aren't made like this. However, there are ways to improve bad chairs.

Chairs that have a flat surface but don't have the forward slope can be modified using a seat wedge pillow. This way your pelvis is tilted so that the natural curve of your lower back is maintained. Chairs that are more difficult to modify are ones that have a dip in the sitting surface and a backwards-angled backrest. It's probably best to avoid these. Chairs that have a hollow backrest can be modified by putting a pillow or folded up towels in the space.



A seat wedge makes sure your hips are higher than your knees, maintaining a neutral pelvis and a normal lumbar curve.

Make sure your chair at work is set up properly, since this is probably where you'll be sitting the most. Also have a good look at your car seat, and what you sit on at home. I'm afraid it's difficult to modify a soft couch... you can try by using pillows and seat wedges, but you're better off sitting on something else. Sitting on a bad chair can push your vertebrae forward. When this happens, as mentioned before, your body can't self-correct it, and starts to collapse forward. You're essentially causing problems for yourself this way. The good news is that it'll be easier for you to prevent problems now that you know how to fix your sitting position!

SITTING,
STANDING &
SLEEPING

Standing all starts with your feet. Your body was designed to walk barefoot on uneven surfaces. While walking around barefoot is probably what's best for us, it's not very practical. There is a solution though: barefoot shoes. These shoes are very minimal, are shaped for your feet and have thin and flexible soles. This way your feet can work the way they were supposed to. All your foot muscles will be used allowing your feet to get stronger, and you'll be able to feel the ground beneath your feet. However, if you Google 'barefoot shoes' and decide these shoes aren't fashionable enough for you, maybe your current shoes can be modified to at least minimize the damage a lot of shoes are doing.

One of the most important things for shoes is that they should be flat on the inside, without an arch support or dipping of the heel. Some shoes will have dipping heels built in; other shoes will develop this over time once they're worn in. To fix this, you can put a small heel lift in your shoes to make them flat on the inside again. The reason this is so important is that if there's dipping of the heel, your pelvis tilts backwards. To compensate for this your head and shoulders will slump forward. As discussed earlier, this forward posture is bad for you and important to avoid. A slight heel on the outside of your shoes is generally fine, as long as your shoes are flat on the inside.



Left: flat shoes without a heel lift. Your heel will sink in slightly, and your upper body will be slightly forward. Middle: good posture with a small heel lift. Right: forward posture due to a dipping heel.

Cushioned or padded shoes (like the sneakers and trainers a lot of us are wearing) are also shoes that are best avoided. These shoes prevent you from feeling the ground beneath your feet and usually develop dips of the heel quite quickly. They usually have a soft inner surface that makes your heel sink lower than the front of your foot. Rigid shoes or shoes with thick soles might be better with regards to the heel dipping, but are still not flexible enough to allow your foot's normal movement.

Also try to stay away from arch supports. Again, these prevent the normal movement of your feet. Although a lot of us have 'flat feet', if you 'fix' your flat feet with an arch support, it is likely that other joints in your body like your knees, hips, pelvis or spine will have to compensate for it, and problems are developed in other areas of your body.

It's best for your feet if they have a bit of space to move. Squeezing your feet in pointy or tight shoes isn't the best idea. Try to wear shoes that leave plenty of space for your feet to fan out when you're walking.

If you've never had any feet problems, please don't think you can skip this advice! Remember, we're looking at full body posture and function here, and everything is connected. If you have a neck or low back problem, it's possible that it starts with your feet. If your feet aren't moving like they are supposed to, your body will compensate in other areas.

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The thing people ask me questions about the most is definitely how to sleep. Maybe because there are so many options when it comes to mattresses and pillows – most people just don't know where to start and are hoping I have the answer. Fortunately the answer is actually pretty simple!

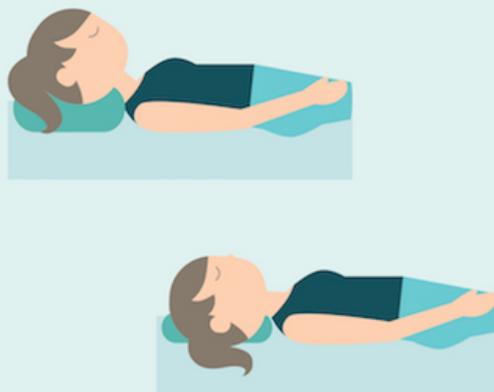
For your bed, firm is best to keep your body in good alignment. A firm mattress with a firm bed base is ideal. Forget about memory foam! A mattress is supposed to be supportive to your body. When you sink into it it's too soft to support you properly. Even though you might think it's comfortable, comfortable is not always good for you. Most people notice that when they have a firm mattress they actually have fewer problems when they get up in the morning. A mattress that's too soft can actually create problems, or make sure you keep the problems you already have.

When you combine a firm mattress with a pillow that's exactly the right height, you'll find that you wake up refreshed and without pain. A firm latex mattress without springs or pockets is a great option. It can be either a normal mattress or a topper that you use as a mattress. For the bed base you can use a divan base or a slatted base. You can even put a plywood board on the slats for extra support. Now this might sound a bit weird, but before you buy a new bed, try this out by sleeping on a duvet on the floor for a couple of nights. Make sure you get your pillow height exactly right using the tips at the end of this guide.

When it comes to sleeping positions, sleeping on your side is best for your spine. Side sleeping supports the normal curves of your back. To keep your spine in a neutral position it helps to sleep with a small pillow between your knees. Sleeping on your back is not bad but not as good as side sleeping. When you lay on your back the curves of your spine will be flattened. To take some pressure off your lower back it can help to put a pillow underneath your legs.

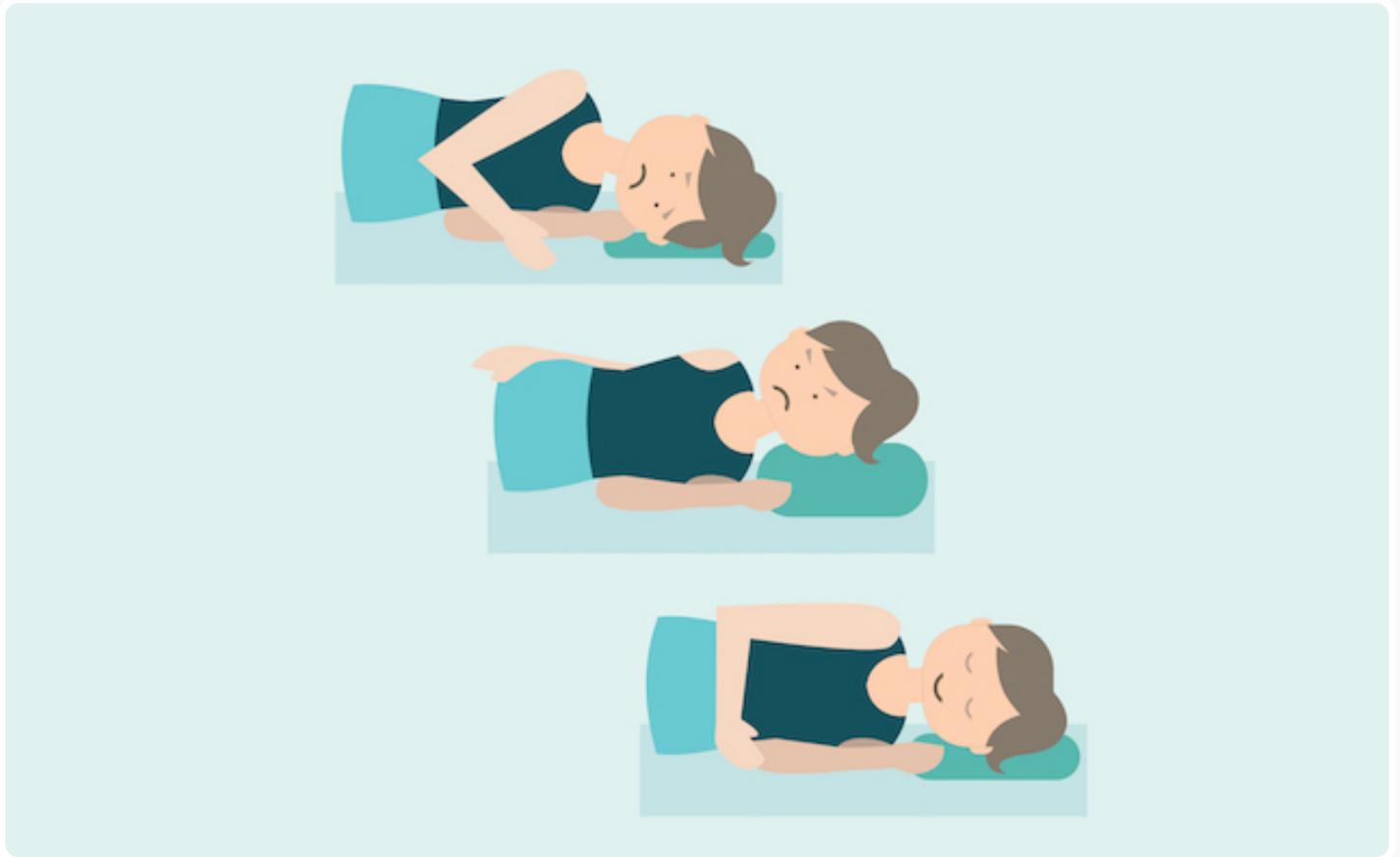
Whatever you do, never sleep on your stomach! This is the worst position possible because it completely twists up your spine. Your head is turned to one side and the curve of your lower back is increased. If you sleep in this position you're creating problems for yourself. To stop sleeping on your stomach try putting two tennis balls in between 2 tight boxer shorts on each side of your groin while you sleep. This will wake you up when you try to turn on your stomach in your sleep. Good luck and keep trying! Most people learn to stop sleeping on their stomach within a couple of weeks this way.

Last but not least, let's talk about pillows. First of all, don't fall into the trap of buying a 'front sleeper pillow'. By now you know not to sleep on your stomach, and the pillow isn't going to make a difference. There is no way to make sleeping on your stomach ok. If you're a back sleeper, it's probably best not to use a pillow at all. Remember, we're trying to avoid forward posture. If you use a pillow when you sleep on your back, you'll most likely push your neck and upper back forward. You might get away with a very flat pillow. Otherwise a folded up towel is a good option.



Above: a pillow that's too high. The neck and head are being pushed forward too much. Below: a good, flat pillow that keeps the spine in a neutral position, while supporting the space underneath the neck.

If you're a side sleeper, the height of the pillow is more important than anything else. Do make sure the material isn't too soft. Again, memory foam is way too soft and not supportive enough. You can test exactly what pillow height your body needs at home. Just grab a stack of towels and start building a 'pillow'. If you're on your side and your upper shoulder drops down and forward, the pillow is too low. If your upper shoulder is pulled backward, the pillow is too high. You know you've found the right height when your shoulder and body is in a neutral position without any effort. It's perfectly fine to keep sleeping on your stack of towels, or else you can try to find a pillow that is that height. If your current pillow is too low you can also put some folded up towels underneath your pillow to build up the height.



Above: a pillow that's too low with the shoulder dropping forward. Middle: a pillow that's too high with the shoulder being pulled backward. Below: an optimal side sleeping position with a neutral shoulder position.

If you wake up in the morning and you don't feel refreshed or you have all sorts of aches and pains, you most likely don't have the right pillow/mattress combination. Try these tips to see if they work for you!

Hopefully you understand that the way you sit, stand, and sleep can damage your body now. With this guide you have all the tools you need to fix this, and to make sure you keep your body functioning as good as possible. I hope you understand the importance of a good posture when it comes to your health better, and that you found this guide useful.

If you think you have structural problems with your body that need to be corrected and you live in Amsterdam, you can find me at Chiropractie De Pijp (www.chirodepjip.nl). I wish you the best on your journey to good posture and health.

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