

AN UNEXPECTED DAILY DANGER

Did you know that studies link prolonged periods of sitting to an increased risk of disease and mortality?

By Natasha Liviero

What the research says

That's right, it's not only the usual suspects like stress, smoking, diet and exercise that you need to be aware of. Researchers link sitting for extended periods of time to several conditions including weight gain, diabetes, metabolic syndrome, cancer and an increased risk of death from cardiovascular disease. A study published in the American Journal of Epidemiology found that sitting for more than six hours a day elevates your risk of death from diabetes, heart disease and obesity by 18% as opposed to someone who sits for less than three hours a day.

That's why doctors advocate getting up and about every 20 minutes or so for the sake of longevity and total body wellbeing. "Sitting for too long has implications on one's muscles, bone structure and nervous system. Keeping the core flexible and strong is very important for the body's health and wellbeing," says Dr Michael Lan, traditional Chinese Medicine

Practitioner and Martial Artist. "When sitting for a long time on a chair, one easily becomes ignorant of posture, putting the core out of balance which in turn affects the back and the rest of the body negatively."

The health hazards of sitting

Health experts warn of more risks, including elevated blood pressure and cholesterol levels, as well as poor circulation in legs, decreased flexibility and weaker bones. However, one of the most common discomforts associated with sitting for extended periods is lower back pain. "Muscles that stabilise the spine in the neutral position will often tire first and as a result the body slouches," says Katya Sampaio, Physiotherapist at Adrian Stevens and Associates. "When other muscles are recruited as compensation, these become overloaded and predisposed to injury." Muscle spasms develop from the overload and tension, which compromises blood flow and decreases oxygen and nutrients, while in-

creasing waste products in the tissues. When this continues for long periods, muscles become weaker and pain sets in. "The body will try to protect an injured area by tightening around it, resulting in more fatigue and increased muscle spasm," says Katya.

Reduced blood circulation throughout the body has an effect on mental alertness. "Low levels of oxygen to the brain and body due to decreased blood-circulation leads to lower levels of concentration and drowsiness," explains Dr Lan, who also warns that incorrect posture may lead to problems in the nerves and vertebrae and cause nervous disorders and headaches. So, if you always have a stash of Panado's within easy reach, check your posture the next time a headache sets in.

If you are guilty of sitting for long periods with no exercise at all, and have a preference for unhealthy foods, you are setting yourself up for weight gain and obesity. Amongst oth-



er things, muscles burn less fat when sitting for a long time, so if you are forced to spend hours in front of a desk, please compensate with regular exercise and smart food choices.

What you can do...

Researchers at the American Cancer Society found the even the benefits of regular exercise can be undone if you spend the rest of your work and leisure time sitting. Another study, of over 200 000 Australian residents published in the Archives of Internal Medicine, found that adults who sat for eleven hours or more a day had a 40% greater risk of dying within 3 years than those who sat for less than 4 hours a day. The message is clear: we need to change the way we do things. Here's where to begin:

1 Choose a good chair and correct your sitting posture. "Your chair should provide adequate lumbar support to maintain its natural curve," says Katya. "The height of your chair should be corrected so that your elbows are at keyboard height and your forearms parallel to the floor. Get a footrest so that your hips are slightly higher than your knees and you

are sitting comfortably in the chair with your back and thighs fully supported."

2 Neaten up your desk and office space, paying special attention to ergonomics. The computer should be in the middle of the desk so that you do not angle your head towards the monitor. "Watch for rounded shoulders and slumping your head forward caused by reaching over to see documents on the desk. The top line of your work on the monitor should be at eye level," says Katya.

3 Take regular breaks and aim to stand and move every 20 to 30 minutes or whenever you get a chance. For example, stand up when taking phone calls and request 'standing-up' meetings. Consider investing in a standing desk and put your water bottle on the other side of the office, forcing you to stand up to pour a glass of water! Be innovative in your solutions. There is even a trend towards treadmill workstations!

4 Dr Lan recommends two simple, yet beneficial exercises you can do when sitting for prolonged periods of time:

The first exercise is referred to as 'waving hands in front of the lake' and involves bending your knees, tucking in your coccyx and stomach and stretching your back, while raising your arms up to shoulder height in front of the body, then lowering them down to the sides again. Repeat 18 times.

The second exercise is 'knocking on heavens gate' and involves placing your feet shoulder width apart and swinging your arms from side to side while the back of your palm gently hits your back. This should be done while relaxing your shoulders, hips and waist. It helps to release tension and loosen stiff muscles and tight joints around the back and hip region. Repeat 18 times.

Top Tip: "You may find it useful to place a sticky note on your computer screen, with the word posture on it, as a subtle but powerful reminder to correct your posture while working," says Katya.

The bottom line is that there is mounting medical evidence substantiating the need to sit less during work and leisure time. And, when you consider that an analyses of over 17 000 people by scientists in Louisiana, USA, found that those who spend most of their time seated are 54% more likely to die of a heart attack, do you really have a choice? ■

Tone-up while sitting

Why not tone your abs and buttocks while sitting or driving? "Put on some upbeat music and try squeezing your glutes together to the music. Hold for a count of five and then release, one buttock at a time. Repeat throughout the song and by the end of it you should feel a tightening in your abdomen and buttocks region. If you do this for three songs, it's a quick 12-minute workout!" Says Christine sparks, personal trainer with Virgin Active Health Clubs.

