

FITNESS

Is sitting the next smoking?

Why too much sitting can be hazardous to your health. *Toni Krasicki* reports.

When you think of sitting, it's hard to see it as an activity that could influence your health. It seems neutral, something everybody does, like breathing or blinking one's eyes. After all, most of the population spends much of the day sitting, so how can there be a problem? In fact, that is the problem.

The latest research figures show that a hefty 63 percent of the Australian population is overweight or obese. The fact we are spending far too much time on our backsides rather than on our feet might be one of the reasons.

The CEO of the Chiropractors' Association of Australia (CAA), Andrew McNamara, says that the average office worker spends nearly 14 hours a day sitting.

"When you add eight hours of sleep we are not talking about much time to walk, shop and exercise, or move our bodies in any real way," he says.

The surge in the size of the average Australian has also increased the rise of other chronic conditions and associated diseases such as cardiovascular disease, high blood pressure, atherosclerosis and type 2 diabetes, to name a few.

"When we sit," says McNamara, "kilojoule burning drops to a handful a minute, the enzymes that break down fat →



drop by 90 percent and the electrical activity in our legs shuts down.”

Obesity is only one problem caused by sitting, with a proportionate number of the population developing all sorts of postural complaints, including neck and back pain.

“A recent study showed over a quarter of a million Australians are being forced into early retirement because of back pain or arthritic pain and 663,000 Australians aged 45 to 64 are not working due to ill health,” says McNamara.

“Sitting too much is as serious as saying ‘sitting will kill you,’” says Dean Quirke, director and personal trainer at Holistic Health Concepts.

Although humans are designed to move, sitting causes specific muscles to shorten and adapt to whatever position they are made to hold for long periods. “The hip flexors, particularly the big psoas muscles at the front of the hips as well as the hamstrings become very short. They pull on the pelvis - one is pulling it forward the other backward - so it causes a very tilted spine, creating lordosis or a flat spine, which can lead to back pain,” he says.

Osteopath, Mark Deaves who runs a practice at Fitness First’s Walker Street club in North Sydney, tags postural

SITTING TOO MUCH IS AS SERIOUS AS SAYING ‘SITTING WILL KILL YOU’

problems caused by too much sitting, “upper cross syndrome and lower cross syndrome”, which refers to a typical profile of rounded shoulders, a forward head carriage, shortened hip flexors and hamstrings, and weak gluteal muscles. Once a chronic condition for those in their 30s, 40s and 50s, Deaves says that he is seeing it in increasing numbers of young people in their 20s, where it’s related to a posture developed from sitting in front of the computer.

“It’s not so much sitting but technology,” adds chiropractor, Tom Cartwright from Cartwright Physiotherapy. “People usually have an iPad or smartphone in their hand and their head is dropped,” he says.

But apart from banishing all forms of computers and winding back the clock to the pre-technology days of the

last century, how can we combat these growing concerns?

Cartwright suggests running, as you’re more likely to exercise an increased number of joints, or hitting the pool and swimming backstroke to open up the chest. Quirke says strengthening lower abdominals will help alleviate back pain as these muscles become long and weak from prolonged sitting. Deaves adds that we should sit on the floor rather than in a chair, so as to stretch slightly different muscles.

“The floor is relatively uncomfortable and you actually have to move more and you tend to fidget around - that’s a good thing - not only does it burn more calories but it actually moves the muscles and you’re not keeping certain muscles on stretch for a long time,” Deaves says.

Both Cartwright and Deaves agree that replacing chairs with Fitballs isn’t the best option as you can slouch on a Fitball just as you can in a chair. “A good ergonomic chair is going to be better than a dodgy chair but I still believe in movement, you need to get up and down, your body isn’t designed to sit in one posture for hours,” says Deaves.

Another option in the workplace is the “stand-up desk” or even the “treadmill desk.” Adopted by some forward-thinking companies, these



bring their own complications. Apart from the obvious cost of a special desk, not everyone may be able to master the multitasking involved in walking and working. Standing for prolonged periods can lead to other glitches, like back pain and sore feet (so say some angry bloggers forced to try it by their employers) and raises the issue of finding suitable footwear and dealing with hard floors.

Perhaps a stool would be handy, and so would the ability to lower or raise the height of the desk to suit a seated or standing position. Cartwright shares some insightful advice from a former lecturer:

“Choose the most uncomfortable seat in the house, because you are more inclined to get off it.” Now that’s food for thought! □

THINGS YOU CAN DO TO GET OFF YOUR BUTT IN THE OFFICE:

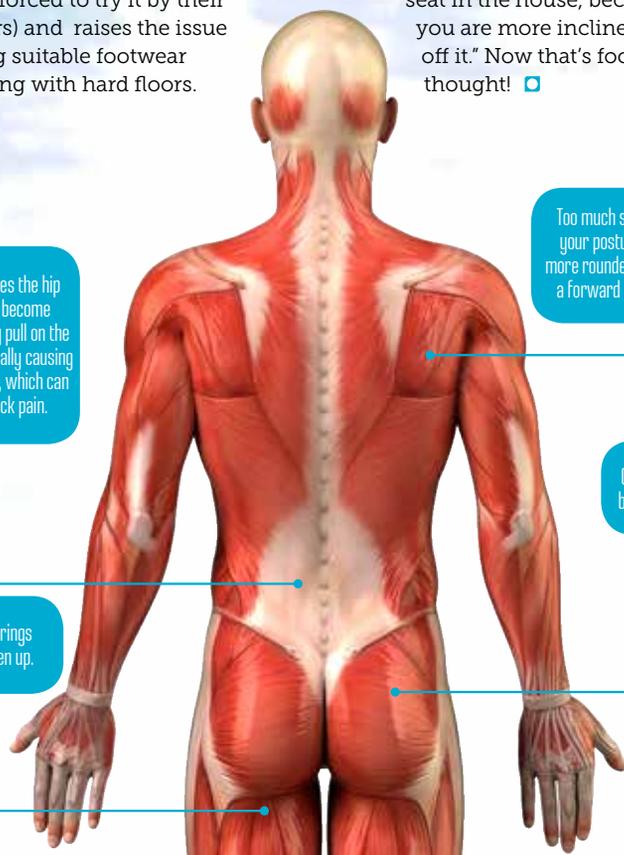
- Set an alarm on your computer to go off every 30 minutes, then stand, roll shoulders and shake out the legs, stretch across the chest.
- Use triggers such as standing up to answer and talk on the phone.
- Get up and walk to your colleague’s desk rather than send an email or call.
- Drink lots of water so you have to walk to the water cooler to fill your glass or bottle, as well as increase your trips to the toilet.

TAKE ACTION:

- Get your workstation assessed to make it as ergonomically friendly as possible.
 - Get your posture assessed by an osteopath, chiropractor or physiotherapist.
 - Fit in at least a couple of stretch sessions a day to lengthen key muscles such as chest, hamstrings and hip flexors.
 - If the budget allows, try a “stand up” desk, if not, use a lectern or recipe book stand on a filing cabinet so you can stand when reading.
 - Try a treadmill desk so you can consistently move while you work.
 - Introduce walking meetings, and discuss business on the move.
- Suggestions by Mark Deaves, Osteopath*

WHAT YOU CAN DO:

- Run, swim backstroke and practice yoga (Cobra works wonders for opening the chest and strengthening the upper back).
 - Perform squats, deadlifts and split squats to strengthen and lengthen lower body muscles.
 - Perform dumbbell flies or cable crossovers for chest and reverse flies for posterior deltoids, or any exercise such as rows that strengthen the upper back.
- Information by Tom Cartwright, Chiropractor*
 *www.abs.gov.au/ausstats/abs@.nsf/Lookup/4364.0.55.001Chapter4002011-1



Sitting causes the hip flexors to become shorter. They pull on the pelvis, eventually causing a tilted spine, which can lead to back pain.

Too much sitting changes your posture, giving you more rounded shoulders and a forward head carriage.

The hamstrings also shorten up.

Gluteal muscles become weaker.

TONI KRASICKI, BHMS (EX SC) PGDIPHLTHPROM
 Toni has 23 years’ experience in the fitness industry and has been exploring the world for just as long. She is a freelance writer and can be contacted at tkrasicki@hotmail.com or visit www.adventuregirlwrites.com