



A healthy workplace is good for business

TO SIT OR STAND? THAT IS THE QUESTION...

Sedentary behaviour is defined as any waking activity where energy expenditure is very low and energy levels do not increase above normal resting levels.^{1,2} The terms 'sitting time' and 'sedentary time' are often used interchangeably and both refer to sedentary behaviour.³ Workplace sitting is defined as time spent in sedentary behaviour at work.⁴

The issue of sitting time is a hot news item. The occupations that are most at risk of prolonged sitting include office work, transportation and highly mechanised trades.⁴ People in these occupations typically spend a great deal of the working day sitting down. This is in addition to their transport and leisure sitting time. In a normal 16-hour day, it's easily possible to spend over 80% of the time seated.

Our modern 'sitting oriented' society



Awake
7am



Breakfast
15 mins



Work on computer
3.5 hrs



Transport from work
45 mins



Watch TV
4 hrs



Sleep
11pm



Transport to work
45 mins



Lunch
30 mins



Evening meal
30 mins



Work on computer
4 hrs



Exercise
30 mins

← **Sitting Opportunities** 15.5 hrs →

Adapted from Dunstan, D & Healy, G 2011, *Interventions targeting the reduction of workplace sedentary time: An evidence review*, Baker IDI.

Recent research has suggested links between excessive sitting time and a host of chronic conditions, including diabetes⁵, heart disease⁶ and colon cancer⁷. This is independent of the amount of physical activity performed during the day. In other words, you can cycle to work, swim at lunch time and then cycle home, but if you spend the rest of your day sitting down, you increase your risk of developing one of the chronic conditions identified with prolonged sitting time.

There is a 15% increased risk of death in the next three years if you sit for 8-11 hours per day, when compared to those who sit for less than four hours per day. This risk increases to 40% for those who sit for greater than 11 hours per day.⁸

So what can I do?

While there is a large amount of emerging evidence on the risks associated with prolonged sitting, there are few conclusive studies on the success of interventions, and no current recommended guidelines. However, there is a range of research currently in progress. The Commonwealth Government's Department of Health and Ageing is currently undertaking a review of the National Physical Activity Guidelines and Recommendations. Due to the increased recognition that sedentary behaviour is a distinct and separate issue from physical activity levels, it is expected that specific sedentary behaviour recommendations will be included in these new guidelines when they are released in 2013.

In the meantime, there are some simple strategies which may be of use in breaking up sitting time.

- Stand up. It's that easy!
- Position your printer away from your desk.
- Stand up every time you take a phone call.
- Go and talk to nearby work colleagues, rather than rely on email or phone calls.
- Encourage standing or walking meetings.
- Include a stand-and-stretch break on meeting agendas.



Using a standing workstation

One of the more obvious ways of breaking up office sitting time is to use a standing workstation. This can either be a height-adjustable sit-stand workstation, or a raised platform on a standard desk that creates a 'permanent' standing workstation.

When using a standing workstation, it is important to set it up correctly so as to reduce the potential for creating other ergonomic issues.

- Position the top of the keyboard at elbow height (when standing). Position the monitor at eye level to reduce the need to look up or down.
- Remember to stand on both feet evenly, and avoid slouching or favouring one leg.
- Wear suitable footwear for prolonged standing – avoid excessive heels or non-supportive footwear.
- Standing all day can be quite tiring – it's important to listen to your body and to sit down when you are feeling tired or aches start to set in. Having a mix of sitting and standing can be a good option. A good rule of thumb is 'the next posture is the best posture'.

What's next?

Research on this topic is still in its infancy, and there are a lot of unknowns. It's important to recognise that the exact amount of sitting time hazardous to health has not yet been identified.⁹

As more information emerges, this fact sheet will be updated.

References

1. Pate, RR, O'Neill, JR & Lobelo, F 2008, 'The evolving definition of 'sedentary'', *Exercise and Sport Science Reviews*, vol. 36, no. 4, pp. 173-8.
2. Sedentary Behaviour Research Network 2012, 'Standardized use of the terms "sedentary" and "sedentary behaviours"', *Applied Physiology, Nutrition and Metabolism*, vol. 37, pp. 540–542.
3. Medibank Private 2009, *Stand up Australia: Sedentary behaviour in workers*, Medibank Private, Australia.
4. Victorian Health Promotion Foundation 2012, *Reducing prolonged sitting in the workplace*, VicHealth, Melbourne.
5. Gill, J, Bhopal, R, Douglas, A, Wallia, S, Bhopal, R, Sheikh, A, Forbes, J, McKnight, J, Sattar, N, Murray, G, Lean, M & Wild, S 2011, 'Sitting time and waist circumference are associated with glycemia in UK South Asians', *Diabetes Care*, vol. 34, no. 5, p. 1214.
6. Thorp, A, Healy, G, Owen, N, Salmon, J, Ball, K, Shaw, J, Zimmet, P & Dunstan D 2010, 'Deleterious associations of sitting time and television viewing time with cardiometric risk biomarkers', *Diabetes Care*, vol. 33, no. 2, p. 327.
7. Boyle, T, Fritschi, L, Heyworth, J & Bull, F 2010, 'Long-term sedentary work and the risk of subsite-specific colorectal cancer', *American Journal of Epidemiology*, vol. 173, no. 10, pp. 1183-1191.
8. Van der Ploeg, H, Chey, T, Korda, R, Banks, E & Bauman, A 2012, 'Sitting time and all-cause mortality risk in 222 497 Australian adults', *Archives of Internal Medicine*, vol. 172, no 6, pp. 494-500.
9. Alberta Centre for Active Living 2012, *Research Update*, vol. 19, no. 1.