

From Canadian Business magazine, October 11, 2010



RBC Direct Investing™

Health

Standing up for a healthier workplace

Could the humble office desk chair be increasing your risk of heart disease?

By [Joe Castaldo](#) 

[Joe Castaldo](#) is a staff writer for *Canadian Business*. He joined the magazine in January 2007 and has written about a variety of topics, including management issues and investing. For *Canadian Business Online* Joe writes about clean technology — companies, tech developments, and environmental policy and investing.



Patrick Skerrett has never liked sitting still. Even during meetings he attends as editor of the *Harvard Heart Newsletter*, a Harvard University publication, Skerrett prefers to stand while his colleagues sit. So last year, Skerrett modified his Ikea desk to allow him to work standing up. "It's made me much more comfortable," he says. He now stands for six of the eight hours in a typical working day. (Common sense still prevails; he'll sit when he's tired.)

Skerrett's preference may seem unusual but it's fortuitous, because the office chair is increasingly looking like a health hazard. Recent research links long stretches of sitting to obesity, diabetes and heart disease. And what's surprising scientists is that exercise does not counteract those negative effects.

Last year, a paper in the journal *Medicine & Science in Sports & Exercise* summarized a study that followed a group of more than 17,000 Canadians over 12 years. It found that the more time they spent sitting, the greater their risk of death from heart disease — regardless of age, sex, smoking status, alcohol consumption and how much the subjects exercised.

Another study, involving more than 100,000 Americans tracked over 14 years, published this year in the *American Journal of Epidemiology*, found much the same results. Women who reported sitting longer than six hours a day had a 40% higher mortality rate than those who sat for fewer than three hours, whereas men had a 20% higher death rate. Again, exercise made no difference.

Scientists are only starting to figure out what sitting does to the body. "There's something about sitting that messes up people's metabolism in a very, very bad way," says Marc Hamilton, a professor

at the Pennington Biomedical Research Center in Louisiana. A few years ago, Hamilton looked at the effects of inactivity in rats. He found that an enzyme that regulates fat and cholesterol in the blood is "shut off literally within hours of not being upright." The level of good cholesterol in the blood drops, while the bad builds up.

Hamilton has spent the past two years repeating the tests in humans, and the preliminary findings are similar to those from the rat experiments. Hamilton himself was a test subject, and grew unnerved by his cholesterol levels. "When you see the results in yourself," he says, "it makes you a believer very quickly."

This is horrible news for cubicle dwellers, who often have no choice but to sit for hours at a time. Enter the stand-up desk. A handful of companies manufacture adjustable-height desks, offered at a wide range of prices, that allow for both sitting and standing. GeekDesk in California, for example, makes a model for US\$799 that employs an electric motor to raise or lower itself. Founder Donovan McNutt says sales are on track to triple this year. "It's definitely moving out of being just a niche product," he wrote via e-mail.

Those who switch generally don't come back. Kevin Meyer, president of a silicone component manufacturer in California, purchased a stand-up desk in 2008. "A lot of people at work thought I was nuts," he says. But now roughly 30 employees at his company use stand-up desks, which are manufactured in the company's own shop and provided for free. Meyer insists that standing has made him more productive and focused. "I didn't realize how much time I spent just daydreaming and surfing the Internet," he says. "When you're standing, you want to get the job done." He's even considering stand-up conference rooms to ensure meetings move swiftly.

While no studies to date have delved into the benefits of stand-up desks, health researchers are enthusiastic about the idea. "I've lived much more on my feet than on my rear end," Hamilton says. That not only applies to work, but to other occasions, including his kids' baseball games.

For researchers, the next step is to develop guidelines about how much sitting is too much. Employers, meanwhile, should consider offering workers a variety of arrangements to prevent endless hours of sitting. McNutt at GeekDesk already sees many companies purchasing stand-up desks at the request of employees. But employers need not invest in new furniture. Hamilton recommends that workers simply put cardboard boxes on their desks and place their computers on top to work in an upright position. Taking a stand, it seems, is getting easier.