

Is Sitting the New Smoking?

You've already heard that sitting is the new smoking. Now, scientists reveal exactly how it hurts the body—and novel ways to undo the damage (without clocking hours at the gym). You might want to stand up for this.



We like to think we're a stand-up species. After all, that's what drove our evolutionary march away from many of our four-legged ancestors. But everywhere we go are invitations to sit down. Hop into your car and what's there? If you're lucky, a plush bucket seat designed with just the right tilt for your back. On the subway to work? A less comfortable seat, to be sure, but you'll grab one if you can. Once at work, an office chair. At home, your favorite fauteuil. But all that hospitality, all those opportunities to give your feet a break, are doing untold things to the rest of your body.

From standing desks and fitness trackers to groundbreaking pilot experiments in high schools in several cities, the movement to sit less and stand more is gaining momentum. Which is a good thing, because new evidence suggests that the more than eight hours the average American spends sitting every day could be exacting a serious—and previously misunderstood—toll.

Studies have long connected sedentary behavior to poor health, including heart disease, diabetes, obesity and hypertension. But doctors thought those problems could be traced to the fact that people who sat more were probably just not working out very much. But while exercise is critical, it alone can't make up for the ills of idleness. New research shows there's a big difference between exercising too little and sitting too much. That's because a standing body uses energy altogether differently from a sedentary body—and also from an exercising one.

This research has doctors and health experts calling for a paradigm shift. "In the same way that standing up is an oddity now, sitting down should be," says Dr. James Levine, director of the Mayo Clinic-Arizona State University Obesity Solutions Initiative and probably best known as the inventor of the first treadmill desk. "My argument is that whatever building it is—a movie theater, airport, arts complex—a fundamental part of our thinking has become that people who enter that space will need to be seated." And that's what got us into all this trouble in the first place.

This Is Your Body On Sitting

It's not entirely our fault. As we moved from an active, agricultural lifestyle to one of offices and automated transport, every aspect of our day, from our meals to our jobs and our entertainment, have been adapted with one priority in mind: our comfort. Where our ancestors spent the large bulk of their waking hours on the go, modern life entails sitting for as much as half the day (and that's not counting sleeping).

Sitting for extended periods increases your risk of some cancers, hypertension, obesity and diabetes.

The first studies to connect sedentary behavior to poor health emerged in recent decades, and revealed a clear message: People who spent more hours of the day sitting were more likely to develop a host of health problems.

A recent review of 43 studies¹ analyzing daily activity and cancer rates found that people who reported sitting for more hours of the day had a 24% greater risk of developing colon cancer, a 32% higher risk of endometrial cancer and a 21% higher risk of lung cancer—regardless of how much they exercised. In another study involving a group of

men and women who reported exercising the same amount, each additional hour they spent sitting was linked to a drop in their fitness levels. In other words, sitting was chipping away at some of the benefits of exercise.

The human body is designed to move, and a moving body is a needy body, siphoning off calories to make sure every cell is doing what it's supposed to do. But even when we're not exercising, we're moving and using energy. A body that's sitting isn't expending energy, so the signals that normally result in you moving—and which, in turn, burn calories—start to check out, molecularly bored with not being called into duty. Meanwhile, the processes that build up fat get busier. When that happens, it gets harder and harder to get off the chair.

Becoming a body in motion

Even if you're wired in some ways to sit, can you become a stand-up person? Absolutely, says Levine. Just as sedentary behavior can change the brain and body to prefer sitting, getting up and becoming more active will prompt you to want to stay in motion.

Even if you don't have the help of a forward-thinking boss to transform your workplace, there are ways to make yourself get up. For the more ambitious, there's changing your work station to a standing one .

Turn your desk into a stand up desk!



But even simply fielding phone calls on your feet is a good way to start, or pacing while you talk. You could also keep a small glass of water on your desk so you're inclined to get up more frequently to refill it, taking walks around the office or your home while you're at it. For the more ambitious, says Levine, urge your colleagues to try standing meetings.

“By simply changing your work style, from a chair-based work style to a [standing] one, you can burn 500 to 1,000 extra calories a day,”

“What we need to do is change the default,” Levine says. “I want us to have to find excuses to be sitting down.”

Imagine that. Maybe standing really could be the new sitting.

*<http://jncli.oxfordjournals.org/content/106/7/dju206.full>
<http://time.com/sitting/>*