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Is All That Sitting Really Killing Us?

By THE EDITORS

Maye Webb

Yes, we all sit too much, but will our sedentary ways reduce our lifespans? Olivia Judson, in a recent online Op-Ed column in The Times, told readers to "Stand Up While You Read This," and an article in The Times's business section reviewed different models of standing desks.

Are our sedentary life styles so pernicious that we need to rethink the current office culture — for example, switch to standing desks or exercise stations or change our work schedules? Or are there ways to stay in the chair 10 or 12 hours a day?

- Galen Cranz, author, "The Chair"
- Peter T. Katzmarzyk, Pennington Biomedical Research Center
- Josh Camson, Legal Geekery
- James A. Levine, professor of medicine, Mayo Clinic
- Jack Dennerlein, professor of ergonomics, Harvard

Lying Down on the Job, Literally

Galen Cranz, a professor of architecture at the University of California at Berkeley, is the author of "The Chair: Rethinking Culture, Body and Design."

There are problems associated with both sitting and standing. No posture is perfect. As a species we are designed for movement. The best posture probably is the next posture.

So what do you do if you have to be still for lengths of time —that is, in case you actually need to work for a living at a desk job?

Job redesign may ultimately be a better solution rather than equipment redesign. That means changing what you do over the course of the day; nobody should get stuck sitting — or standing — in the same position for the entire day.

defense.gov Did it work for him? Donald H. Rumsfeld used a stand-up desk.

That said, some postures are better than others. The neutral body posture, as NASA calls it, is half way between sitting and standing; it balances our musculature between front and back. This position is used in the martial arts (the horse) and in the Alexander Technique (position of mechanical advantage). Also called the perch position, it requires a higher than currently conventional desk, not a standing desk, but definitely higher than 28 inches.

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I got a hydraulic table for my university office so that simply by pushing a button I can move from perching to standing, back to perching, down to sitting, back to perching on my favorite chair, the "Capisco" chair by HAG. This is the best upright chair I have found anywhere. It allows me to perch comfortably. Other chairs with a forward tilt seat, sometimes called a waterfall front, let the sitter slide forward, but the Capsico seat is flat with cutouts at the corners for one's legs, so that you sit with a feeling of security and still easily assume the correct oblique angle of the legs for perching.

My all-time favorite is a lounge chair. I work in a lounge chair with the computer monitor on a movable arm that swings in front of me. If you take the same neutral body posture — open angle between thighs and trunk — and rotate it in space, you get a lounge chair.

Job redesign may ultimately be a better solution rather than equipment redesign. But a lounge chair helps.

It distributes the weight of the body and spine along a surface, supports the head, raises the eyes enough to read, write and converse with others. Some people might view this extremely comfortable position as "lying down on the job," but in fact I am most productive in this position because I am most comfortable in this position.

I note some recent headlines about research studies with the The Capsico chair. surprising claim that "slumping can be good for you." Sitting in the classic right angle seated posture that has been the cultural ideal for generations turns out not to be so good for the lower back. Sometimes sitters slump by sliding their pelvis to the edge of the seat and leaning back diagonally to the seat back.

Lo and behold, they have recreated the perch-lounge position with the very same open angle between thigh and torso that I advocated in my book "The Chair." These recent studies have demonstrated that this is safer for our spines than trying to sit up straight while actually slumping forward into a curled spine.

So, is the standing desk overrated? Yes, if that's all you use. No, if it is part of a workspace design that provides you with five to six ways of working in different postures over the course of the day, morning or hour. The standing desk carries with it its own strains — standing is tiring to the legs. And, since conventional sitting hurts the back, the way out of this impasse is to move a lot by alternating between postures.

Sit All Day, Die Early

Peter T. Katzmarzyk is the associate executive director for Population Science at the Pennington Biomedical Research Center in Baton Rouge, La. He is an editorial board member of the Journal of Physical Activity and the International Journal of Pediatric Obesity.

Humans are designed for movement. Most of our evolutionary history has been characterized by a hunter-gatherer lifestyle, one in which we have had to seek out our food from the environment. Studies indicate that this type of lifestyle involves various levels of physical activity throughout the day.

This is in direct contrast to the "modern" lifestyle that many of us find ourselves immersed in, where technological advances have engineered the need for movement almost entirely from our lives. A major part of our modern lifestyle involves sitting.

National Archives The 1920s: was it better back then? Close

We sit when we are in school, at work, commuting in a car, eating a meal, reading a book and watching television. Recent studies have highlighted the health concerns associated with excessive sitting. Of particular note is the link between sitting and premature mortality: individuals who sit most of the day have a greater chance of dying early compared with people who sit very little.

Thus, there is something about sitting that puts us at risk of bad things happening. Since scientific evidence is just now emerging about the ill health effects of sitting, it will also likely take several years before we are able to say just how much sitting is bad, and why. All we know right now is that the more sitting we engage in, the worse off we are. The takehome message should be that the more time we spend out of the chair, the healthier we are likely to be.

A Standing Desk Didn't Work For Me

Josh Camson, a third-year student at the University of Pittsburgh School of Law, is a contributor to Legal Geekery and Social Media Law Student, where he writes about legal ethics and technology.

I got interested in the idea of standing desks about a year ago. The health advantages of standing instead of staying sedentary for eight hours a day are clear, so when Ergotron invited me to review their WorkFit C-Mod Dual Desk, I jumped out of my chair — literally.

After several painstaking hours putting the desk together, I finally got to try it out. The desk was an adjustable model, meaning it could change from a regular sitting desk to a standing desk by just pulling the desk up and down. It supported my dual monitors, had a desktop that I could use for writing, and the computer mounted securely to the base of the desk.

You could spend a fortune on a new work station. Or you could take the stairs at work, and find other ways to be less sedentary.

At first I absolutely loved it. Standing during the day instead of sitting was fantastic. Although I felt more tired after all that standing during the day, I knew the health benefits were worth the slight discomfort. I also knew that discomfort would pass, and it did after the first two weeks. However, after the initial novelty of the desk wore off, I realized that I

could not use it for the long term.

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It was just not practical. While using the desk for a month, I could definitely foresee problems arising from using it full time.

I enjoy having a lot of stuff on my desk. My Blackberry, mail, Kindle, random bills and a printer are all common desktop occupants. The standing desk just did not have enough room for all of my things. Now, you may think that this situation was unique to the desk I was using. However, standing desks are often designed to be work stations instead of full desk replacements. The desks I have looked at which could replace my current workspace were exorbitantly expensive.

The amount of money I would have to lay out to replace my current workspace with a standing desk was not the only issue.

Standing desks are often designed to be work stations instead of full desk replacements.

I can easily foresee awkward situations when I put that desk in an office space. When someone comes into your office, does your guest have to stand as well? Alternatively, do you have a chair in front of your desk so you can tower over them while they sit in their chair? If your office is big enough, maybe you have room for a separate chair for you and a visitor, which is great. Yet for the common office worker in a cubicle, the standing desk creates a very awkward situation.

These pragmatic issues are only one part of the consideration. Even spending a part of the day standing can offset many of the negative effects of excessive sitting. Through activity changes like taking the stairs instead of the elevator, walking down the hall instead of using the intercom, or even using a bathroom further from your office, you can easily increase the time you spend on your feet. Best of all, those options are completely free.

Take a Walk — Anywhere

James A. Levine is a professor of medicine at the Mayo Clinic. He is the author of "Move A Little Lose a Lot" and the inventor of the Treadmill Desk.

There's no bad chair - it's just that we sit.

A re-examination of our office culture is under way. Over the last few years, the evidence has become overwhelming — sitting daylong is a killer. Office or home — it doesn't matter. Risks include heart disease, diabetes, high cholesterol and deep vein the sitting of the control of the contr

Chris Machian for The New York Times Answering calls while burning calories on a treadmill at the office.

include heart disease, diabetes, high cholesterol and deep vein thrombosis. Consider, too, poor productivity and being caught asleep on the job (one advantage of walking at work is that napping won't happen).

Today, without cost, people can walk and hold meetings, can attend conference calls walking in the park, and can play video games while breaking a sweat. A world that normalizes health is one to bequest to our children.

Obesity is a national epidemic, and a person living in America is swamped with stimuli that increase obesity, squelch physical activity, and encourage terrible food habits.

The notion that our children will work on the move, and enjoy active leisure, as well as eat food with ingredients that are recognizable represents a necessary cultural shift.

The Paradox of the Perfect Chair

Jack Dennerlein is an associate professor of ergonomics and safety at the Harvard School of Public Health.

There is a public health paradox in ergonomics — we seek to design work that fits a large population and reduces physical loading on muscles, bones and tissues. Yet, we know that physical activity is important to reduce chronic illnesses like diabetes and heart disease.

Ergonomics is not so much about sitting up straight than it is about how to design the work station to allow for proper biomechanical support while sitting. Often, it means tailoring the work so that it is easy to perform with little risk of injury.

Ergonomically advanced work stations have let us sit longer. The solution: find ways to not sit still.

For sustained, seated work ranging from driving motor vehicles to typing in front of a computer, we have invested in making seating comfortable, which allows the cognitive task to be the primary focus. Better chairs have allowed for better performance and comfort for workers.

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Similarly, we need to think about how the design of work can allow for a better and healthier work force. Can we design work and workstations that allow for more opportunities to exercise while performing specific tasks? Does standing at a computer workstation improve health outcomes as well as performance? Or does it introduce other health problems associated with sustained standing? Future research needs to ask these important questions.

In the meantime, find comfort in your seat, but don't sit still. Get up and move frequently. Marilynn K. Yee/The New York Times Don't sit for hours on end.

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