Workplace Sitting: Hazards and Mitigation

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An Office Worker’s Day

Wake up, sit down to eat breakfast

Sit all day at the computer

Sit down and have dinner

Sit in the car on the way to work

Sit in the car on the way home

Sit on the couch until bedtime

Even if you exercise for an hour every day after work, it may not be enough to counter all the sitting.
As the chart shows, time spent sedentary has increased for each age group. While a drop-off of 1 to 1.5 hours is observed between 2013-14 to 2015-16, the daily time spent sedentary is still significantly higher in 2015-16 than in 2007-08, showing that sedentary behavior is increasing at every working age group (data obtained from source 2).
Why is Sitting Bad for You?

Long periods of sitting

- Decreased blood flow to the legs and brain\(^3,4\)
- Discomfort, stiffness, and pain in neck, back, and shoulders\(^5,6\)
- Head forward position weakens neck and upper back, causing tension in traps and pecs\(^7\)
- Improper spinal curve places uneven pressure on spinal discs, leading to disc herniation\(^7\)
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- Spine position limits mobility of muscles used for breathing and causes weakened glutes and abs\(^7\)
- Linked to higher BMI and blood pressure, diabetes, heart disease, stroke, and increased all-cause mortality\(^8\)
What can you do about all this?
Take Breaks!

Small breaks (2-5 minutes) every 30-45 minutes showed...

- Decreased blood pressure after 3 months with lasting improvements\(^9\)
- Increased blood flow to the legs and brain\(^{10,4}\)
- Improved working memory and executive function\(^11\)
- Decreased BMI, waist circumference, blood sugar, and blood triglycerides\(^1\)
  - Getting up and moving often was more effective for these than doing a big block of exercise once a day
- Decreased subjective fatigue\(^12\)
What should you do during a break?

- The studies mentioned used several methods, including walking, bodyweight lower body exercises, or just getting up and moving.
- So do whatever exercise you like the most!
  - You can walk a couple laps around the office, do some bodyweight squats or calf raises at your desk, do push-ups against your desk, or anything that gets you up and moving.
What if you can’t take a break?

Maybe you’re stuck at a long meeting or having lunch with a client

- You can still move around!
- Fidgeting with your legs (like toe taps or heel taps) improves blood flow to the legs\(^\text{13}\)
- While it doesn’t have all the benefits of getting up and moving, it’s better than nothing

If you’re constantly trapped at your desk, consider getting an adjustable-height desk

- A study found using a sit-to-stand desk reduces muscle pain in the back, hips, knees, ankles, and wrists without negatively impacting productivity\(^\text{14}\)
- This will help alleviate the muscle stiffness that comes from sitting all day