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Ergonomics in the Workplace

OUR SPINES ARE STRONG AND STABLE WHEN PROPER POSTURE IS PRACTICED. When we slouch or stoop over muscles and ligaments have to strain to keep balance, which contributes to the estimated 75 to 85 percent of people who experience some form of back pain in their lives.[1]

Many jobs require people to sit for long periods of time, which in turn diminishes proper posture and leads to a strained or sprained neck or lower back muscles. This unwanted stress on the spine can lead to lower work productivity and potentially more serious back problems.

What is proper posture?

How can we prevent posture-related back pain to ensure a pain-free, more physically comfortable life in our work environment?

Focus here is on the spine. A healthy back has three natural curves:

1. Two forward curves at the neck or cervical area

2. The lower back or lumbar area

3. The backward curve at the upper back or thoracic area[2]

Proper posture helps maintain these natural curves, whereas poor posture can do the opposite, placing stress the muscles and ligaments in the spine and causing pain.

What is proper sitting posture?

Many jobs require staying seated for much of the day, so it's important to be aware of sitting posture.

While sitting, make sure your feet are flat on the floor and thighs are parallel to the floor. It is important that the chair you sit in supports the curve of the lower spine. If it doesn't, place a small pillow behind your lower back. Make sure the upper back and neck are straight and shoulders are relaxed.[2]

These simple steps may seem easy to remember, but many people forget and go back to a slumped form in a matter of minutes. A simple trick to remind yourself about these steps is to set a timer on your phone for thirty minutes. When the alarm sounds, get up and walk around for a couple minutes. This provides a small break from the stress of work and allows muscles to relax for a bit before getting back at it.
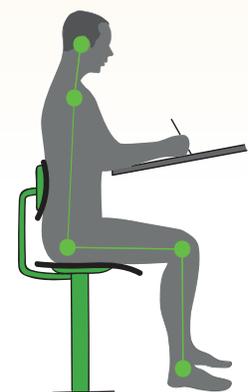
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How to set up an ergonomically correct workstation.

Ergonomics is the science of fitting design in the workplace to enhance employee wellness and capabilities.[3] Poor work site design can lead to fatigue, frustration and distress. It can also lead to injury, lower productivity and poor work quality. By making improvements to the workplace and providing people with an environment that works with a body's capabilities, an employer can maximize work performance and provide a better work environment.[4]

HERE ARE A FEW SIMPLE ADJUSTMENTS TO MAKE:

1 **Adjust the height of your monitor.** Look forward with your head in a neutral position. Your eyes should be at the same height as the top or middle part of the screen. Leaning your head forward can lead to problems like headaches and neck pain.

2 **This same principle should be applied while reading at the desk.** Use a bookstand to keep your eyes at the same level as if you were using a computer. The average human head weighs around 12 pounds. For every inch your head moves forward it piles on 10 more pounds of weight on top of that 12. This strains the upper back and neck muscles which are struggling to keep the head from dropping to the chest and to keep the eyes level.[5]

3 **When typing or writing, keep your wrists straight as they stretch from your body to the desk.** Shoulders should be perpendicular to the floor, and your forearms parallel to the floor, creating a 90-degree angle at the elbow.

ALTHOUGH IT SEEMS THAT PROPER POSTURE SHOULD COME NATURALLY, most people haven't practiced the correct way to sit or stand up straight—so correct posture can feel stiff or uncomfortable at first. The key is to practice everyday, throughout the day. Over time your body will adapt and the right posture will become second nature.

There's no question that paying attention to the physical workspace and personal posture can payoff in many important ways, for increased wellness, comfort, and productivity.

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1. Low Back Pain." American Association of Neurological Surgeons. N.p., May 2016. Web.

2. Adult Health." Slide Show: Prevent Back Pain with Good Posture. N.p., n.d. Web. 14 Sept. 2016.

3. Get Healthy with Chiropractic." Workpace Ergonomics. N.p., n.d. Web. 14 Sept. 2016.

4. Aug 8, 2013 James Anderson. "Four Simple Ergonomic Steps to a More Productive Workplace." Four Simple Ergonomic Steps to a More Productive Workplace. N.p., n.d. Web. 14 Sept. 2016.

5. FORWARD HEAD POSTURE." Chiro.org. N.p., n.d. Web. 14 Sept. 2016.