

# Newsletter

May 2007

## The importance of being ergonomic

Michelle Magnan  
CanWest News Service, Calgary  
April 13, 2007

As I sit and type this story, my elbows are hanging by my side. That's not good.

According to Shona Anderson, a certified Canadian professional ergonomist and owner of Calgary-based Anderson Ergonomics Consulting Inc., hanging elbows cause more muscle fatigue. I should have my arms resting on my armrests, but the rests are too wide.

No wonder I have sore shoulders at the end of the day.



An adjustable laptop support helps keep the computer monitor parallel to eye height.  
Phil Carpenter, CanWest News Service

If you're like me, you need to do some rearranging to achieve a healthy workspace. Believe it or not, desk jobs can be exhausting, even though you're sitting on your fanny all day.

Tiny, repetitive movements really add up over the course of a day, week and year, sometimes with debilitating results.

Carpal tunnel syndrome, headaches and back problems are some of the injuries that can arise.

"If you're not set up properly, it causes a lot of muscle tension in various parts of the body," says Anderson.

Considering we spend a significant amount of time at our desks, it's crucial to have a good setup. "People get pain if they're not set up properly," she says, noting the pain usually starts in the shoulders and upper back.

To help you get the ideal workspace, here are Anderson's ergonomic tips, labelled one to eight. Start with No. 1 -the chair - and work your way out from there.

"The chair is really critical in the workstation," she says. "It's the most important thing."

## **TIPS FOR A HEALTHY WORKSTATION**

**1.** Plant your feet on the floor, with your knees and hips bent about 90 degrees. You should feel your weight through your sitting bone, not through your thighs.

Adjust the outward curve in the chair's back to fit the small of your back. Your lower back should curve around it and your shoulder blades should come back and touch the chair.

Anderson says people often don't touch their shoulder blades to the back of the chair, but it's important. "That helps to ease muscle contractions in the upper back and neck."

**2.** Make sure you have a space between the back of your knee and the front edge of the seat. You should be able to fit three to four fingers between them. Some chairs will allow you to adjust the seat depth.

"If there isn't that space, then people tend to sit forward on their chair. They perch." If you have strong core muscles and can maintain good posture while perching, it might not be a problem. But most people can hold themselves straight for only 10 minutes. When you perch, she adds, you end up in a slouching position and that puts pressure on the discs and the muscles in your back.

**4.** With your elbows bent about 90 degrees and resting close to your hips, set up your armrests to support at that height no higher. "You don't want to have to use your shoulder to raise your arm to reach the rest," Anderson says. "Most armrests are too high, and people tend to have these really tight shoulders." Let the armrests support your arms so you don't have to.

**5.** Now roll into your workstation with your elbows bent and your wrists straight. The keyboard should fall right underneath your fingers. Most often, office desks are too high. If that's the case, you can either lower the keyboard onto a tray or raise your chair.

"But if you raise your chair, you need to mimic the floor with some good support under your feet."

A foot rest will do the trick.

**6.** The top of your monitor screen should be parallel to your eye height. Bifocal-wearing workers are the exception; because they tend to look through the bottom of their lenses, their monitors should be lower.

Your monitor should be far enough away that with your arm extended, your fingers just touch the screen. "If you can push it back and still see it comfortably, that's better for your eyes," she says. The closer the monitor is to your eyes, the more strain they're under.

**7.** Keep your phone on the opposite side from your dominant hand. As a right-handed person, you want it on the left side so you can pick up with your left, leaving your dominant hand free to type or write. You'll avoid the crossing-over motion this way, a repetitive movement that can cause muscle strain.

**8.** Place your document holder between your keyboard and your monitor. You might need to replace your vertical holder, as there are shorter, horizontal holders available that are designed to fit the space. It will save your neck a lot of work.

"The eyes are capable of looking down and up, but they can't look sideways, so you have to turn your head," says Anderson.

Palm rests are optional. Anderson says they can be good in front of a keyboard, as long as you put the fleshy part of your palm on the rest and not the entire wrist.

"Without (a palm rest), people often drop their wrists down to the desk surface," causing the wrists to bend backwards. She doesn't recommend using a palm rest in front of a mouse because most people don't have long enough forearms to extend over an armrest, the palm rest and the mouse.

### **Take a Walk**

Get out of your chair at least once an hour. "It allows the muscles to stretch, allows blood flow to get to the muscles so they can re-energize themselves and it changes your posture," she says. "If you're creeping in and slouching, stand up and sit back down again. You're likely to lean back in your chair and sit properly. You'll break the bad habit."

Lighting should be as natural as possible. "You have to avoid the glare as much as possible," says Anderson. She says people will sometimes take out a row of bulbs from overhead lights to reduce the glare. The ideal is to use a task light and shine it away from you so that it becomes indirect light.

Don't bend your neck to cradle your phone receiver between your head and shoulder. Instead, buy and use a headset. You'll avoid the neck strain, and it will free up your hands to type or write.