



By Terrie Heinrich Rizzo, MAS

Computer Fitness

You probably spend a lot of time working on a computer. Unfortunately, the very thing that makes so many tasks easier can be bad news for your body!

The human body isn't designed to sit rigidly for long periods. Your eyes aren't adapted to cope with the close focusing that computers demand. Out-of-position equipment and poor body mechanics increase the likelihood of wear and tear on your musculoskeletal system and vision.

Computer-related disorders (CRDs) fall into two main groups. The first category includes repetitive strain injuries (RSIs), such as neck and shoulder trauma, tendinitis, carpal tunnel syndrome and low-back strain. RSIs are usually related to repeated motions—like typing and manipulating a mouse—or to holding a position for too long.

The second category of CRDs is related to visual problems. Staring at a monitor, blinking less often (studies indicate up to 50 percent less often!) and being exposed to glare can eventually cause eye strain; headaches; painful, itching or burning eyes; or even vision changes.

Statistics indicate that both categories of CRDs are increasing dramatically.

EXAMINE YOUR WORK SPACE

The most effective way to deal with CRDs is to prevent them. Scrutinize your computer area to check for proper set-up.

Keyboard Position. Position your keyboard at approximately waist height. Your hands will fall naturally onto the keyboard with your elbows bent so your forearms are parallel to the floor and your wrists are *straight*. To achieve proper keyboard height, either adjust your chair up (and also use a footrest), or if possible, lower the keyboard with an adjusting tray.

- Be sure the length of the desk or ad-

justing tray is adequate (a minimum of 26 inches) for both keyboard and mouse use.

- To help keep your wrists straight, tilt the keyboard so it forms a plane with your forearms and wrists. If the keyboard has legs at the back, lower them; or raise the front edge of the keyboard with a strip of foam.

- Use wrist or forearm rests to reduce static muscle loading and deviated wrist postures while keying. However, don't rely on rests alone without addressing postural and positioning problems, and *never press your wrists* into the rest.

Chair. If possible, choose a chair with multiple adjustment points, and find the right adjustments for your body. Chairs should provide support to your lumbar region, and if you recline even slightly, at the base of your shoulder blades.

- You should be able to sit back and yet still move your knees and lower legs freely. (There should be about two inches behind your knees.)

- If your chair doesn't provide adequate adjustments, use a cushion or towel for lumbar support, or a lumbar wedge to push you forward.

Equipment Arrangement. The equipment you use most should be directly in front of you.

- *Never* position the monitor at an angle to the keyboard (a frequent cause of neck/shoulder problems).

- Keep the pointer close to and at the same height as the keyboard.

- Make sure the area of the monitor you look at most is at eye level (lower for bifocal wearers). The monitor should be as far away as possible (a minimum of 18 inches), but still readable.

- Prevent glare by positioning the screen at right angles to windows and between (not directly under) overhead lights. Reduce overhead lighting, and use window coverings to control outside light.

ADJUST YOUR WORK HABITS

Pay attention to your own body mechanics.

Take Frequent Breaks. Every hour or so, stand up and move your legs and arms to restore circulation.

Stretch. When you take your "stand up" breaks, add a full-body overhead stretch, then carefully swing each shoulder through its range of motion several times. Learn several hand and finger stretches and do them every half hour to relieve muscle tension.

Rotate Job Tasks. Try to do seated computer work in small time blocks. Then allow your body some "recovery time" by doing something else, such as telephone calling or filing.

Take Regular Vision Breaks. Do "hard blinks" (tightly closing your eyes and then opening wide) to help restore lubrication. Focus on a distant object for 10 to 15 seconds, then close your eyes and "cup" them with your palms. Do this every 30 minutes when you're working on your computer.

Sit in Neutral Posture. Body mechanics is an essential part of preventing yourself from becoming a computer victim. ●

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