

# Corporate Health

## Does Your Workstation Need An Overhaul?

### Applying Ergonomics to Computer Workstations

#### Adjusting Your Chair

Contrary to popular belief, sitting is hard on the back. Sitting for long continuous periods of time causes increased pressure on the intervertebral discs—the cushioning and shock-absorbing part of the spine. Sitting is also hard on the feet and legs as gravity tends to pool blood in the legs and feet and creates a sluggish return to the heart.

Recommendations to increase comfort for computer users:

1. "Dynamic sitting", don't stay in one static position for extended periods of time. Take mini-breaks (1 to 3 minutes) every 30 minutes. Periodically make slight seat adjustments increasing or decreasing the backrest angle.
2. When performing daily tasks, alternate between sitting and standing.
3. Adjust height of backrest to support the natural inward curvature of the lower back.
  - It may be useful to use a rolled towel or lumbar pad to support the low back if the chair has inadequate lumbar support.
  - The backrest angle is set so that your hip-torso angle is 95 degrees or greater.
4. Adjust height of chair so feet rest flat on floor (use footrest if necessary).
  - Sit upright in the chair with the low back against the backrest and the shoulders touching the backrest.
  - Thighs should be parallel to the floor with your knees at about the same level as the hips.
  - Back of knees should not come in direct contact with the edge of the seat pan (there should be 2-3 inches between the edge of the seat and the back of the knee).
5. Where armrests are used, elbows and lower arms should rest lightly
6. Don't use armrests to slouch.
7. Adjust height and/or width of armrests so they allow you to rest your arms at your sides and relax/drop your shoulders while keyboarding.

#### Monitor

The top of the viewing screen should be eye level, or 1 to 2 inches below eye level if you wear bifocal lenses. Placing the monitor on reams of paper, books, CPU unit and a monitor stand are all appropriate tools to raise a monitor to the appropriate height.

The monitor should be positioned as far away as possible while still maintaining the ability to easily read the font.

### **Desktops for Computer Workstations**

There is no specific height recommended for your desktop; however, the working height of your desk should be approximately elbow height.

To allow for proper alignment of your arms your keyboard should be approximately 1 inch to 2 inches above your thighs. Most times this requires a desk which is 25 inches to 29 inches in height (depending upon size of individual) or the use of an articulating keyboard tray. The area underneath the desk should always be clean to accommodate room for your legs and allow for stretching.

The desktop should be organized so frequently used objects are close to you to avoid excessive extended reaching. If a document holder is used, it should be placed at approximately the same height as the monitor and at the same distance from the eyes to prevent frequent eye shifts between the screen and reference materials. The document holder should be near the monitor to prevent continuous cervical rotation.

### **Keyboard and Mouse**

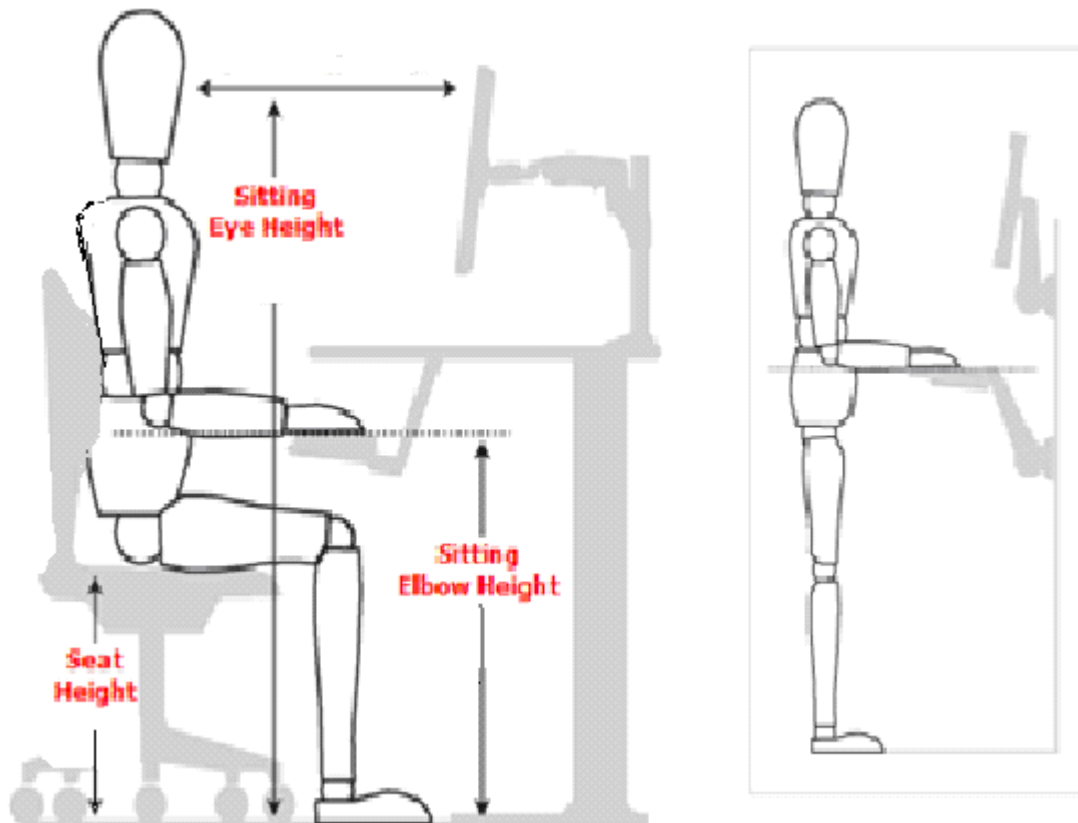
Many ergonomic problems associated with computer workstations occur in the forearm, wrist, and hand. Continuous work on the computer exposes soft tissues in these areas to repetition, awkward postures, and forceful exertions.

The following adjustments should be made to your workstation to help prevent the development of a repetitive stress injury involving the upper extremities:

1. Ensure keyboard is centered in relation to the monitor. Avoid twisting neck/back to view display screen.
2. Adjust keyboard height so shoulders can relax and allow arms to rest at sides (an articulating keyboard tray is often necessary to accommodate proper height and distance).
3. Keyboard should be close to you to avoid excessive extended reaching.
4. When inputting and using the mouse, keep wrist in a neutral position. Avoid flexing, extending or deviating wrists.
5. Maintain your forearms parallel to the floor (approximately 90 degree angle at elbow).
6. Mouse should be placed adjacent to keyboard and at the same height as the keyboard.
7. If using keyboard wrist pad make sure it is composed of soft material and has rounded edges. Only use pad during short pauses while typing. Keep hands

slightly elevated off pad while typing. To avoid compression over the median nerve the pad should contact heel or palm of hand, **NOT THE WRIST**.

8. Do not rest the hand on the mouse when you are not using it. Rest hands in your lap when not entering data.



If you have any additional questions or concerns please [contact us](#).