Ergonomic Recommendations for Laptop Computer Use

Laptop (notebook) computers provide a work anywhere platform for users, but compromise computer workstation ergonomics. The joined keyboard and monitor makes it difficult to create a computer workstation that follows current guidelines without implementing corrective measures.

Guidelines and Solutions:

- Complete the web-based computer workstation ergonomics training (course #291).
- Take frequent breaks (every 30 min for ~2min) and alternate tasks to break up continuous computer use. If the recommended computer postures cannot be achieved, take breaks more frequently.
- Use an appropriate office chair for prolonged laptop use (over 1 hour).
- Use a separate keyboard and mouse for prolonged laptop use (>1 hour). Position the keyboard and mouse to allow the shoulders to relax, elbows to be at the sides, and the hands to be at or slightly below elbow level. Place the laptop on a riser to position the monitor at an appropriate level (Figure 1).
- Use a separate monitor if you prefer to use the keyboard and pointer built into the laptop.
- Take frequent eye breaks. For example, follow the “20-20-20” rule: Every 20 minutes, look 20 feet away for 20 seconds.
- Avoid resting the laptop on you lap for extended periods of time. The weight of the computer compresses against sensitive tissues in the thigh and pelvic regions. Heat generated by the computer may pose a burn risk.
- Use a telephone headset for prolonged phone use (> 1 hour/day) and simultaneous phone/computer use.
- Consider the weight of the entire laptop workstation when choosing a carrying case (i.e. the weight of the computer, spare battery, pointing device, power supply, etc.). A rolling carrying case is recommended for heavier loads (over 10 lb).
- Laptop carrying cases (including backpacks) should have wide straps with sufficient padding.
- Be creative if you use a laptop in a hotel. Pillows can be used to adjust seat height, phone books make suitable footrests, and small towels can be used as lumbar supports.
- The monitor screen should be perpendicular to windows to avoid glare. Close shades and blinds to avoid bright light from outside. Avoid working under bright sources of light. Finally, don’t work in the dark.
- Integrate stretching and exercise into your workday and daily life.

Figure 1. A possible solution for an ergonomic laptop workstation

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