

Laptop Computer Ergonomics

Ergonomics for desktop computer use has often been written about. However, many of us presently use laptop computers for all of our computer and writing needs, both while traveling and at home. How can we help ourselves to avoid musculoskeletal strains, usually of forearms and hand or upper back and neck?

An important principle to understand is that holding any position of your spine for too long is not good. Your spine is made for movement, and thus it is important to periodically interrupt any position we get into. On the other hand, constant or very frequent repetitive movement of our forearms and fingers can cause problems, and therefore appropriate support and rest is important for these areas.

Analyze whether your hands or your spine is more problematic for you, and try these simple suggestions.

For wrist and hand problems:

- 1 - Consider introducing a 5-10 minute rest period into every hour of keyboarding.
- 2 - Forearms should rest on a flat surface for support, wrists not cocked up or down, with fingers moving in a middle, strain free range of motion
- 3 - Stretching fingers and wrists in a forward rounded position is good, but don't forget stretching your wrist backwards and straightening your fingers completely. Stretch during every rest period.

For spine and neck discomfort:

- 1 - Introduce movement on an hourly basis in order to interrupt a static position. Try walking briefly, and stretch your neck forwards, backwards (just as you did with your hands), then into rotation and bending sideways.
- 2 - You should position your neck in the most neutral posture, generally erect with ears over (not in front of) shoulders, and shoulders over hip joints.
- 3 - This position is easiest if you have a chair that supports your lower and mid back in an upright position, rather than allowing these areas to slouch.

Laptops by themselves do not lend themselves toward good ergonomic setups either on a desk or on a lap - but that is not why you have one. At home, consider using a separate keyboard and mouse that can be on a desk level, with the laptop/monitor placed at a higher level so that both head, neck and arms are in the most natural working position. External keyboards can be acquired for \$20-30 dollars, even in wireless versions, and then the laptop monitor can be elevated simply with a few books. Tilting the monitor can also help with easier viewing.

When traveling, analyze what you will be using your laptop for primarily. If reading, then emphasize the monitor placement for good viewing; if mostly writing, then emphasize keyboard placement for better hand use. With a little attention and perhaps some inexpensive devices, you can help yourself and still enjoy the convenience of a laptop computer.

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