# LAPTOPS Ergonomic Advice for Students & Staff



## THE PROBLEMS

Laptops are not very ergonomic - it's difficult to use them and maintain a good posture and, as a result, they can cause you problems. These include:

- Neck and/or eye problems due to viewing the screen at an awkward angle.
- Wrist and hand problems, from bending your wrists to use the keyboard or from over-using the other input devices (mouse, trackpad etc).
- Shoulder and/or back problems caused from carrying the laptop, reaching too far to use it or from using it extensively in an unusual posture such as slouching, bending over or lying down.
- Over-heating of the groin due to supporting the hot laptop (despite its name!).

You will also be aware that laptops are a temptation for thieves and, by carrying one on or off campus, you need to take steps to avoid being a victim of theft.

#### Here are some suggestions for how to prevent these problems:

### **SELECTING A LAPTOP**

The first rule is - whenever possible don't use a laptop for long periods, use a desktop computer. You need to ensure that desktop equipment is arranged appropriately. For further information on this use please refer to:

#### www.hse.gov.uk/pubns/indg36.pdf

If you do need to buy a laptop, look out for:

- As low a weight as possible (3kg or less) for computer and accessories.
- As large and clear a screen as possible (14" diagonal or more)
- As large size keys as possible.
- As long a battery life as possible, or extra transformer/cable sets so you only carry the computer, not an extra battery.
- Trackpad, rollerball or external mouse rather than 'nipple' trackpoint device.
- Wrist pad between keyboard and front edge of table.
- Tilt/pitch adjustable keyboard.
- Facility for attaching external mouse and numeric keypad.
- Friction pads underneath to prevent computer sliding across surfaces when in use.
- Sufficient memory and speed (for the applications used)
- "Add-ons" that improve usability and reduce maintenance time, such as (removable) CD-ROM drives and additional memory.
- Lightweight non-branded carrying case with handle and shoulder straps (or normal rucksack with extra padding inside
  - this will disguise the fact that you are carrying a laptop at all).

Always ensure that you secure your laptop when not in use. If you need to use the laptop in the library or in a café, get a cable lock to secure it to the table while you browse for books or re-fill your coffee.

## WORKING ON A LAPTOP

- Find a posture in which you can keep your wrists straight (neutral, in line with your forearms), your shoulders relaxed and your back supported so you feel comfortable.
- Align the laptop centrally with your body don't twist round to use it.
- Take frequent breaks from working on the laptop, get up, stretch and walk around, at least once an hour and more frequently if possible.
- Change your posture often, whenever it becomes even slightly uncomfortable; don't stay in one position for more than 15 minutes or so.
- Rest your eyes frequently by looking at something far away or by closing them, for a minute or two.
- Remember to blink more often to prevent your eyes feeling dry.
- Take whatever software training is available because the more skilled you are with the programmes the less time you will need to spend using the laptop.
- Do not support the laptop on your lap (because of the heat).
- Make sure the laptop is supported and stable and will not wobble or slide as you work.
- Adjust the laptop screen angle (and height if possible) to reduce stretching your neck and to minimise glare on the screen.
- If possible, when using the laptop for long periods, attach an external full-size keyboard and an external mouse.
- Think before you use the laptop try to cut down intensive usage because the more you use it the more likely you are to develop problems.
- If you are sharing the laptop, eg in a teaching session, try to move the laptop round to face each person in turn, rather than each stretch to read and see it.

If you develop any symptoms such as aches and pains, which you consider may be associated with your use of the laptop, consult your Doctor and Occupational Health immediately.