



Health, Safety and Computers

Children should take a break from the computer at least every 20 minutes, and do some simple stretching to relieve the muscles they have been using, i.e. hands, wrists, neck. It is a good idea to get up and walk around at least once an hour and refresh the eye muscles by looking at distant objects as well as those close up. Children can make these exercises into their own personal 'computer workout' routine.

Posture is very important and children should be given a few simple guidelines. Make sure they are not constantly leaning their head forward (it is very heavy for the neck to support!), and encourage them to keep the chin tucked in. The back should be supported in an upright position in the chair and the body should face forwards, not twisted sideways. Children sharing a computer should be encouraged to make sure that everyone in the group can see without straining.

Suitable hardware

Make sure children know how to adjust a screen for brightness and contrast, and how to position it to avoid glare from lights or windows. They should be looking down at the screen, with the top of the screen roughly at their eye level. There is a slight risk of triggering epileptic seizures from excessive screen flicker – there is wide variation in the 'steadiness' of screen image from one monitor to another, and if an individual child is at risk then consult with the relevant therapist/doctor when choosing a screen for them to use. All children should have regular eye check-ups.

Show children how to hold the mouse lightly in the widest part of the hand with their fingers resting lightly on the mouse button(s) so that a very small movement is needed to click a button. A small mouse is best for those with small hands. The arm or wrist should be supported on the table or wrist rest and check that they don't extend one or more fingers stiffly as this can lead to muscle strain. If children spend a lot of time using a computer, you should be aware of alternatives to a traditional keyboard and mouse – ergonomic keyboards, voice recognition systems, trackballs, handwriting recognition pads, finger pads and 'mouse pens'. These should all be available for demonstration at your local computer store.

There are various types of wrist rests available that can take the strain off the wrist when typing at a keyboard. Show children how to choose the position of the keyboard that feels most comfortable. Most keyboards can be used at different angles of tilt but the flattest position is best for most wrists.

Functional furniture

When using a computer, a child should be able to sit upright on a chair which gives some back support, having their arms roughly horizontal when using a keyboard. If their feet don't reach the floor, then use a footstool. Ideally, the chair height should be adjustable to suit all the people who will use it.

There should be space on the computer table for the keyboard in front of the monitor, and for a wrist rest in front of the keyboard. Keep the monitor well back from the front edge of the table. There should be enough space on the computer table for a mouse mat, a computer manual, any paperwork, and software disks. A simple document holder can be attached to the monitor to keep paperwork off the work surface.

Reducing risks

Don't be tempted to connect too many extension cables or double socket adapters to your existing electrical sockets – if you are in any doubt at all, call in an electrician to check the safety of your system and always replace damaged plugs or leads. Do uncoil leads but don't leave them trailing on the floor. Explain to children that computer equipment that uses mains electricity must be treated with the same caution as TV sets or electrical equipment in the kitchen.

Check regularly to make sure the computer equipment is sitting in a stable position and hasn't been pushed or tilted too far. Don't use the top of the computer or monitor as a storage shelf as you may block ventilation grills and cause overheating.

