

Newsletter

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Poor Computer Posture

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Parents should be concerned about not only what their children are viewing on the Internet, but also how they are sitting while in front of their computers. As any adult who is metaphorically chained to their desk can attest, there is a price to pay for poor posture. And children are no different. Only, they don't know, or care, about the ergonomics of their desk set-up.

A study published in *Computers in Schools* (1998, vol. 14, pages 55-63) led by Shawn Oates, a graduate student of Cornell University, documented that elementary school children are at serious risk for posture problems because of computer workstations that have been designed with little regard to musculoskeletal development.

"The research suggests that ergonomic considerations for computer use among elementary schoolchildren are frequently disregarded; this has implications for health problems down the line," says Cornell professor and environmental psychologist Gary Evans.

In all, 95 students from 11 different schools in New York State were observed while working at their classroom computer stations. Not a single student scored within acceptable levels. Forty per cent of the third to fifth graders were at postural risk while the other 60 fell under a category of "some concern."

"Most children are now working for short periods of time on keyboards that are too high and incorrectly angled, looking sharply up at monitors and with their legs dangling, unsupported on the floor," says Oates.



Figure 1: A computer desk designed for an adult has been adapted for an eight-year-old to minimize postural strain.

With a few recommendations you can help your young patients set up their computers to avoid the risk of cumulative trauma disorders or repetitive strain injury often caused by working at computer stations with poor posture. The advice is similar to that which you would give an adult, simply adapted for a smaller body.

- Monitor should be located directly in front of the body with the eyes directed at the upper one-third of the screen. For a child, raise the chair so their eyes are at the correct level.
- Elbows should be at 90 to 100 degrees without bending wrists to rest on the keyboard. An adjustable keyboard tray, which can be lowered and angled for each individual user, is a good investment.
- Consider buying a child-sized keyboard and mouse.
- A good chair should support the back with knees resting two inches from the front edge. Place a pillow behind the child's back for support and to move them forward so their knees hang free.
- Feet should reach the floor. If they don't, a stool should be placed under the feet so that knees are bent at approximately 100 degrees.
- Head and shoulders should be relaxed and neutral.
- Watch the time! Breaks should be taken every 20 to 30 minutes.
- Parents should assess their children's posture and adjust a home workstation to facilitate the most neutral posture possible.

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