Computers and Young Children

With increased numbers of young children using computers, some child health and development professionals, advocates and parents are worried about the potential physical, emotional, social and intellectual hazards they may pose young children. Parents need to consider the potential harm, as well as the promised benefits, of computer use by young children.

What are the possible hazards?

Musculoskeletal injuries. Long hours at keyboards and repeating a few fine hand movements may overload children's hands, wrists, arms and necks. This in turn may damage their developing muscles, bones, tendons and nerves.

Vision problems. Frequent computer use may tire and irritate eyes, putting additional strain on children's eyes and developing visual system.

Lack of exercise. Children need plenty of time for active play, and time spent using a computer may replace time spent being physically active.

Social isolation. Children need strong personal bonds with caring adults. Computers can distract children and adults from spending time with each other, causing them to live more isolated lives.

Other long-term hazards. Over-use of computers in childhood may also cause lack of creativity, stunted imagination, lack of self-discipline and motivation, emotional detachment from community, commercial exploitation, impoverished language and literacy skills, poor concentration, attention deficits, and exposure to online violence, pornography and other inappropriate materials.

When should children start using computers?

Many researchers do not recommend that children under 3 years of age use computers. During this time, children need strong, positive interactions with other children and adults. They learn through their bodies—their eyes, ears, mouths, hands and legs. Computers are not a good choice for supporting the developmental skills such as crawling, walking and talking that these children are learning to master.

Tips for proper use of computers by children

Become involved in making choices. Select software, music, movies and Web sites as carefully as you select other learning materials.

Be aware of ratings for computer games. Use the Entertainment Software Rating Board's (ESRB) ratings systems. The *rating symbols* suggest what age group the game is best suited for; *content descriptors* include brief descriptions of the content and parental advisories.

Set time limits. Limit your child's total screen time to no more than one or two hours per day. This includes TV, movies, video and computer games, and surfing the Internet. The younger the child, the shorter the time limit.

Arrange computers and furniture correctly to ensure good ergonomics. Teach children to use good posture.

Anticipate problems. Provide young children with adequate knowledge and teach them what they really need to know.

Computer time should not draw children away from developmentally important activities such as reading, hobbies or creative play.

When used in age-appropriate ways, computers can be a positive influence as well as a valuable educational tool. When used incorrectly, computers may do more harm than good.

Resources

Healthychildren.org from the American Academy of Pediatrics, Where We Stand: Screen Time, https://www.healthychildren.org/English/family-life/Media/Pages/Where-We-Stand-TV-Viewing-Time.aspx

American Academy of Pediatrics, Media and Children, https://www.aap.org/en/patient-care/media-and-children/