Staring at the computer all day... okay for my eyes? [1]

Alice,

My eyes feel dry and swollen after hours of staring at the computer monitor. Is there any long range harm caused by spending both work and play time in front of the computer? I work out, and eat a healthy, low-fat diet. I don't have any other vices except perhaps a higher than normal caffeine intake.

? Computer nerd

Answer

Dear Computer nerd,

Whether you’re a computer nerd, geek, or brain, you likely will not have to worry about long-term damage to the eyes from many hours spent at the computer (or other devices including smartphones, e-readers, and tablets). You may experience some minor health concerns, such as dry eyes, but fear not – there are preventive measures that a person can take to help alleviate discomfort from long hours in front of a screen.

Computer vision syndrome (CVS) or digital eye strain is a recognized condition among computer users and includes five major symptoms: eye strain, headaches, blurred vision, dry eyes, and neck or back pain. One reason for these symptoms is that folks viewing computer and device screens for extended period of time don’t blink as often (the body’s way of lubricating the eye). In fact, they blink about one-half to two-thirds less than normal during screen time, as compared to blinking about 15 times a minute when not behind a screen. Reading on a screen is also more taxing to the eye; letters on a screen aren’t as sharply defined and the contrast between those letters and the background is not as sharp either. And, of course, a person’s peepers may encounter glare, which makes items on a screen harder to see. So, these make the eyes work a bit harder than they would if a person was simply reading from a printed page.

The surrounding environments (offices, neon lighting, ergonomically poor computer desks, etc.) also contribute to the experience of symptoms. Lastly, the computer users’ current visual ability and the length of time spent viewing these screens factors into the degree to which they experience these undesirable symptoms. For most folks though, the symptoms will go away after screen time is over. The American Optometric Association [2] does note, however, that some people may continue to experience symptoms even after they stop using the computer. If the cause is not addressed, the symptoms may recur and worsen with
continued digital screen exposure.

Prevention can be a key component in addressing any discomfort. The first line of defense is to get your vision examined by a professional (an optometrist or ophthalmologist). It's noted that folks who have uncorrected vision impairments, such as farsightedness or astigmatism, may be more likely to experience these symptoms. Letting the optometrist or ophthalmologist know about how much daily screen time you have may also help them determine if any specially designed contact lenses or eyeglass lenses may be beneficial (particularly if you already use either to correct your vision).

Additionally, making changes to the screen display and how you use a computer may help alleviate or prevent some of the eye irritation and fatigue associated with using a computer for long periods of time. These adjustments include:

- Use the 20/20/20 rule: After 20 minutes of computer use, look at something 20 feet away for at least 20 seconds.
- Make sure the computer monitor is at least 20 to 28 inches away from the eyes.
- Place the screen at a viewing angle of 15 to 20 degrees below horizontal eye level.
- Make a conscious effort to blink more when viewing a screen.
- When using a reference document, make sure it's placed above the keyboard and below the top of the screen. A document holder may also help.
- Adjust lighting in the workspace or room to reduce glare or get a glare filter for the screen.
- For those working in offices with windows, make sure the window is located to the left or right of the worker (not behind or in front of the monitor). Try to use drapes or blinds to further reduce glare.

Getting your vision checked out (and corrected, if needed) and taking a breather—er, blinker every now and then can keep you typing, surfing, reading, designing, studying, watching, playing, and more.

Happy computing!

Alice!

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