

Sight for Sore Eyes: Preventing Computer Eyestrain

Computer eyestrain is the number one office-related health complaint, but there are many things workers and employers can do to reduce this symptom of computer vision syndrome (CVS). Here are some easy tips:

- * **Get a computer eye exam.**

This is the most important thing you can do to prevent or treat computer vision problems. If your occupation involves a high degree of computer use, yearly eye exams are recommended.

- * **Use proper lighting.**

Eyestrain is often caused by excessively bright light. Try closing drapes, shades, or blinds. Reduce interior lighting by using fewer or lower intensity light bulbs or fluorescent tubes. If possible, position your monitor so that windows are to the side of it, instead of in front or back.

- * **Minimize glare.**

Glare on walls and surfaces, as well as reflections on the computer screen itself can also cause eyestrain. You may want to install an anti-glare screen on your monitor. If possible, paint bright white walls a darker color with a matte finish. Have an anti-reflective coating applied to your glasses. This will prevent glare and reflections on the back side of your lenses from reaching your eyes (*more on this below*).

- * **Adjust the brightness of your computer screen.**

Closely match the brightness of the environment with that of your computer screen, by using the buttons on the monitor. Also adjust the monitor to make sure the contrast between the screen background and the on-screen characters is high. And make sure that the text size and color are optimized for the most comfort.

- * **Blink more often.**

Blinking is very important when working at a computer — it rewets your eyes to avoid dryness and irritation. When working at a computer, people blink less frequently — about five times less than normally, according to studies. Office buildings may have excessively dry environments that also reduce tearing.

For significant problems, ask your eye doctor about artificial tears. Don't confuse lubricating drops with the drops that only "get the red out." The latter can indeed make your eyes look better with vasoconstrictors that reduce the size of the blood vessels in your eyes, but they are not necessarily formulated to help with dryness and irritation.

Also try this exercise: Every 30 minutes blink 10 times by closing your eyes as if falling asleep (very slowly). This will help rewet your eyes.

- * **Try specialized Computer glasses**

Obtaining customized computer glasses can make a world of difference in your comfort level while you're using the computer. These special-purpose glasses are prescribed specifically to reduce eyestrain and to give you the most comfortable vision at your computer.

I Already Wear Eyeglasses; Do I Really Need Computer Glasses?

If you already wear regular eyeglasses or reading glasses, you may be tempted to just dismiss the idea of computer glasses outright. Unfortunately, your regular glasses are probably not quite right for computer work.

Why? Computer screens are usually positioned 20 to 26 inches from the user's eyes. This is considered the *intermediate* zone of vision — closer than driving ("distance") vision, but farther away than reading ("near") vision.

Most young people wear eyeglasses to correct their distance vision. Reading glasses are prescribed to correct near vision only. And bifocals prescribed for those over age 40 with presbyopia correct only near and far. Even trifocals and progressive lenses (which do have some lens power for intermediate vision) have only a small portion of the lens dedicated to this area, not nearly large enough for comfortable computer work.

Without appropriate eyeglasses, computer users can often end up with blurred vision, eyestrain, and headaches—the hallmark symptoms of computer vision syndrome. Worse still, many people try to compensate for their blurred vision by leaning forward, or by tipping their head to look through the bottom portion of their glasses.

Computer Lens Designs

There are a number of special purpose lens designs that work well for computer glasses. Because these lenses are prescribed specifically for computer use, they are not suitable for driving or general purpose wear.

The simplest computer glasses have **single vision lenses** with a modified lens power prescribed to give the most comfortable vision at the user's computer screen. This lens relaxes the amount of accommodation required to keep things in focus at the distance of the computer screen and provides the largest field of view, reducing the risk of eyestrain, blurred vision, and unnatural posture that can cause neck and back pain. These lenses can be used comfortably by younger and older computer users alike.

A popular type of computer eyeglass lenses for people with presbyopia is the **occupational progressive lens** — a no-line multifocal that corrects near, intermediate, and, up to a point, distance vision. It has a larger intermediate zone than regular progressive lenses for more comfortable vision at the computer. But this leaves less lens area for distance vision. So these lenses are not recommended for driving or other significant distance vision tasks.

Other options for presbyopic computer users are a **lined trifocal**, with a larger intermediate zone than regular trifocals, or an **occupational bifocal**, with the top part of the lens for intermediate vision (computer screen) and the bottom portion for near vision (reading).

Another Benefit: Eyestrain Relief

In addition to fixing your blurry vision, computer glasses can help with another problem as well: eyestrain from bright office lighting. Getting anti-reflective (AR) coating on your lenses can significantly reduce the amount of glare and reflected light that reach your eyes.

Your eyecare professional can help you decide which lens design and options will best suit your needs. If you have questions, please feel free to stop by either of our Fichte-Endl optical locations. Our knowledgeable opticians will be happy to assist you.