# Computers, Digital Devices and Eye Strain

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You may have heard somewhere that looking at a computer, smartphone or other digital screen for long periods of time will permanently damage your eyes. Thankfully, this is like the old adage about "ruining your eyes" from watching too much television or sitting too close to the TV: it's simply not true. However, you probably notice some uncomfortable effects from staring at your screen too long.

Digital-related eye strain affects people of all ages. If you spend hours a day using digital devices, you might notice your vision blurs, and your eyes feel achy and tired. You may also find your eyes become dry, and will tear or sting. This eye strain is no different from the symptoms you may have when reading, writing or doing "close work" like sewing for long stretches of time.

We are not likely to cut back on cell phone and computer use any time soon. So what can we do about the related eye strain? Here are some tips to relieve your eyes.

**1. Blink!**

Humans normally blink about 15 times in one minute. However, studies show that we only blink about 5 to 7 times in a minute while using computers and other digital screen devices. Blinking is the eye's way of getting the moisture it needs on its surface.

Make a conscious effort to blink as often as possible. This keeps the surface of your eyes from drying out. You might even want to put a sticky note on your computer screen reminding you to blink often!

**2. Lube 'Em Up.**

Use artificial tears to refresh your eyes when they feel dry. If you are often in a dry, warm room, consider using a humidifier to add moisture to the air.

**3. Follow the "20-20-20" Rule.**

Take regular breaks using the "20-20-20" rule: every 20 minutes, shift your eyes to look at an object at least 20 feet away, for at least 20 seconds.

**4. Use Computer Eyeglasses.**

If you work on a computer for many hours at a time, might find that using computer eyeglasses reduces eye strain. These prescription glasses allow you to focus your eyes specifically at computer screen distance (intermediate distance, which is about 20-26 inches away from your face). Some of these glasses have multifocal lenses to help you quickly shift your focus between close, intermediate and far distances. Be aware that computer glasses for reducing eye strain are not the same as "blue light blocking" glasses.

**5. Adjust Brightness and Contrast.**

If your screen glows brighter than your surroundings, your eyes have to work harder to see. Adjust your screen brightness to match the level of light around you. Also, try increasing the contrast on your screen to reduce eye strain.

**6. Reduce the Glare.**

The screens on today's digital devices often have a lot of glare. Try using a matte screen filter to cut glare. Check with your computer store or cell phone store to see what they can provide.

**7. Adjust Your Position at the Computer.**

When using a computer, you should be sitting about 25 inches (right about at arm's length) from the screen. Also, position the screen so your eye gazes slightly downward, not straight ahead or up.

Contact Lens Users and Digital Devices

People who wear contact lenses and use digital devices for long periods of time may find dry eye to be an ongoing problem. Some tips:

- Give your eyes a break by wearing your glasses instead.
- Don't sleep in your contact lenses, even if they are labeled "extended wear."
- Always use good contact lens cleaning practices.

If your eyes are consistently red, blurry or watery, or they become sensitive to light or painful, see your ophthalmologist.

Is 3-D a No-No for You?

Do you find watching 3-D movies makes your eyes very tired? Or that you get headaches or feel dizzy and sick to your stomach? You may have a problem with focusing or depth perception.

3-D eyeglasses and movie screens show different images to each eye to create the illusion of depth. It works because this is how we see objects at different distances in real life. Those objects appear in slightly different places in each eye's field of vision.

In real life or when watching a 3-D movie, our eyes track an object that's coming closer to us by turning inward toward the nose. Our eyes naturally focus closer as an object moves closer. However, with a 3-D movie, the screen itself isn't moving any closer, so our eyes have to focus back out to see clearly. That back-and-forth focusing effort strains your eyes. People who find 3-D very hard to watch probably have some trouble getting their eyes to converge properly in real life.