Digital Devices and Your Eyes

Sections

Blue Light and Digital Eye Strain

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Blue light glasses

Are eyeglasses with special blue light-blocking filters worth the expense? By absorbing the excess blue light from our devices, the eyeglasses claim to:

- improve sleep
- reduce digital eye strain
- and prevent eye disease

We all want to do these things, but it's not necessary to spend money on special eye wear for computer use. Here's why:

- **Blue light from computers will not lead to eye disease.** It is true that overexposure to blue light and UV light rays from the sun can raise the risk of eye disease, but the small amount of blue light coming from computer screens has never been shown to cause any harm to our eyes.
- **Sleep can be improved without special eyeglasses.** You don't need to spend extra money on blue light glasses to improve sleep— simply decrease evening screen time and set devices to night mode.
- **Digital eye strain is not caused by blue light.** The symptoms of digital eye strain are linked to how we use our digital devices, not the blue light coming out of them.

Computer/digital eye strain

While using devices will not damage your eyes permanently, staring at them for a long time can cause temporary discomfort. People experience eye strain in different ways, but symptoms can include:

- dry eyes
- blurry vision
- tearing or watery eyes
- headache

The reason we get digital eye strain is that we blink less when we stare at our devices. Normally, humans blink around 15 times per minute—but this "blink rate" can be cut in half when staring at screens or doing other near work activities (like reading). To reduce eye strain:

- **Take frequent breaks by using the "20-20-20" rule.** Every 20 minutes look away from your screen and look at an object 20 feet away for at least 20 seconds. This gives your eyes a chance to reset and replenish themselves.
- **Use artificial tears to lubricate your eyes** when they feel dry.
- **Keep your distance.** Sit about 25 inches or at arm's length from your screen and adjust its height so you're looking slightly downward at it.
- **Reduce glare and brightness.** Devices with glass screens can cause glare. To reduce glare, consider a matte screen filter for your device. Adjusting the brightness and contrast of your screen and dimming the lighting near your screen can also help reduce eye strain.
- **Wear eyeglasses.** If you wear contact lenses, you already know they can increase dryness and irritation. To reduce these symptoms, try wearing eyeglasses instead when working on a computer for longer periods.

Screen time for kids

Most parents of newborns, infants and young children grapple with how much screen time they should allow. While there are plenty of valid reasons to limit screen time, it's helpful to know there is no evidence that screen use harms children's eyes or their developing visual systems.

But there is research that links increased screen time in young children to other health issues, such as:

- **Attention-related disorders.** A study in Canada showed that children with more than two hours of screen time per day were eight times more likely to develop ADHD than those with less screen time.
- **Obesity.** Too much screen time means less time spent on healthier, outdoor activities and can increase the risk for childhood obesity.
- Myopia (nearsightedness). The number of people with myopia in the U.S. and Asia has risen sharply since the 1970s. Research suggests a link to kids spending more time on their screens and more time indoors generally. The study provided evidence that more time spent on outdoor play and activities in early childhood can slow the progression of myopia.

While we don't have screen time guidelines for children, the American Academy of Pediatrics recommends:

- No screen time for kids until they are 2 years old (except for video chatting with apps like FaceTime or Skype)
- No more than one hour of screen time for children ages 2 to 5. This allows more time for other activities emphasizing body movement and interactive play that are fundamental to a child's physical and intellectual development.

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