

Uptown EyeCare Guide: How To Prevent Digital Eyestrain

As digital screens become a bigger part of our everyday life, we would like to offer important tips and strategies on how to avoid visual stress from extended screen time. Headaches, eyestrain, dry or irritated eyes, blurry vision and neck/shoulder pain are among the biggest symptoms of digital eyestrain. In children, poor behavior, reduced attention span and irritability can increase with too much screen time as well. Coupled with less outdoor play, excessive near demand can also lead to childhood myopia (nearsightedness) progression. Your vision is priceless. Without it, there would be no screen time. Take care of your eyes today, so your vision will last you a lifetime.

<u>1.FOLLOW THE 20/20/20 RULE:</u> Take a break from your screens (or any near work) every 20 minutes, and look at something 20 feet away for at least 20 seconds. This simple task relaxes the focusing and eye alignment muscles, reducing eyestrain.

- 2. MORE VISUAL BREAKS FOR KIDS: School age children learning online should take breaks more often and split online sessions into multiple modules throughout the day. Sessions should incorporate multiple daily outdoor activities to get more natural light exposure. We know that these environmental lifestyle choices, coupled with 20/20/20 rule, are important at slowing down the myopia epidemic research does suggest that focusing fatigue is likely associated with the onset and worsening of myopia. Reducing the rate of myopia early is important because it directly reduces risk of many eye related diseases later in life.
- 3. PAY ATTENTION TO ERGONOMICS: Your screen should be positioned at your extended arm's distance (18-24 inches). The screen should be placed slightly below your eye level, so your eyes are looking slightly downward (10-15 degrees). Tilt your monitor upward (so bottom of monitor is toward and top if away from you). "Turtling" (tilting head forward and slouching forward, rounding the back and shoulders) should be always avoided. Increasing the text size on digital devices better defines content on the screen, and also makes your eyes focus (or accommodate) less, thereby decreasing eyestrain. Use traditional font, not cursive.
- 4. GET YOUR EYES CHECKED AND WEAR APPROPRIATE PRESCRIPTION: If you or your child have not had your eyes checked in the last 12 months, now would be the time to do so. If you were prescribed computer (or near) glasses, fill your prescription so your eyes focus properly. Remember, your near prescription may work on your laptop and for reading, but may be too strong for your desktop always discuss your screen set-up with your provider, so your prescription matches your occupational needs and lifestyle. If you are a progressive lens wearer, invest into occupational computer progressives or computer glasses for better ergonomic posture and larger area of intermediate and near "real estate" in your lens.
- 5. PROTECT YOUR EYES FROM GLARE: Lighting should come from behind or overhead, not directly at your face. Utilize a glare guard to reduce reflections and adjust screen brightness and color. A good anti-reflective coating (AR) in your glasses is a must. Using inexpensive blue blocking non-prescription glasses has been a recent effective marketing trend, but they are not a replacement for prescription reading glasses. Remember, high quality blue blocking AR coating does not filter out all the blue light, and only works well if coupled with your actual prescription, as assessed by your eyecare provider. It's the combination of your prescription and a high-quality AR coating that will make the difference on your screen when it comes to glare reduction and eye comfort. When outside, wear transition or polarized sunglasses to protect your eyes from the most damaging blue light source—the sun.



- <u>6. NO SCREENS BEFORE BEDTIME:</u> Do not use digital devices at least 1-2 hours prior to going to bed. The degree and intensity of artificial and blue light exposure does matter, as it can not only cause more eyestrain, but also affect your circadian rhythm and cause sleeplessness and fatigue. Adults should model good habits in front of their children establishing media-free times each day and creating "bedtime" for digital devices for the whole family is likely the best recommendation to avoid sleep disruption and increase quality family time without devices.
- 7. BLINK: Our blink rate naturally decreases while using screens (up to 60% from 10-15 times per minute to 3-5 times per minute on screens), so reminding yourself to blink more often is important. Every 20 minutes, forcefully squeeze your eyes 5 times in a row with the help of your facial muscles—this expresses more oil from the meibomian glands in your lids, stabilizing your tear film and providing clear vision. Chronic use of digital devices can cause the oil glands in your lids to atrophy over time. At the end of the day, put a hot compress mask over your eyes for 5-10 minutes for a much-deserved relaxation and increased comfort.
- <u>8. LUBRICATE:</u> Use preservative-free lubricating drops with oil to add moisture to your eyes if they are feeling dry. This not only prevents soreness, but also increases comfort and decreases blurriness while using screens. Stay away from redness-reliever drops that only mask the problems and do not treat dry eyes. A small desktop humidifier can also increase air moisture around you while you work, keeping your eyes from drying out during extended screen time.
- <u>9. DRINK MORE WATER:</u> Increase your hydration to prevent dry eyes, as well as headaches and migraines from happening.
- 10. GET ENOUGH LUTEIN: Eat lot of green leafy veggies, or take a carotenoid supplement. Research suggests that dietary carotenoids may help strengthen the eye's natural ability to block blue light. The eye has its own blue-light shield—it's called the retinal pigment epithelium, a thin layer of cells in the retina which acts as a filter for blue-wavelength light. The cells of this layer contain carotenoids, which we absorb through our diet. Carotenoids, including lutein and zeaxanthin, are available from dietary sources such as yellow, red and green leafy veggies and from supplements (such as Macuhealth). Carotenoids help protect the eye against macular degeneration, as well as against the unwanted stimulating effects of blue light exposure at the wrong times.
- 11. APPS TO THE RESCUE: Use blue light filtering computer software such as Flux, Iris, NightLight on your computers, and NightShift on your smaller digital devices such as ipads and phones. Use break reminder apps to encourage taking breaks during your work: Time Out Free (screen will dim in and out and track your activity), eyeCare (helps you with eye and lower back exercises, based on 20/20/20/ rule), Workrave (frequently alerts you to take micropauses, rest breaks and restricts you an adjustable daily screen time limit), Eyeleo (reminds you to take short breaks).