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ADULT & PEDIATRIC EYECARE . CONTACT LENSES . TREATMENT OF OCULAR DISEASE

**Computer Vision Syndrome (CVS) - Eye Strain Symptoms and Solutions**

Common symptoms of CVS include: eye strain or fatigue, tired eyes, watery eyes, dry eyes, blurred or double vision, difficulty focusing, a heavy feeling of the eyelids, after-images, temporary nearsightedness, and headaches. Here are some steps you can take to reduce computer eye strain and the other common symptoms of computer vision syndrome.

**1. Use proper lighting.**

Eye strain is often caused by excessively bright light either from outdoor sunlight coming in through a window or from harsh interior lighting. When you use a computer, your ambient lighting should be about half that found in most offices.

Eliminate exterior light by closing drapes, shades or blinds. Reduce interior lighting by using fewer light bulbs or fluorescent tubes, or use lower intensity bulbs and tubes. If possible, position your monitor so that windows are to the side of it, instead of in front or back.

**2. Minimize glare.**

Glare on walls and finished surfaces, as well as reflections on the computer screen can also cause computer eye strain. You may want to install an anti-glare screen on your monitor and, if possible, paint bright white walls a darker color with a matte finish.

Again, cover the windows. When outside light cannot be reduced, consider using a computer hood.

If you wear glasses, have **anti-glare technology** applied to your lenses, which will reduce glare by minimizing the amount of light reflecting off the front and back surfaces of your eyeglass lenses.

**3**. **Mimimize your exposure to blue-light.**

Warmer colors are safer and more comfortable on your eyes. On your desktop computer, download f.lux at [www.justgetflux.com](http://www.justgetflux.com) which will make the color of your computer's display adapt to the time of day

For iphone: Go to “Settings”, then “Display and Brightness”, then “Nightshift” or “Blue Light Reductions”…..then adjust to warmer colors.

**4. Adjust the brightness and contrast of your computer screen, tablet and smart-phone.**

Adjust the display settings on your computer so the brightness of the screen is about the same as your work environment.

Also, adjust the screen settings to make sure that the contrastbetween the screen background and the on-screen characters is high. Adjusting how your monitor displays text can provide welcome eyestrain relief. Ideally, your text size should be three times the smallest text size you can read from your normal viewing position.

Black text on a white background is the best color combination for your eyes; other high-contrast, dark-on-light combinations are also acceptable.

To adjust the text size and color settings in the Windows operating system, use the Display Properties dialog box, which is available from the Control Panel. Depending on which version of Windows you have, font size will either be on the Settings tab or the Appearance tab. Color choices are on Appearance.

If you’re online and using the Internet Explorer browser, you can click on View, then choose the Text Size that is most comfortable for you. Most other browsers and email programs also let you change the text size and color, but you may have to do some exploring through the Help menus to find those controls.

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**5. Blink more often and use artificial tears.**

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.

Tears coating the eye evaporate more rapidly during long non-blinking phases and cause dry eyes. Also, the air in many office environments is dry, which can increase the evaporation rate of your tears, placing you at great risk for dry eye problems.

If you experience dry eye symptoms you may **use artificial tears 2-4x per day (or as needed)**. (Systane Ultra, Refresh Optive or Blink Tears) Don’t confuse lubricating drops with drops like Visine, that only “get the red out”. Visine contains ingredients that reduce the size of the blood vessels on the surface of your eyes to “whiten” them, but they are not necessarily formulated to reduce dryness and irritation.

Try this exercise: Every 20 minutes, blink 10 times by closing your eyes as if falling asleep (very slowly). This will help rewet your eyes.

**6. Exercise your eyes……20-20-20 Rule!**

A component of computer eye strain is focusing fatigue. To reduce your risk of tiring your eyes by constantly focusing on your screen, look away from your computer **every 20 minutes** and gaze at a distant object (**20 feet away)** outside or down the hallway **for 20 seconds**. Looking far away relaxes the focusing muscles inside the eye to reduce fatigue.

Another exercise is to look far away at an object for 10-15 seconds, then gaze at something up close for 10-15 seconds. Then look back at the distant object. Do this 10 times. This exercise reduces the risk of your eyes’ focusing ability to “lock up” (a condition called accommodative spasm) after prolonged computer work.

Both of these exercises will reduce your risk of computer eye strain. Remember also to blink frequently during the exercises to reduce your risk of computer-related dry eye.

**7**. **Take frequent breaks.**

To reduce your risk for CVS and neck, back and shoulder pain, **take frequent breaks during your computer work day.**

During your computer breaks, stand up, move about and stretch your arms, legs, back, neck, and shoulders. Check your local bookstore or consult your fitness club for suggestions on developing a quick sequence of exercise you can perform during your breaks and after work to reduce tension in your arms, neck, shoulders and back.

**8**. **Modify your workstation.**

If you need to look back and forth between a printed page and your computer screen, this can cause eye strain. Place written pages on a copy stand adjacent to the monitor. Light the copy stand properly. You may want to use a desk lamp, but makes sure it doesn’t shine into your eyes or onto the computer screen.

Improper posture during computer work also contributes to computer vision syndrome. Adjust your work station and chair to the correct height. Purchase ergonomic furniture to enable you to **position your computer screen 20 to 24 inches from your eyes**. The **center of your screen should be about 10 to 15 degrees below your eyes** for comfortable poisoning of your head and neck.

**9. Consider computer eyewear.**

For the greatest comfort at your computer**, you may benefit from having a customized eyeglass prescription for your computer work** with **Anti-glare** and **Blue-blocking technology**. With the rise in electronic devices, your eyes are exposed to more harmful blue light than ever before. Studies show that blue light affects your daily vision, long-term eye health, and can contribute to sleep disruption. Lens options like BluTech Lenses, Gunnar Eyewear, TechShield, Eyezen+ and Prevencia Anti-glare technology can help block the damaging blue-light emitted from harsh fluorescent lighting, computer screens, and personal electronics, while giving you soothing and relaxed vision.

**Essilor Computer lenses** are a good choice if you wear bifocals or progressive lenses. These lenses will give you a more relaxed and comfortable visual experience by featuring a larger intermediate area perfect for working at your computer and office work space.