



Glaucoma Research Foundation

January 2024

Digital Eye Strain and Glaucoma

It's becoming increasingly difficult to function without computers and other digital technology. However, is the excessive use of digital technology directly linked to glaucoma? Continue reading to learn how excessive use of digital devices can affect your vision. No strong evidence suggests excessive use of digital technology is a glaucoma risk factor.

However, prolonged computer, tablet, cell phone, and other digital device use can lead to a group of eye and vision-related problems known as computer vision syndrome or digital eye strain. However, to understand eye strain and Glaucoma impacts we must first know Glaucoma.

Glaucoma is a group of eye diseases that gradually steal sight without warning. While the most common forms mainly affect middle-aged and the elderly, glaucoma can affect people of all ages. Glaucoma does impact African American's and Latino's in greater numbers. Vision loss is caused by damage to the optic nerve. This nerve acts like an electric cable with over a million wires. The optic nerve carries images from the eye to the brain. There is NO cure for glaucoma, however, both medication and surgery can slow and in some cases prevent further vision loss.

As with all diseases and cancers early detection is always key to prevent further damage. Getting your eyes examined annually is extremely important. Now that we understand what Glaucoma is and who it affects let's discuss how eye strain and glaucoma have a potential impact.

What Is Digital Eye Strain?

Digital eye strain, also called computer vision syndrome (CVS), [affects an estimated 70% of adults](#), especially those between 18 and 34. It's a result of extended hours focusing on a computer screen and may be worsened by hours of exposure to blue light, high-energy visible light emitted by digital screens.

Blue light can cause short-term eye strain and discomfort. Scientists are researching whether it could also be linked to severe eye conditions, such as age-related macular degeneration (AMD) and cataracts.

Staring at a screen causes people to blink up to 66% less often. Blinking is essential as it hydrates your eyes and stimulates the release of oil from the tiny glands in your eyelids. Dry eyes can cause blurry vision, which exacerbates eye strain.

Recommended Steps To Help Glaucoma Patients Limit the Risk of Eye Strain

The primary concern regarding computer use for glaucoma patients is the potential for glare and its effect on the patient. Fortunately, there are ways to decrease eye strain when working on computers.

REDUCE GLARE

Because glaucoma damages the optic nerve and retina, less light is transmitted to the brain; therefore, the images produced are darker and lack contrast. Therefore, patients with glaucoma should optimize lighting conditions. It's also imperative to ensure that you adjust your display settings accordingly. For example, you may find that applying black text on a white background will help improve readability.

Avoid glare using a monitor filter, or choose a display with an anti-glare matte screen. Also, ensure that your monitor doesn't face a window. The light from a window interferes with the monitor, especially if you have contrast problems. Older CRT computer monitors can be more stressful than flat-screen displays.

Office lighting can also create and exacerbate problems with glare. Fluorescent lighting produces the most glare, while incandescent bulbs create less glare. A pharmacy light aimed over the non-dominant hand can help. Altering the color of carpets, desks, or walls can make a difference. Tinted lenses can be used to lessen the effects of some of these problems.

TAKE BREAKS

Taking breaks from staring at digital displays — computers, tablets, mobile phones — is vitally important. You can take breaks simply by focusing on something 20 feet away for 20 seconds every 20 minutes. Apps with built-in functions that stop you from continuing work until you have taken a break are also available. In addition, taking breaks helps your eyes relax after time spent on computers or other digital devices.

PAY ATTENTION TO LIGHTING

Reading on a computer, tablet, or phone in poor lighting conditions and at night can suppress the production of melatonin, which helps control your sleep cycle. Therefore, avoiding reading on a phone or tablet at night is essential, as disrupting your melatonin levels can make your body think it's daytime when it's not.

BLINK

Humans normally blink about 15 times per minute. However, studies show that [we only blink about five to seven times 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. Making a conscious effort to blink as often as possible 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!

USE COMPUTER EYEGLASSES

If you work on a computer for many hours, you might find that using computer eyeglasses reduces eye strain. These [prescription glasses](#) allow you to focus your eyes at a computer screen distance (intermediate distance, about 20-26 inches away from your face). However, be aware that computer glasses for reducing eye strain are not the same as ["blue light blocking" glasses](#).

HAVE REGULAR EYE EXAMS

Regular eye exams help you keep your eye health in check and ensure your problems aren't worse than normal eye strain. If you spend prolonged periods in front of the screen, it's important to talk to your eye doctor about whether you would benefit from lubricating eye drops or a pair of computer glasses.

Posted on August 2, 2022

Article provided by Glaucoma Research Foundation

<https://glaucoma.org/january-is-glaucoma-awareness-month/>

Last reviewed and updated on October 24, 2023.



Healthy Recipe

<https://www.allaboutvision.com/recipes/>

Eye Health Recipe

By: Dr. Laurie Capogna and Dr. Barbara Pelletier

Salmon with Melon Salsa

Makes: 4 Servings

Ingredients:

4 Wild Alaskan salmon fillets (frozen or fresh)

1 Tbsp. olive oil, salt and pepper

Melon Salsa

1 cup cantaloupe (cut into ¼ inch cubes)

½ red pepper (cut in ¼ inch cubes)

1 green onion, chopped finely

1 Tbsp. fresh cilantro, chopped

salt and pepper

juice and zest 1 lime

1 Tbsp. olive oil



Directions:

1. Preheat oven broiler to 400 degrees (or maximum)

2. Line a cooking sheet with aluminum foil

3. Place fish fillets on the cooking sheet and brush with olive oil. Sprinkle a little salt and pepper on each fillet

4. Place in oven for 5-10 minutes, or until brown on the top and cooked throughout

While Salmon is cooking, prepare the salsa:

1. Mix together gently the cantaloupe, green onion, red pepper and cilantro. Season with a little salt and pepper

2. In a small bowl, whisk together the olive oil, lime zest and lime juice

3. Pour dressing over salsa and mix to combine.

When salmon is ready, place one fillet on each plate and spoon one quarter of the salsa on top.

Serve with a green salad and brown rice.

Notes: You can replace cantaloupe with peaches or papaya for this recipe

Nutrition:

CALORIES: 500KCAL | CARBOHYDRATES: 46G | PROTEIN: 40G | FAT: 18 G | SUGAR 13G

SATURATED FAT: 7G | FIBER: 6G | CALCIUM: 37MG | CHOLESTEROL 95MG | SODIUM 790MG

Source: **Optometrists Dr. Laurie Capogna and Dr. Barbara Pelletier** have co-authored books on eye nutrition, which you can order at www.eyefoods.com.

QPIC Corner

New to the ACO network

Home is where your health is.™



dispatchhealth

Same-Day, In-Home Medical Care

DispatchHealth brings medical care to you, in the comfort of your home.

Getting the medical care you need can be inconvenient and expensive—that's why we're bringing you a new way to receive medical care. DispatchHealth offers safe, convenient and affordable medical care in your home for urgent health needs that do not require an ER visit.* Get the care you need and recover comfortably at home.

How It Works

- 1 Request care:** You can request DispatchHealth's services by calling 833-512-4482 or visiting our website at DispatchHealth.com. We are available 8 a.m. – 10 p.m., 7 days a week including holidays. No pre-registration required!
- 2 Explain Your Symptoms:** You'll provide a few details about your illness or injury and other information like your primary care provider's name.
- 3 A Medical Team You Can Trust:** We arrive within a few hours to provide treatment. Each team includes a nurse practitioner or physician assistant, along with a medical technician. An on-call emergency medicine physician is always available by phone for consultations.
- 4 We Take Care of the Rest:** We will call in any prescriptions you might need, update your doctor and process billing.

For non-life-threatening injuries and illnesses, call DispatchHealth at 833-512-4482.

Available 8 a.m. – 10 p.m., 7 days a week, including holidays. www.DispatchHealth.com.

PAR2022 08 25

What DispatchHealth Treats

We treat simple to complex illnesses and minor injuries, all from the comfort of your home.

- Bronchitis
- COVID-19 symptoms
- Croup
- Diarrhea / Nausea / Vomiting
- Dehydration
- Fever
- Flu
- Headache / Migraine
- Nosebleeds
- Respiratory infections
- Pneumonia
- Shortness of breath with COPD
- Significant skin infections
- Strains, sprains and minor fractures
- Urinary tract infections
- Weakness
- And more

Procedures we perform include:

- EKG
- IV fluids, medications and antibiotics
- Stitches
- Splinting
- Lancing of abscess (boil)
- Advanced on-site blood testing
- Urinary catheter insertion
- Rapid infectious disease testing (flu, COVID-19, strep, mono, etc)
- And more

What DispatchHealth Does Not Treat

If you are experiencing any of the following symptoms, call 911.

- Chest pain
- Confusion
- Hallucination
- Intentional overdose or suicidal thoughts
- Loss of consciousness
- Loss of vision
- Moderate to severe shortness of breath
- Rectal bleeding
- Severe abdominal pain
- Stroke symptoms: numbness or weakness on one side, difficulty speaking, swallowing or walking
- Vomiting blood

An Affordable Healthcare Solution

We've got you covered.

DispatchHealth is in-network with most insurance, including Medicare and Medicare Advantage and is often the same out-of-pocket cost of an in-network urgent care center. The percentage of the total bill you're responsible for is determined by your insurance plan.

"DispatchHealth's medical team listened to my issues, thoroughly went through the diagnosis, wrote a prescription and advised on recovery—all from the comfort of my couch. DispatchHealth is amazing!"

— Andrea W.



Available 8 a.m. – 10 p.m.,

7 days a week, including holidays.

833-512-4482 or DispatchHealth.com

*For life-threatening and time-sensitive injuries and illnesses, patients should call 911 or go to the nearest emergency room. DispatchHealth shouldn't be used in a life-threatening emergency and doesn't replace your primary care provider. DispatchHealth complies with applicable Federal civil rights laws and does not discriminate on the basis of race, color, national origin, age, disability, or sex. ©2022 DispatchHealth. All Rights Reserved.

PAR2022 08 25