

# Dietary Advice for Managing Dry Eyes

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One of the most common eye conditions for adults 50 and older is dry eye disease (DED). As a sufferer of this since my 20's, I have been exploring options as a dietitian/nutritionist. There is mounting evidence that an anti-inflammatory and high-fiber diet, along with eating a higher amount of coldwater seafood, and adding a colorful produce eating plan, are helpful strategies for decreasing eye inflammation. The following nutrients have been shown to be helpful for lowering inflammation and are gaining popularity among eye care professionals looking to make nutrition recommendations to those who struggle with DED:

## Water

Dehydration can negatively impact our bodies in several unpleasant ways, one of those being dry eyes. If you're consistently experiencing dry eyes, look at your daily water intake. While people with healthy diets get most of their necessary daily water

intake from the foods they eat and beverages they drink, generally healthy people should drink an additional eight cups of hydrating fluids per day. For most adults, this can be met by adding a 16-ounce bottle of water in the morning and one in the afternoon. Certain health conditions like renal dysfunction or chronic heart failure may require fluid restriction. If that is the case, follow your physician's recommendations on fluid intake.

## Omega-3 Fatty Acids

Omega-3 fatty acids are anti-inflammatory compounds that reduce unwanted inflammation. One cause of DED is ocular surface inflammation, and research shows that consuming omega-3 fatty acids helps to combat this inflammation. The best source of omega-3's is coldwater seafood, specifically salmon, mackerel, tuna, trout, sardines and oysters. However, if you're vegetarian or not a fan of fish, other great sources of omega-3's are walnuts, flaxseed

oil, chia seeds, edamame, seaweed and green leafy vegetables. Adding 1000-2000 mg of omega-3s in supplemental form may also be helpful.

## Antioxidants

Antioxidants can decrease inflammation, prevent damage to our cells and DNA, and help fight infections. Lutein and zeaxanthin are two antioxidants associated with maintaining healthy eye function. These specific antioxidants are found in eggs, corn and deep leafy greens like kale, spinach and broccoli. If your patient reports not consuming enough colorful fruits and vegetables encourage that they do, along with taking an antioxidant multivitamin supplement.

## Vitamins and Minerals

Vitamin C, vitamin E and zinc are all linked to DED. Vitamin C is important for healthy blood vessels in your eyes. Good sources of vitamin C include oranges,

tomatoes, apples, bananas and grapefruit juice. Vitamin E is an antioxidant that helps prevent damage to our cells and boosts our immune systems. Good dietary sources of vitamin E include almonds, sunflower seeds, wheat cereal, peanut butter, hazelnuts and sweet potatoes. Zinc is a mineral that has several important roles in our bodies, one of them being that it helps the body guide vitamin A to the retinas where it generates a protective compound called melanin. Zinc is found in oysters, beef, lobster, pork, yogurt, salmon, milk, fortified grains and eggs. Additional vitamin C supplementation is warranted in patients who do not consume citrus fruits daily; levels in the 500 to 1,000 mg range/day are safe supplemental ranges.

### Other Phytonutrients with Promising Benefits

Lutein and zeaxanthin, nutrients found in deep leafy green vegetables can help protect your eyes from harmful ultraviolet rays in sunlight. Studies show that increased levels helps with improved vision, especially when trying to see at night. Additionally, studies have found that people who eat foods rich in zeaxanthin are half as likely to develop cataracts and can benefit from slowing macular degeneration.

### What to Limit

#### Caffeine:

- Ever notice an increased need to urinate after drinking a cup of coffee or tea? That's because these drinks contain caffeine, which is a diuretic. Diuretics causes frequent urination by signaling our kidneys to reabsorb water and excrete it through urination. This can lead to dehydration as well as overexcretion of electrolytes, vitamins and minerals that our bodies need to function properly.

#### Alcohol:

- According to the latest (2020) USDA Dietary Guidelines, adults should consume no more than one alcoholic beverage a day for women and two for men. However, alcohol is another diuretic which can lead to dehydration and depletion of important water-soluble compounds. Also, frequent

## Foods That Help Fight Inflammation

### Red (color all the way through) fruits and vegetables:

Strawberries, Cranberries, Cherries, Tomatoes, Red peppers

### Orange (carotenoid) fruits and vegetables:

Carrots, Orange squash, Pumpkin, Acorn squash, Sweet potatoes

### Sources of Lutein and Zeaxanthin:

Leafy greens, Kale, Spinach, Broccoli

### Sources of Zinc:

Oysters, Beef, Lobster, Pork, Yogurt, Salmon, Milk  
Fortified grains, Eggs

### Sources of Omega-3

Coldwater Fish (salmon, tuna, mackerel, sardines, trout, oysters)

ingestion of alcohol can decrease absorption of vitamins in our GI tracts, as well as decrease overall function of our liver and its ability to store vitamin A.

#### Fried foods:

- Lipids are readily oxidized when exposed to air, light and heat, meaning the oil that is frying your foods at restaurants is more than likely oxidized. When we ingest oxidized lipids, we are ingesting reactive oxygen species (ROS) which are pro-inflammatory compounds. The pro-inflammatory compounds put the body into an inflammatory state, potentially causing ocular surface inflammation and dry eyes.

#### Added sugars and refined carbohydrates:

- It's well studied that excess sugar in the body can negatively impact eye health by leading to deterioration in eyesight and formation of cataracts. Consumption of simple sugars has been shown to aggravate dry eye symptoms as well. Additionally, the latest USDA Dietary Guidelines have decreased the amount of sugar that is recommended in the US diet; it is now recommended that adults consume no more than 7% of their calories in the form of "added sugars," or those found in soft drinks, sweetened breakfast cereals and sweet

bakery items and other desserts and snacks. Therefore, it is advised to limit foods high in sugar and sugar-sweetened beverages.

Consider referring your patients to a registered dietitian/nutritionist (RDN) to help with anti-inflammatory menu planning to help your clients with DED. Direct them to the Academy of Nutrition and Dietetics website: [www.eatright.org](http://www.eatright.org) to find a dietitian in your zip code. **CO**



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