

Dry Eye

What is dry eye?

The continuous production and drainage of tears is crucial to the eye's health. Tears keep the eye moist, help wounds heal, and protect against eye infection. In people with dry eye, the eye produces fewer tears and/or poorer quality tears and is unable to keep its surface adequately lubricated and comfortable.

What are tears made of?

The tear film consists of three layers—(1) an outer, oily (lipid) layer that helps keep tears from evaporating and helps tears “stick” to the eye; (2) a middle (aqueous) layer that nourishes the cornea and conjunctiva; and (3) a bottom (mucin) layer that helps to spread the aqueous layer across the eye to ensure that the eye remains wet. As we age, the eyes produce fewer tears. Also, in some cases, the lipid and mucin layers are of such poor quality that tears cannot remain in the eye long enough to keep the eye sufficiently lubricated.

What are the symptoms of dry eye?

The main symptom of dry eye is usually a scratchy or sandy feeling as if something is in the eye, although some patients will not have symptoms. Other symptoms may include stinging or burning of the eye; episodes of excess tearing; a stringy discharge from the eye; and pain and redness of the eye. Sometimes people with dry eye experience heaviness of the eyelids or blurred, fluctuating, or decreased vision. Many people with dry eyes will experience vision that changes when they blink.

Dry eye is more common in women, especially nearing and after menopause.

Interestingly, some people with dry eye may have tears that run down their cheeks. This happens because the eye is producing less of the mucin and lipid layer, which help keep tears on the eye surface. When these layers are insufficient, tears roll out of the eye and evaporate too quickly.

What other factors affect dry eye?

Dry eye can occur in climates with dry air, as well as with the use of some drugs, including antihistamines, nasal decongestants, tranquilizers, and anti-depressant drugs. People with dry eye should let their eye doctor know about all the medications they are taking, since some of them may intensify dry eye symptoms.

People with connective tissue and autoimmune diseases, such as rheumatoid arthritis, are prone to developing dry eye. It is important to note that dry eye is sometimes a symptom of Sjögren's syndrome, a disease that affects the body's lubricating glands, such as the tear and salivary glands. A complete physical examination may diagnose any underlying diseases.

What is the treatment for dry eye?

Artificial tears, which lubricate the eye, are the main treatment for dry eye. They are available over-the-counter from many different companies. Lubricating ointments are sometimes used at night to help keep the eye moist. Using humidifiers, wearing wrap-around glasses when outside, and avoiding windy and dry conditions may bring relief. For people with severe dry eye, temporary or permanent closure of the tear drain (small openings at the inner corner of the eyelids where tears drain from the eye) may be helpful. This is a simple procedure done in your ophthalmologist's office. There are also prescription medications to treat dry eye, depending on its cause, as well as vitamin supplements that are thought to help moisturize the eye. Ask your ophthalmologist which treatments are right for you.