

## What is Dry Eye Syndrome?

Dry eye syndrome is one of the most common eye problems and affects more than ten million Americans. It is usually caused by a problem with the quality of the eye's tear film.

Tears are comprised of oil, water, and mucus layers. With each blink, the eyelids spread the tears over the eye. Excess tears flow into two tiny drainage ducts in the corner of the eye by the nose. These ducts lead to tiny canals that connect to the nasal passage.

In addition to lubricating the eye, tears are also produced as a reflex response to outside stimuli such as an injury or emotion. However, reflex tears do little to soothe a dry eye, which is why someone with watery eyes may still complain of irritation.

Dry eye syndrome has many causes. One of the most common reasons for dryness is the normal aging process. With age, the body produces less oil. With less oil to seal the watery layer, the tear film evaporates faster, leaving dry areas. Other causes include: dry or windy climates, air-conditioning, cigarette smoke, contact lens wear, certain medications, thyroid conditions, vitamin A deficiency, and diseases such as Parkinson's and Sjögren's.

There are several methods to test for dry eyes. The cause is determined by measuring the production, evaporation rate and quality of the tear film. Special drops that highlight problems that would be

## Signs and Symptoms of Dry Eye Syndrome:

- Itching
- Blurry vision that improves with blinking
- Excessive tearing
- Irritation
- Burning
- Redness



Photo Credit: <https://www.aaopt.org/eye-health/>

## Treatment Options

When treating dry eyes, everyone's needs are a little different. Many find relief from using warm compresses and artificial tears. Some drops are watery and alleviate the symptoms temporarily; others are thicker and adhere to the eye longer. Preservative-free tears are recommended because they have fewer additives that could potentially irritate. Products that whiten the eyes don't have adequate lubricating qualities and often make the problem worse.

Simple lifestyle changes can significantly improve dry eyes. For example, incorporating essential fatty acids into your diet, drinking plenty of water, and frequent blinking when reading or watching TV is very helpful. Also, avoid rubbing your eyes.

Closing the opening of the tear drain in the eyelid with special inserts called punctal plugs is another option. This works like closing a sink drain with a stopper. The plugs trap the tears on the eye, keeping it moist. This may be done on a temporary basis with a dissolvable collagen plug, or permanently with a silicone plug. Prescription anti-inflammatory drops may also be helpful.

Prescription drops can also be prescribed by your provider to help provide more tears of a better quality (ex Restasis, Cequa, Xiira).

## Tear Supplements for Dry Eyes

Drops: We prefer that you purchase drops labeled as moisture drops, lubricating drops or artificial tear drops rather than those claiming to “get the red out”. Listed below are a few examples of artificial tears that can be purchased over the counter:

Drops with Preservatives (multi-use bottles): May be used up to 4 times per day

- Genteal
- Tears Nature
- Systane Ultra
- Blink
- Bion Tears
- Refresh tears/Liqui Gel
- Optive

Drops without Preservatives (single use vials): May be used MORE THAN 4 times per day, as needed

- Theratears
- Tears Naturale
- Systane
- Soothe
- Refresh Plus
- Bion Tears
- Blink
- Optive Sensitive

Ointments can be used at bedtime for relief of dry eyes during sleep when drops are not sufficient. A few examples are listed below:

- Place approximately ¼ inch inside the lower lid. You may notice blurred vision due to the thickness of the ointment.
  - Moisture Eyes PM
  - Refresh PM
  - Lacrilube
  - Genteal Gel