



Dry Eye

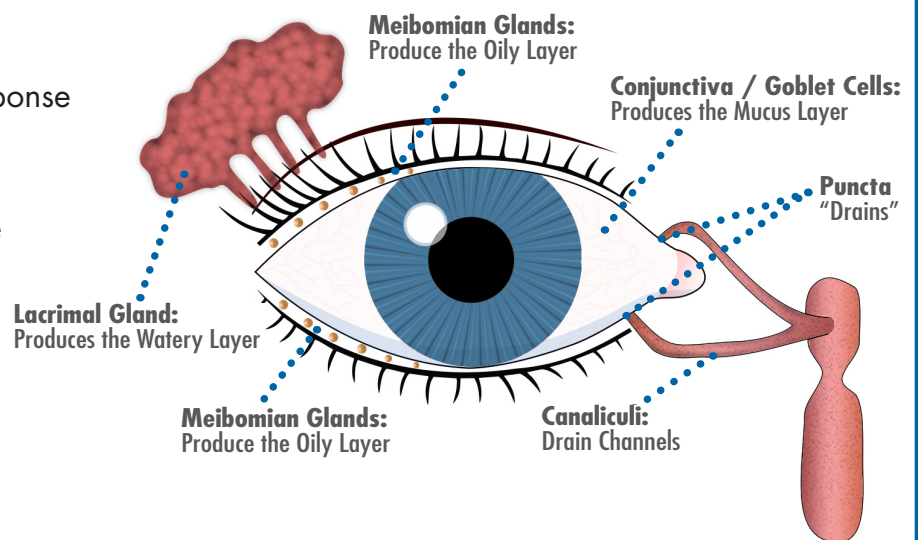
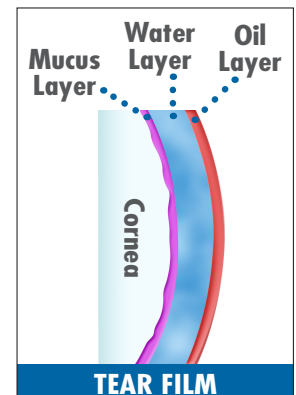
What is Dry Eye?

Normally the eye constantly bathes itself in tears each time we blink. This “tear film” is made up of three layers. By producing tears at a slow and steady rate, the eye stays moist and comfortable.

Sometimes people do not produce enough tears or the appropriate quality of tears (due to clogged meibomian oil glands) to keep their eyes healthy and comfortable. This condition is known as **Dry Eye**.

Symptoms of Dry Eye include:

- ◆ Stinging or burning eyes
- ◆ Excess tearing (due to the eye’s response to discomfort)
- ◆ Fluctuating vision (especially with reading or computer work when the blink rate decreases)
- ◆ Scratchiness
- ◆ Stringy mucus in eyes
- ◆ Excessive eye irritation from smoke or wind



What causes Dry Eye?

Tear production normally decreases as we age. Although dry eye can occur in both men and women at any age, women are most affected. This is especially true after menopause.

Certain diseases are associated with dry eye including blepharitis and autoimmune diseases such as rheumatoid arthritis and Sjogren’s syndrome.

A wide variety of common medications, both prescription and over-the-counter, can cause dry eye by reducing tear secretion. These medications include:

- Diuretics
- Beta-Blockers
- Antihistamines
- Antidepressants
- Sleeping Pills
- Anxiety Pills
- Pain Relievers

Dry Eye Treatment

ARTIFICIAL TEARS

Eye drops called artificial tears are similar to your own tears. They lubricate the eyes and help maintain moisture. There are many brands on the market. You may need to try several to find the brand you like the best.

Preservative-free eye drops are available for people who are sensitive to the preservatives in artificial tears (about 1 out of 10 people). If you need artificial tears more than six times per day, you will need preservative-free tears.

Many patients find more relief by refrigerating their artificial tears.

- Artificial Tears _____ times a day
Recommended: Optive, Refresh, Blink, Systane
- Preservative-free Tears _____ times a day
Recommended: Refresh, Systane, Optive
- Longer lasting artificial tears _____ times a day (last longer but slightly more initial blur)
Recommended: Genteal gel, Refresh liquid-gel, Systane gel
- Ointment _____ times a day
Recommended: Lacrilube, Refresh pm

ORAL TREATMENT

- Fish Oil: 1,500 mg to 2,000 mg once per day (use a high quality brand, rich in omega 3 such as **Nordic Naturals** at GNC).
- Doxycycline 50 mg: Take 1 tablet, 2 times per day for 1 week; then take 1 tablet, 1 time per day.

CONSERVING TEARS

- Punctal plugs are placed to close the channel that drains tears from the eyes into your nose, therefore conserving your own tears longer.

PRESCRIPTION EYE DROPS

Restasis is the only drop that helps your eyes make more of their own natural tears by reducing inflammation and increasing production of tears. To work properly, it must be used everyday and usually takes 3 to 4 weeks to start working.

Restasis comes in a small vial which has 4 to 6 drops. Store the vial upright in a small container and 1 vial can be used for both morning and evening doses. This will make a 30-day supply last at least 2 months or a 90-day supply last at least 6 months reducing cost significantly. The most common side effect is a slight and temporary stinging sensation.

Sometimes a steroid drop is started to provide quick relief.

- Restasis: Instill 1 drop, 2 times per day (once in the morning and once in the evening)
- Lotemax / Prednisolone: Instill 1 drop, 2 times per day for 2 weeks

Always wait 3-5 minutes between drops

LIFESTYLE MODIFICATIONS

Tears evaporate like any other liquid. You can take steps to prevent evaporation.

- Use a humidifier in the bedroom (especially in the winter) to add moisture to the air.
- Wear wrap around sunglasses to decrease wind.
- Turn off all ceiling fans or any fans that circulate air and cause faster evaporation.
- Make sure car vents are pointing up or down but not directly toward your face.
- 10/10/10 Rule: If reading or on the computer, every 10 minutes look at an object at least 10 feet away, and fully blink 10 times.
- Make sure you are looking slightly down at your computer monitor and not straight ahead or up. This allows your upper lid to slightly lower resulting in less eye exposure.