

Associates

WHAT IS DRY EYE?

Dry eye is an extremely common condition affecting more than 5 million Americans. Dry eye can occur at any age, with the majority being ages 50 and older and women affected more than men.

Dry eye occurs when the eye does not produce tears properly, or when the tears are not of the correct consistency and evaporate too quickly. Healthy and adequate tears are crucial to maintaining the health of the cornea (clear front surface of the eye), as well as ensuring comfortable and clear vision.

Dry eye can make it more difficult to perform some activities, such as using a computer or reading for an extended period of time, and it can decrease tolerance for dry environments, such as the air inside an airplane.

WHY DO I NEED TEARS?

Tears are necessary for overall eye health and clear vision. Tears are constantly produced to bathe, nourish, and protect the eye surface by keeping it moist. They are also produced in response to emergencies, such as a particle of dust in the eye or an infection or irritation of the eye. When the lacrimal, or tear, glands fail to produce sufficient tears, dry eye can result.

Tears are composed of three major components: a) outer, oily, lipid layer; b) middle, watery, lacrimal layer; and c) inner, mucous layer. Tears are made of proteins, electrolytes, and vitamins that are critical to maintain the health of the eye surface and to prevent infection.



WHAT ARE THE TYPES OF DRY EYE?

There are different types of dry eye, even though they can share common symptoms. It is important to distinguish which type of dry eye you have, so that appropriate treatment can be determined.

- 1) <u>Aqueous tear-deficient dry eye</u>: a disorder where the tear-producing glands fail to make enough of the watery component of tears to maintain a healthy eye surface
- 2) <u>Evaporative dry eye</u>: may result from inflammation of the eye's "sweat" glands, also located in the eyelids. These glands make the lipid or oily part of tears that slows evaporation and keeps the tears stable.

HOW DO I KNOW IF I HAVE DRY EYE?

Dry eye symptoms may include any of the following:

- stinging or burning of the eye
- a sandy or gritty feeling as if something is in the eye
- · episodes of excess tearing
- a stringy discharge from the eye
- pain and redness of the eye
- episodes of blurred vision
- feelings of "heaviness" or fatigue
- uncomfortable contact lenses
- any of the above symptoms noted in activities requiring sustained visual attention (i.e. computer, reading)

Dry eye can also be associated with:

- inflammation of the eye surface, tear-producing glands, or other eye surfaces
- any systemic conditions that can alter the components of the tears
- cosmetic surgery of the eyelids
- trauma occurring in or around the eye area
- certain medications, including but not limited to antihistamines, nasal decongestants, certain blood pressure medications, birth control pills, and anti-depressants



Dry eye tends to be more prevalent in cases involving:

- Diseases of the glands in the eyelids, such as Meibomian gland dysfunction
- Pregnant women
- Post-menopausal women, especially if on hormone replacement therapy
- LASIK or other forms of refractive surgery
- Seasonal allergies
- Jobs or tasks with extended computer use. Infrequent blinking, associated with staring at computer or video screens, is <u>extremely</u> common.
- · Both excessive and insufficient dosages of vitamins
- Loss of sensation in the cornea from long-term contact lens wear
- Contact lens mis-use or abuse
- Sjögren's syndrome, lupus, rheumatoid arthritis, and thyroid disease
- Exposure to irritants such as chemical fumes and tobacco smoke, or drafts from air conditioning or heating
- Exposure keratitis, where the eyelids do not close completely during sleep

Speak with your doctor regarding the best solution for your dry eye condition!

Source: www.nei.nih.gov