

What is Dry Eye?

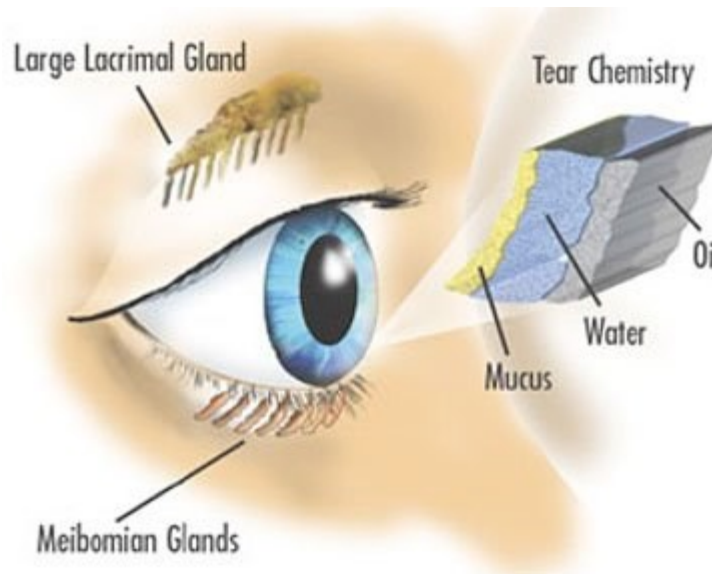
The tears your eyes normally produce are necessary for overall eye health and clear vision. Dry eye occurs when your eyes do not produce enough tears, or produce tears which do not have the proper chemical composition.

What are signs and symptoms of Dry eye?

The most common signs and symptoms include: stinging, itchy, scratchy and uncomfortable eyes; and sometimes having a burning feeling or a feeling of something foreign within the eye. You may experience increased dry eye symptoms on awakening. Some people experience an overly wet eye. This is a natural reflex to comfort a dry eye.

Function of Tears in Dry eye

A healthy tear film spreads uniformly over the front surface of the eye and provides a smooth optical surface that allows for a clear, crisp image of our world. The tear film nourishes the front surface of the eye with oxygen and nutrients, and protects the eye by destroying and flushing out any toxins or bacteria that it may come in contact with. The tear film is made up of three different layers; mucus layer, aqueous layer, and oil layer. Each layer is crucial in a healthy tear film, and lack of quality or quantity in any of the layers will result in a poor tear film. Dry eye symptoms occur when the tear film is compromised and there is no longer a smooth surface over the cornea. This leads to visual disturbances such as blurrier vision that fluctuates with blinking. The tear film is extremely important to your ocular comfort, health and vision.



Meibomian gland dysfunction (MGD) is the leading cause of evaporative dry eye, and occurs when there is a poor tear film due to the insufficient amount or poor quality of the lipid layer. Meibomian glands lining the upper and lower eyelid margin secrete a lipid layer, which is then spread evenly over the tear film by our natural blinks. Inflammation of the meibomian glands can lead to abnormally thick oil secreted from the glands, which may completely block the glands and further decrease the amount of lipids in the tear film. Meibomian gland dysfunction is a result of chronic inflammation, which results in the permanent dysfunction of the meibomian glands. Causes of inflammation that may lead to MGD may include although are not limited to; blepharitis, eczema, acne rosacea, and rheumatoid arthritis. MGD is a lifelong condition that may come and go. Consult your eye doctor for the best form of treatment to reduce your MGD symptoms and to improve your ocular health.

How is Dry eye diagnosed?

During the examination, your eye doctor will ask you questions about your general health, your medication use, and your home and environments to determine any factors which may be causing dry eye symptoms. This information will help your doctor decide whether to perform dry eye testing. These tests use diagnostic instruments, which allow a highly magnified view of your eyes and usually use special dyes. They allow your doctor to evaluate the quality, amount, and the distribution of tears to detect signs of dry eyes.

What are causes Dry eye?

Dry eye symptoms can result from the normal aging process, exposure to environmental conditions (such as low humidity), problems with normal blinking or from medications such as antihistamines, oral contraceptive or antidepressants. Dry eye can also be symptomatic of general health problems or can result from chemical or thermal burns to the eye.

Can Dry eye be cured?

Although dry eye cannot be cured, your eyes' sensitivity can be lessened and measures taken so your eyes remain healthy. The most frequent treatment is the use of artificial tears or tear substitutes. For more severe dry eye, ointments or gels can be used, especially at bedtime. In some cases, small plugs may be inserted in the eyes' tear drainage canals to slow outflow and loss of tears.

In addition, Nutritional supplements may be recommended to support the function of the eyelid oil glands. Prescription medications may also be prescribed to reduce inflammation of the eye to improve necessary tear products.