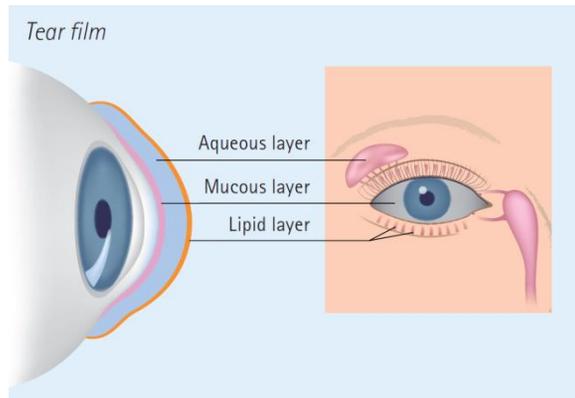


THE TEAR FILM

The tear film is structured with 3 components that work together: a complex mucus component, a watery portion (aqueous) and a complex oil outer layer (lipid).

The oil component (lipid) is important for reducing evaporation of tears and also provides structure to the tear film. Lipid is produced by the Meibomian glands and is injected into the tears with each blink. Meibomian gland dysfunction (MGD) can create a deficiency in the lipid component of the tears, which leads to evaporative dry eye.



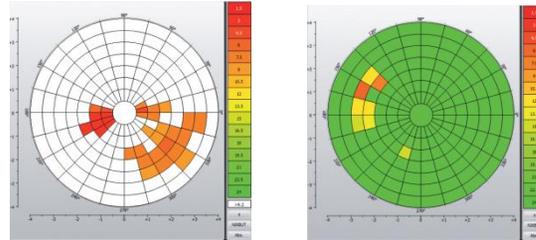
The watery component produced by the lacrimal glands (aqueous) is also important. A lack of aqueous production can result in another type of dry eye called aqueous deficient dry eye. Aqueous deficiency can be associated with disorders such as rheumatoid arthritis and lupus.

COMPUTERIZED TEAR ANALYSIS

Accent on Vision uses an advanced technology called the Oculus Keratograph to examine your eyes. This instrument has a high-resolution color camera equipped with intelligent software to analyze the collected data and document the findings. It can also compare the results and show the success of the dry eye treatment.

QUALITY AND QUANTITY OF THE TEAR FILM

To measure the quality and stability of the tear film, the Keratograph measures the tear film evaporation rate. This test takes less than 30 seconds and does not require touching the eye.

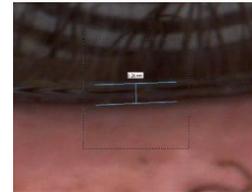


Tear film quality before and after dry eye treatment

To evaluate the quantity of the tear film, the instrument takes a picture of the lower eyelid to measure the tear meniscus height or thickness.



Tear meniscus height



Tear meniscus height detail

The Keratograph can also document the movement of the oily layer in the tear film. A healthy and thick lipid layer protects the tears from evaporation. If there is not enough lipid, the tear film becomes unstable, the moisture dissipates quickly and both vision and comfort can be compromised.

ZONE-QUICK TEST AND VITAL STAINING

Various dyes and stains can be used under the microscope to find dry spots and tissue changes from dry eyes, and are used in conjunction with the Meibograph to confirm its findings.

MEIBOGRAPHY

Located in both upper and lower lids, the meibomian glands produce complex oils that stabilize the tear film and prevent tear evaporation. If the meibomian glands do not function properly, dry eye usually occurs. Your doctor can utilize the Keratograph to directly assess both the number and the health of your meibomian glands.



Healthy meibomian glands



Meibomian gland dysfunction

DRY EYE TREATMENTS

In recent years, there has been much improvement in understanding the reasons for dry eye. Because of that, treatment can now be targeted to address the underlying cause of the problem. Some patients suffer from a lack of tear production, others from excessive evaporation of their tears, or both.

Current approaches include personalized artificial tear eye drop formulations, prescription eye drops that increase tear production and reduce inflammation, tear drain plugs, and new approaches to effectively treat meibomian gland dysfunction, which is now understood to play a primary role in most dry eyes.

Due to the leading-edge nature of this valuable new testing, insurers do not yet cover the Meibograph Tear Analysis procedure (\$95), but may cover the intermediate office visit to interpret the results and formulate a treatment plan. As always, copays and deductibles apply.