Dry Eyes (by Deborah K. Hudak, MD.)

Dry Eye is one of the most common disorders of the eyes. It is estimated that one-in-five Americans has Dry Eye. It is manifest with symptoms of **redness**, **burning**, **mildly itchy**, **irritated**, **"tired eyes"**, **fluctuations in vision** (where the image clears up after you blink a few times, then goes cloudy again), **pain** (ranging from short bursts of sharp, fleeting pain to long bouts of achey pain), and **increased tearing**. The increased tearing is actually an increase in "*reflex*" *tears*---those tears that your lid glands produce in response to something that is irritating your eye, or in response to something that makes you cry.

Think about what happens when something (a small object or noxious fume) gets in your eye. Your eye tears large volumes to try to wash out that irritant. When your eyes are chronically (frequently) dry, this is very irritating to the eye (especially the cornea) and results in symptoms and signs of Dry Eye in order to try to cope with the problem, and help out the cornea.

The cornea is an extremely important part of your eye. It is the windowshield of the eye. It is over the iris (the colored part of the eye that functions as the shutter of a camera, regulating the amount of light that gets into the eye), the lens (which bends light rays entering the eye to focus them on the retina), and the retina (which functions as the film of a camera). The cornea is a living tissue that is important enough that you have probably heard of some people needing a cornea transplant....and yet the cornea has no blood supply! This important living tissue gets its nutrients and rid of its waste products largely through the tear film! The tear film needs to be sufficient in *quality and quantity* in order to keep the cornea healthy. A good quality "baseline", or "basal," tear has more than 140 known nutrients for the cornea. A "reflex tear" is poor in quality. The "basal" tear is present to keep the cornea healthy. The "reflex" tear is present to wash away irritants to the eye surface. A person who just cried a lot has all the classic symptoms of a dry eye, because she or he just diluted out their good quality "basal" tear with a poor quality "reflex" tear.

The **causes of dry eye** are related to the 3 layers in a tear film: the mucus layer (which becomes abnormal in allergies), the watery/nutrient layer (which becomes abnormal in certain nutritional deficiencies and disease states), and the protective, outer, oil layer (which becomes abnormal in blepharitis and some other diseases that affect the eyelid margins, where the eyelids meet the eyes).

Dr. Hudak will examine your eyes, looking for problems that could affect any of the 3 layers of the tear film. The management or treatment of Dry Eye involves treating the causes of Dry Eye. Oftentimes the problem is only an insufficient quantity of "basal" tears, in which case you will be asked to use a high quality, **preservative-free, artificial lubricant drops and/or gel.** She has a list of recommended drops and gels. Sometimes you need to take allergy eye drops, or treat the blepharitis, or take **Vitamin A** or Omega 3 oils (**Barlean's Total Omega** 3,6,9 is especially good and **Barlean's flax seed oil**—may get at Harmony Farms). When the symptoms are helped with additional quantity of lubrication, punctal plugs may be recommended. **Punctal plugs** function as a sink stopper in part of your tear drainage system, and they can be easily pulled out (without any pain and no dilation or downtime needed) if they do "too good of a job" in preventing your natural tears from draining into your nose, resulting in an overflow of tears onto the cheeks. Dr. Hudak only recommends punctal plugs is she feels they are needed. Consequently, it is a very rare instance in which their removal is needed. **Steroid drops and/or Restasis** may be added.