

Dry Eyes

The tear film is made up of three layers; aqueous/water, oil, and mucus (glue). Dry eyes are the result of a problem with one or more of the layers not producing in the correct proportion. It is not uncommon for dry eyes to occur either because of trauma to the eye (contact lens wearer) or as we become more mature. Generally the problem is either too much oil production and/or not enough aqueous is produced. Patients commonly complain of a gritty feeling, sand in the eye, sharp shooting pain, eyes watering all the time, water running down my cheek, intermittent blur (blur fluctuates with blinking), slight redness of conjunctiva (whites of the eye).

Most problems with dry eye can be controlled with lid hygiene and artificial tears. This means cleaning the lid margin to remove the excess oil and installing artificial tears to supplement the decrease in tears produced. Oil glands are located in the lid and get to the eye through the same port as the lashes on the lid margin. So when too much oil is produced it pools on the lid margin. Lid scrubs are the best way to remove the excess oil. Wet a wash cloth using warm water from the faucet (as hot as you can handle with out burning yourself), add one to two drops of baby shampoo, rub to lather the cloth, again place it under the warm water until you have one to two soap bubbles (a little soap goes a long way). Gently rub the upper and lower lid **MARGINS** only; do not clean inside the lids. Cleaning the skin around the eye will not remove the oil. Be careful not to rub the cornea. Do not look at the wash cloth while cleaning the lid. When cleaning the bottom lid look up and when cleaning the upper lid look down. Rub with some pressure but do not make it redder than when you started (be gentle). If it hurts you are doing it wrong. This should be done at least twice a day for the first two weeks and then daily from then on. The doctor may specify additional treatment if required.

Most people have a problem with both excess oil and decreased tear production. Artificial tears help to supplement the patient's normal tears. These can be used as much as necessary, but if used over 6 times a day unpreserved tears should be used. If a preserved drop is used more than 6 times a day the preservative may cause damage to the cornea. When unpreserved drops are used the container must be consumed in a 24-hour period or thrown out since it can become contaminated. Below are the brands I recommend based on studies which have determined these match the PH of the eye best.

<u><i>Preserved(bottles)</i></u>	<u><i>Unpreserved(individual dose)</i></u>	<u><i>Ointments</i></u>
Freshkote	Retaine MGD	Retaine PM

New research has determined a component of dry eyes may be inflammatory. Suggesting omega -3 fatty acid may help. The recommended dose is 2- 4000 mg/day. This can be either through diet or supplements. It should be noted it may take 2-3 months to notice a difference. Since Re-esterified triglyceride (rTG) are better absorbed by the body, I recommend **PRN De** or **Nordic Naturals**. Allowing for lower dose with more absorption. Since Omega-3 can thin the blood people on blood thinners need to consult their cardiologist prior to starting any supplements.

