

## FLAXSEED OIL And other oral supplements for Posterior Lid Margin Disease

Flaxseed oil is sometimes an effective treatment for dry eyes and posterior lid margin disease (PLMD).

There are many causes of dry eye, some of which include:

- a) Eyelid retraction or eyelids pulled away from the center of the eye (causing greater surface area of the eye to be exposed and enhancing tear evaporation)
- b) Exophthalmos or eye protrusion (causing greater eye exposure to wind and increasing tear evaporation, as in thyroid eye disease)
- c) Hormonal changes (causing decreased tear production)
- d) PLMD (causing an unstable, poor quality tear). PLMD is a clogging, inflammation, and scarring of the glands in the eyelid margin. These glands produce the oil component of tears. Without the smooth addition of this oil, tears evaporate very quickly and the eye dries out if it doesn't blink every few seconds. If the oil comes out in sudden "globs," then the tear film carries an oil slick that blurs the vision and creates "glare," "dazzle," and "scatter" when looking at lights, especially at night.

There are many treatment options for PLMD, and an in-depth discussion with a knowledgeable physician about each individual's situation is appropriate. Below are some treatment options available through most health food stores:

- 1. **Flaxseed Oil** This is not a new remedy. Flaxseed oil works for some people probably in three ways. First, it may provide nutrients otherwise lacking in the diet. Second, it appears to have an anti-inflammatory effect under some conditions. Third, it may alter the oil composition produced by the glands in the eyelids. Take 1-2 Tablespoons of flaxseed oil daily by mouth with a sulfonated protein (such as a soy-based shake or a spoon full of peanut butter) in order for the oil to be well absorbed. The bottled form of the oil is probably much more effective than the capsules.
- 2. **N-acetyl cysteine** 100 mg taken three times a day has been shown to be helpful for PLMD. Most stores only carry 1,000 mg doses. So, try 1,000 mg 1-3 times a day.
- 3. **Soy Products** Try complex soy products, like tofu, soy milk, or tempeh. At least 4 servings per week. Soy isoflavone supplements (50-100 mg/day) may also be helpful.