VRCC
VETERINARY SPECIALTY & EMERGENCY HOSPITAL

Matthew J. Chavkin, DVM, MS
— Diplomate American College of Veterinary Ophthalmology

Tanja Nuhsbaum, DVM, MS
— Diplomate American College of Veterinary Ophthalmology

ESSENTIAL FATTY ACIDS AND GOOD OCULAR HEALTH FOR YOUR PET

What are essential fatty acids and where do they come from?
Essential fatty acids are necessary fats that the body does not produce on its own. They support the cardiovascular, reproductive, immune and nervous systems. There are two families of essential fatty acids: Omega-3 and Omega-6. Omega-6 fatty acids are found in animal fats and plant sources. Omega-3 fatty acids are found in marine body oils (fish and salmon). Fish oils contain eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA). EPA is the powerhouse of Omega-3 fatty acids, being easily incorporated into cell membranes. While Omega-6 fatty acids are supplied in ample amounts in pet diets, most commercial pet foods contain very little Omega-3 fatty acids.

What do essential fatty acids do?
For years, essential fatty acids have been given to pets to promote skin and coat health. More recently, essential fatty acids have been found to play an important role in controlling inflammation, allergies, and auto-immune conditions.

How can essential fatty acids help the eye?
For patients with chronic dry eye, it's believed now that supplementation of Omega-3 fatty acids can provide some relief. Omega-3s work in two ways: they improve eye comfort by suppressing inflammation, and they may also provide additional beneficial nutrients to the eyelid glands that secrete the oil layer of the tear film. The oil layer of the tear film is the outermost layer that prevents evaporation of the second, watery layer.

Though few studies have been done, initial reports in humans suggest that Omega-3 dietary supplementation decreases a patient's chance of developing dry eye and also provides relief from the discomfort associated with dry eye.

Because EPA, the crucial element in Omega-3 fatty acids, is incorporated into cell membranes, noticeable results can take some time. Pets often need to be on fatty acid supplements for 9-12 weeks before owners will see improvement. And, remember, fatty acids do add calories, so fewer treats or a slight decrease in the overall amount of food can help to prevent weight gain.

What's important when buying and giving Omega-3 supplements?
Shopping for fatty acid supplements can be confusing. Different products report ingredients in different ways. While bottles are labeled according to the total milligrams of marine oil per unit (usually a capsule or a pump for a liquid), a dose of Omega 3 is determined by the amount of EPA present. These two things are not the same. It is the actual concentration of EPA in a supplement that is most important, so you must look at the nutritional label on the package to determine the amount of EPA present in any given product. Fatty acids increase the body's need for antioxidants, as well, so please look for supplements that are fortified with Vitamin E. Since many combinations of fatty acids are available on both the human and veterinary markets, it's up to you to read the labels carefully to ensure quality and proper dosing.

Please give your pet 180 mg of EPA per 10 pounds of body weight. Administer this dose twice daily. Some pets may need to build up to this dose. You can start by just giving one dose per day for 7 days, then increase to twice daily.