

## OMEGA 3 AND OMEGA 6 FATTY ACID SUPPLEMENTS

### ***What are omega 3/6 fatty acid supplements?***

These are supplements made primarily from fish oil or flax seed oil (see the separate handouts on these products in this series), although some products may include other oils such as evening primrose oil or borage oil.

### ***Why recommend administration of omega 3/6 fatty acids supplements to my pet?***



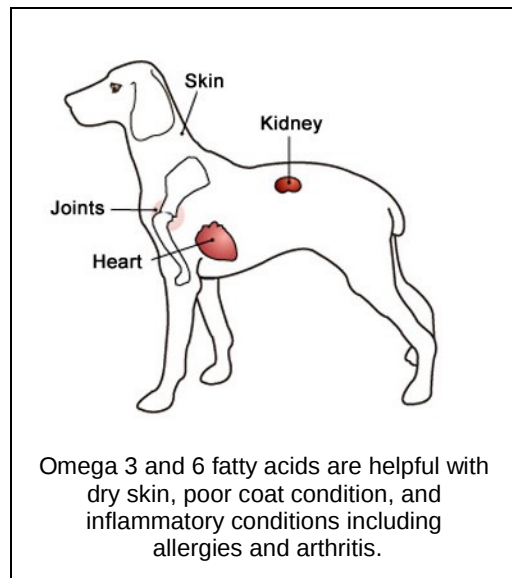
Fatty acid supplements can reduce shedding, promote growth of the undercoat, and reduce tendencies to inflammation. Anti-inflammatory effects come from the conversion of omega-3 and some omega-6 fatty acids into series 1 and 3 prostaglandins. These chemicals have a general anti-inflammatory effect on the body, in contrast to series 2 prostaglandins, that are synthesized from another omega-6 fatty acid known as arachidonic acid. Other emerging benefits of omega-3 fatty acids, especially fish oils, include:

- Differentiation of cancer cells, resulting in the shrinking of various tumors
- Prevention and treatment of autoimmune disorders
- Prevention and treatment of diabetic neuropathy
- Prevention and treatment of constipation and intestinal parasitism
- Treatment of hyper-excitability disorders, including idiopathic epilepsy (seizures of unknown origin) and cardiac arrhythmias

The main reason why omega 3/6 supplements are needed in small animal medicine is because small animal diets are typically notoriously low in omega-3 fatty acids. A relatively high omega 3 to omega 6 fatty acid ratio helps promote a stronger anti-inflammatory effect of the supplement.

### ***How much experience is there with the use of omega 3/6 fatty acids supplements in pets?***

Experience is extensive with the use of these supplements in pets. They are probably the most commonly used supplement in all of human and animal medicine.



### ***What species of animals are being treated regularly with omega 3/6 fatty acids supplements?***

Horses, dogs, and cats are usually treated with fatty acid supplements.

### ***How much research has been conducted on this supplement?***

Research is widespread on the benefits of essential fatty acid supplementation, which is reviewed extensively in the handouts on fish oil and flax oil in this series. Dozens of have been are conducted on omega-3 fatty acids alone, given their emerging importance in the prevention of heart disease (specifically myocardial ischemia and coronary artery occlusion). In animals, given the lack of omega-3 fatty acids in the diet, these supplements are usually used to control inflammation and help inhibit the growth of tumors.

***How can my pet benefit from omega 3/6 fatty acids supplements?***

Pets with dry skin and rough hair coats can benefit from fatty acid supplementation. Pets with inflammatory conditions such as allergic skin disease, nephritis (inflammation of the kidney), heart disease, and arthritis appear to benefit from fish oil supplementation. Pets taking fish oil supplements plus chemotherapy have shown increased survival over those receiving chemotherapy alone. While not always effective by themselves, when combined with other supplements and medications fatty acid supplements are very helpful in treating pets with a variety of disorders.

***How safe is omega 3/6 fatty acids supplements?***

While extremely high doses of fatty acids may interfere with blood clotting, in general these supplements are very safe. A small number of pets may develop a fishy odor to their skin or breath.

***Where do I obtain omega 3/6 fatty acids supplements and do I need a prescription?***

Your veterinarian may have preferred supplements that he or she will recommend. Pet owners are cautioned against buying supplements without knowledge of the manufacturer, as supplements are not highly regulated and some supplements may not contain the ideal ratio of fatty acids for your pet. Products containing Omega fatty acids are susceptible to rancidity if stored incorrectly. A prescription is not needed for fatty acid supplements.

□ *This client information sheet is based on material written by Steve Marsden, DVM ND MSOM LAc DiplCH AHG, Shawn Messonnier, DVM and Cheryl Yuill, DVM, MSc, CVH.  
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