Fish Oil – many health benefits for dog health

by Dr. Jeannie Thomason

Fish oil has shown positive benefits in helping pets with disease as well as preventing some health problems. In recent years, essential fatty acids, specifically, omega-3s have been among the most commonly used nutritional supplements in treating dogs (and cats). Omega-3 fatty acids in the form of fish oil have been used to treat canine allergies for some time now. However, now it is being recommended for a wide variety of conditions ranging from kidney disease to arthritis and high cholesterol. Adding fish oil to your dog’s food provides anti-inflammatory effects and can help relieve itching and scratching some allergy-related skin conditions.

Fortunately, they have been used successfully long enough that most conventional veterinarians include their usage in the treatment of at least some diseases. Though some pet diets may include Omega-3 fatty acids, virtually none include satisfactory amounts of the most important Omega-3 fatty acids EPA and DHA. Many pet foods contain primarily Omega-6 fatty acids from vegetable oils resulting in a highly unbalanced ratio of Omega-6s to Omega-3s. Research has shown that a ratio of Omega 6 to Omega 3 of 5:1 to 10:1 is optimal for dogs and cats and therefore supplementing with a high quality Omega-3 fish oil supports pet health.

Omega 3 oils support heart, vision, joint health, and provide important nutrients for proper immune function while they nourish the skin and coat. First suggested for use in treating allergies in pets, Omega-3 fish oils are now advocated in cases of kidney disease, elevated cholesterol, and arthritis as well. In research studies, it has been discovered that fatty acids can be valuable for a variety of conditions. Fish oil supplementation may be helpful for pets with inflammatory diseases including allergies, arthritis, kidney disease, heart disease, and cancers. Pets with any type of inflammatory disease may benefit from fish oil supplementation.

Essential Fatty Acids and their derivatives serve a number of major vital functions in our dog’s body (as well as our cat’s and our own). They are required for the transport and metabolism of both cholesterol and triglycerides. They are required for normal brain development and brain function. They are required in visual function (retina), brain and nerve function (synapses), and adrenal function. They are required in the structure of the membranes that surround each cell in our body. They stimulate metabolism, increase metabolic rate, increase oxygen uptake, and increase energy production. Omega-3s inhibit the production of prostaglandin. Prostaglandins play important roles in the development and progression of chronic inflammatory conditions such as rheumatoid arthritis (Research has shown that supplementing with omega 3 fish oils can result in a significant reduction in joint inflammation, this reduces morning stiffness and lowers the number of painful joints in rheumatoid arthritis patients both animal and human), lupus, inflammatory bowel disease and a variety of other inflammatory disorders including Kidney Disease. They even work to slow down growth of cancer cells!
Fish Oil vs. Flax Oil

I recommend fish oil for a healthy diet because it contains the omega-3 fatty acids eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA), which are precursors to eicosanoids that reduce inflammation throughout the body and because it is much more easily digested and assimilated than flax oil.

Flax oil contains an omega-3 called ALA and other fatty acids. (ALA) is the precursor of the Omega 3 oils (EPA and DHA) found in fish oil. ALA must be converted to EPA and DHA to be of any nutritional benefit. But ALA is not readily converted to EPA and is severely restricted in its conversion to DHA and its ability to be converted is lessened if the diet is too high in omega-6 and this conversion does not always take place, especially for carnivores who are not designed with the proper enzymes to digest and convert vegetables or grain products in the first place. Even in people who are in less than optimal health or elderly are most often unable to convert the ALA to DHA and EPA.

EPA (from fish oil) also converts to series 3 prostaglandins, which have many benefits such as:

- Regulating inflammatory responses (Skin and Joint)
- Regulating immune function (which can help in fighting disease more effectively)
- Regulating platelet stickiness
- Regulating arterial muscle tone (which involves blood pressure regulation)

The lack of Omega 3 and the excessive amount of Omega 6 found in the modern processed pet foods ultimately create degenerative conditions. Processed Pet foods still do not supply an adequate amount of Omega 3 even after manufacturers add it; to “properly balance the ratio”.

Many nutritional supplements are still promoting and loading up the Omega 6 (LA) fatty acids – which are actually exacerbating an already severely imbalanced and unhealthy situation. The best solution to insure our pet’s health is to provide a high quality Omega 3 Fish oil supplement along with a home cooked or fresh raw diet whenever possible.

“Active EFAs (EPA & DHA as found in Fish oil) can go straight to work in your pet’s body, whereas inactive EFAs such as found in Flax as mentioned above, are unable to carry out their vital roles without first being converted by your dog to the active form. This conversion can only be carried out by enzymes, which your dog may or may not produce. If your dog does not produce those enzymes for any reason, those inactive essential fatty acids are not able to carry out their vital functions. This will lead to ill health.

Supplements which contain the activated omega 3 EFAs include Cod Liver oil and Fish body oils such as Salmon oil. Supplements which contain the inactive omega 3 EFAs include flaxseed oil and hemp seed oil.

Why would critical activating enzymes be missing?

The critical enzyme that converts inactive essential fatty acids into active essential fatty acids can be missing for one of several reasons. The first is heredity. The other more important reasons for the loss of this enzyme include aging, viral infections, any chronic disease state and by a diet rich in trans fatty acids. Prevention is achieved by removing processed pet foods from our dogs’ lives and switching our dogs to their original carnivore diet together with appropriate fatty acid supplementation as and when required and at the very least, supplementing with a good combination of digestive enzymes.

A diet that lacks sufficient omega 3’s is the number one fatty acid associated problem caused by modern processed pet foods. This lack of the omega 3’s allows the omega 6’s to produce the whole range of problems caused by an excess of the omega 6’s.
“In addition, the lack of the omega 3’s can be a potent cause of infertility in our breeding stock together with growth problems in young pups and kittens, and most importantly, problems with the development of the nervous system. This can result in early deterioration of vision and hearing, learning difficulties in puppies and kittens and behavioral problems in our pets that can continue throughout life.” Dr. Billinghurst

Fatty acids are essential components of cell membranes and are an integral component of the intercellular barrier in the stratum corneum. This barrier is formed by extrusion of lamellar granules containing phospholipids, glycosphingolipids, and free sterols that are produced by keratinocytes. Essential fatty acids cannot be synthesized and, therefore, must be supplied in the diet. Animals are unable to change one series of fatty acids to another, eg, omega-3 to omega-6. Dermatologic signs of fatty acid deficiency include a thin and discolored haircoat, scaly skin, sebaceous gland hypertrophy with hyperkeratosis of the sebaceous ducts and increased sebum viscosity, increased epidermal turnover rate, weak cutaneous capillaries, and decreased wound healing.

**Fish Oil** is more often recommended as a supplement for many pets as it improves a lot more than just the skin and coat but to help a variety of different problems.

“Fish oil is one of my favorite supplements for a variety of problems in both dogs and cats, even normal, healthy pets can at the very least, benefit from improved haircoats when supplemented with fatty acids such as fish oil.

In dogs and cats, **fish oil** has been found to be useful for reducing inflammation in pets with allergic skin disease and used successfully in kidney failure. It may even help pets with heart disease and osteoarthritis. Studies show that pets fed high doses of fish oil also have better control of cancer. The addition of vitamin E is sometimes recommended when giving fish oil on a regular basis as fish oil supplemented for many months may lower vitamin E levels (most fish oil supplements contain additional vitamin E for this reason). There is concern about environmental contamination of fish oil with toxins. Studies have shown that fish meat (not oil) may be contaminated with methylmercury.”

**Kidney Failure/Disease**

“Omega-3 fatty acids can increase beneficial (anti-inflammatory) prostaglandins; these prostaglandins can reduce inflammation in the kidney and improve blood flow to the kidneys (a vasodilatory effect). Since omega-3 fatty acids can also lower blood cholesterol and triglycerides, this effect can also benefit pets with kidney disease as dogs and cats with induced kidney disease have elevated levels of blood cholesterol and triglycerides.

Omega 3 fatty acids from marine fish oil have been shown to slow the progression of kidney disease in a clinical trial with dogs. The anti-inflammatory action of the Omega 3’s may reduce kidney inflammation.

In pets with kidney disease, flax seed oil was not as effective as fish oil. While flaxseed oil has been suggested by some and a substituted by many for fish oil, there is no evidence that it is effective when used for the same therapeutic purposes as fish oil. Unlike the case for fish oil, there is little evidence that flax seed oil is effective for any specific therapeutic purpose.

**Fighting Cancer with EFA’s**

In a diet supplemented with fish oil and the amino acid arginine appears to increase survival time in dogs with lymphoma, a cancer that affects white blood cells. Dogs with this kind of cancer, similar to non-Hodgkin’s lymphoma in humans, are easily treated, but as with humans, their cancer sometimes returns.

In this study, half of the dogs received a special “chow” with the two supplements in it, and the other half ate “chow” with soybean oil added. The two diets or “chows” were identical in nutritional value, and formulated to
be equally tasty to the dogs. All the dogs were being treated with the anti-cancer drug doxorubicin every three weeks, and were living at home with their owners.

The dogs were fed one of the chows twice a day during and after their cancer treatment. The researchers report that compared to the control dogs, those who ate the supplemented chow showed higher blood levels of two fatty acids called C20:5 and C22:6 that seem particularly effective in fighting cancer. Dogs with more of these fatty acids in their blood also tended to have more normal levels of lactic acid, which tends to accumulate in the blood when metabolism is disrupted in cancer patients.

The dogs with higher levels of these two fatty acids survived longer than those with lower levels, and had longer remissions, periods of time before their disease came back.

There is also research which has shown that some polyunsaturated fatty acids, like those found in fish oil, may help prevent the growth and spread of cancer tumors, and may help prevent cachexia — the devastating weight loss and muscle wasting seen in some cancer patients despite adequate nutrition. Likewise, arginine supplements have been reported to improve immune responses, and might help the body fight cancer.

NOTE: In studies done in people and pets, dosages much higher than label doses are needed to achieve results. Please talk to your Animal Nutritionist, Veterinary Naturopath or Holistic Veterinarian for proper dosage and supervision.

Dr Jeannie and The Whole Dog highly Recommends Kronch Wild Salmon Oil or Sealogix Omega-3.

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