



Omega-3 Essentials

by: *Sally Perea, D.V.M., M.S., D.A.C.V.N.*

Omega-3 fatty acids are considered essential fatty acids (EFAs) for humans, as well as for dogs and cats, because they cannot be made in the body. In order to maintain optimal health and wellness, these fatty acids must be obtained through diet or supplementation.

EPA and DHA are necessary structural components of cell membranes. These functional, health-promoting fatty acids maintain the cell membrane fluidity and permeability needed for healthy functioning cells.

The two health-promoting omega-3 fatty acids are eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA). EPA and DHA are long chain omega-3 fatty acids found abundantly in fish. Flax seed oil contains alpha-linolenic acid (ALA), a shorter chain omega-3 fatty acid that requires the enzyme delta-6 desaturase to convert ALA to EPA and DHA in the body.

Humans and dogs have limited ability to convert ALA to EPA and DHA². Cats, on the other hand, have less ability to convert ALA to EPA and DHA³. Therefore, supplementation with high quality omega-3 fish oil is recommended for humans, dogs, and cats.

One of the key functions of the omega-3 fatty acid EPA is supporting the body's natural anti-inflammatory response. Dogs and cats can suffer from numerous inflammatory conditions that can affect their health and well-being. Studies have shown supplementation of omega-3 fatty acids from fish supports dogs and cats with inflammatory conditions associated with the skin, joints, kidneys, and heart⁴⁻⁹. In addition, EPA is known to promote healthy triglyceride (fat) levels within the blood of dogs⁴.

In puppies and kittens, the omega-3 fatty acid DHA plays a key role in neurological (brain) and retinal (eye) development^{4,10}. Studies have shown that feeding pregnant dogs omega-3 fatty acid-enriched foods during gestation and lactation provides needed DHA to their puppies¹⁰. Puppies weaned onto foods with DHA have improved electroretinographic responses (a measurement of the electrical response of the retina in the eye to light stimulation), and improved responses to training tests^{2,10}. Studies in humans have shown that omega-3 fatty acids may be beneficial in maintaining normal cognitive function later in life¹¹.

Lastly, essential fatty acid supplementation is known to maintain general skin and coat quality in dogs and cats.

Consult your veterinarian to evaluate the total amount of omega-3 fatty acids your dog/puppy or cat/kitten should receive on a daily basis based on species, age, activity level, diet, life stage (growth/reproductive and adult), and health condition.

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