Evolution of Omega-3 Fatty Acids in Canine & Feline Diets

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Before dogs and cats were domesticated, the ancestors of dogs and cats received their essential omega-3 fatty acids, EPA and DHA, from their prey, such as rodents, birds, and elk. But today, our pet companions depend on us for their food. With modern technology, commercial pet food provides pet owners with a convenient method of feeding their pet companions, but some foods still may not provide your pet companions with the ideal levels of essential omega-3 fatty acids to promote optimal pet health and wellness.

While research indicates a ratio of omega-6 to omega-3 fatty acids of 5:1–10:1 is optimal for dogs[1], many commercial pet foods contain primarily omega-6 fatty acids from animal fats and vegetable oils, resulting in a highly unbalanced ratio dominated by omega-6 fatty acids. The ratio of omega-6 to omega-3 fatty acids is key in helping these nutrients fulfill their important functions in the body. While the ratio is important to consider, it is also important to consider the source of omega-3 fatty acids in the diet. Fish oil provides your pet with a direct source of omega-3 fatty acids. Plant oils are not a direct source because they must be converted to EPA and DHA in the body of dogs and cats.

To correct the fatty acid imbalance dominated by omega-6 fatty acids, pet owners can supplement their pets' food with a high-quality source of omega-3 fatty acids from wild, sustainable fish. Even the best raw food diets or homemade diets will benefit from omega-3 fatty acid suplementation.

References

1. Vaughn D, Reinhart G, Swaim S, et al. Evaluation of dietary n-6 to n-3 fatty acid ratios on leukotriene B synthesis in dog skin and neutrophils. Vet Dermatol 1994;5(4):163–173.