

Omega-3 Fatty Acid Supplementation for Dogs and Cats with Heart Disease

Omega-3 fatty acids have a number of potential benefits in dogs and cats with heart disease, such as reducing inflammation and helping to protect against abnormal heart rhythms (arrhythmia). The dose of omega-3 fatty acids we currently recommend for dogs and cats with heart failure is 40 mg/kg eicosapentaenoic acid (EPA) + 25 mg/kg docosahexaenoic acid (DHA) per day. There are a small number of commercial pet foods that contain this dose (for example, the Royal Canin Early Cardiac Diet for Dogs). However, in most cases, supplements are needed to achieve this dose. Fish oil, which is high in omega-3 fatty acids, is the most appropriate supplement to be used for this purpose. Flaxseed/flaxseed oil also is high in omega-3 fatty acids but is ineffective for providing omega-3 fatty acids to dogs and cats so should be avoided. We also recommend avoiding cod liver oil for this purpose as it is too high in vitamins A and D when administered at this dose and can cause toxicity of these vitamins.

The total daily dose can be administered at a single time daily or can be divided over the course of the day

Please note:

1. Fish oil supplementation is not appropriate for all dogs and cats. If your pet has a sensitive gastrointestinal system or any medical condition that could predispose him/her to excessive bleeding, please discuss use of fish oil supplements with your veterinarian.
2. If your pet is eating a diet that has a high fish, fish meal, or fish oil content, an adjustment to this fish oil dose may be needed to avoid giving excessive levels of omega-3 fatty acids to your pet.
3. Not all supplements have appropriate concentrations of the individual fatty acids or have good quality control. Some of the brands that have had independent testing and that we recommend are listed below.

Product Name	Company	Price/100 mg of EPA+DHA	Daily dose
Cats and Small or Medium-Sized Dogs			
CVS Fish Oil Concentrate Capsules 1000 mg (180 mg EPA and 120 mg DHA per softgel)	CVS Pharmacy	2¢	1 capsule per 10 pounds body weight
Large Dogs			
GNC Triple Strength 1500 (540 mg EPA and 360 mg DHA)	GNC	2¢	1 capsule per 30 pounds body weight
Nordic Naturals Ultimate Omega (325 mg EPA and 225 mg DHA)	Nordic Naturals	6¢	1 capsule per 18 pounds body weight
Simply Right Triple Strength Fish Oil (647 mg EPA, 253 mg DHA). Note: lower in DHA than other brands	Sam's Club	1¢	1 capsule per 35 pounds body weight
Solgar Omega-3 (360 mg EPA and 240 mg DHA per softgel)	Solgar	4¢	1 capsule per 20 pounds body weight
Twinlab Omega-3 (270 mg EPA and 180 mg DHA per softgel)	Twinlab	2¢	1 capsule per 15 pounds body weight
Liquids			
Vitamin Shoppe Omega-3 Fish Oil 800 EPA/500 DHA – liquid (800 mg EPA and 500 mg DHA per teaspoon). Note: lemon-flavored	The Vitamin Shoppe	2¢	1 teaspoon per 44 pounds body weight
Welactin Canine Liquid. Note: not independently tested	Nutramax	Variable	1 scoop per 48 pounds body weight
Welactin Feline Liquid. Note: not independently tested	Nutramax	Variable	1 scoop per 9 pounds body weight

For further information about omega-3 fatty acid supplementation in dogs and cats with heart disease, see: Freeman LM. Beneficial effects of omega-3 fatty acids in cardiovascular disease. *Journal of Small Animal Practice* 2010; 51: 462-470.

To schedule an appointment with the Nutrition Service, please see our website: www.tufts.edu/vet/nutrition or call 508-887-4696.