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Nutrition and Over-the-Counter Supplements in Pets with Heart Disease

Many pet owners have questions regarding nutrition and supplementation for their dog or cat with heart disease. The informational bulletin is intended to answer the most common questions, including:

- 1. Should my pet be receiving any nutritional supplements or vitamins for his/her heart disease?
- 2. Should my pet be on a special diet for his/her heart disease?
- 3. Are treats ok, and if so, which kinds?

NUTRITIONAL SUPPLEMENTS

A wide variety of over-the-counter supplements are readily available on the internet and in the nutritional aisles of our pharmacies, nutritional stores, and grocery stores. Furthermore, a seemingly unlimited amount of often incomplete or conflicting information can be found on the internet about these products, which can make it difficult to decide what to give (or not give) to our pets. The information below addresses some of the more common supplements often inquired about.

The most important pieces of information about any vitamin or supplement are

- 1) whether they are known to cause any harm or side effects
- 2) whether there is any definitive scientific <u>EVIDENCE</u> that they provide clear benefit for a medical condition. Anecdotal reports of success are <u>NOT</u> considered sufficient scientific evidence for use.

Remember, any supplements you choose to administer to your pet are in addition to, NOT as a substitute for, any cardiac medications prescribed by the cardiologist!

Omega-3 Fatty Acids (Fish Oils)

There is scientific evidence that omega-3 fatty acids present in fish oils provide a beneficial effect in some dogs with heart disease. There is no evidence that omega-3 fatty acid supplementation will help prevent heart disease in dogs. Omega-3 fatty acids may be of particular benefit in pets with poor appetite, muscle loss, and abnormal heart rhythms (cardiac arrhythmias).

Although evidence in dogs and cats for nearly all nutritional supplements is limited, Dr. Peddle does support supplementation of Omega-3 fatty acids to dogs with heart disease if it is economically feasible for their owners. A daily dose of one gram (1000 milligrams) of omega-3 fatty acids per ten pounds of body weight is recommended. Thus, a 50 pound dog would receive 5000 milligrams of omega-3 fatty acids per day (which can be divided into morning and evening doses of 2500 milligrams). Ideally, each gram (1000 milligrams) should contain approximately 180 milligrams of eicosapentanoic acid (EPA) and 120 milligrams of docosahexaenoic acid (DHA). Products containing flaxseed oil should be avoided.

Taurine and L-Carnitine

Taurine (amino acid) and L-carnitine are important for heart health. Deficiency of these biologic compounds can cause a specific form of Dilated Cardiomyopathy (DCM) in dogs and cats. Balanced commercial pet foods have significantly reduced the frequency of taurine-deficient DCM in pets. If your pet requires taurine or carnitine supplementation, it is because he/she has been diagnosed with a taurine deficiency by the cardiologist and exact dosing will be discussed with you.

Other forms of heart disease in pets <u>do not</u> involve taurine or carnitine deficiencies. Supplementation of either of these compounds in these other forms of heart disease is unlikely to be harmful but there is no evidence available that it provides a specific benefit, either.

Other supplements (Coenzyme Q, Vitamin C, Vitamin E, among others)

While there are many other readily available vitamins and supplements that are purported to promote heart health, the evidence supporting use of any of these supplements in dogs and cats with heart disease is lacking. Furthermore, specific dosing guidelines are generally not available for most of the products.

DIETARY GUIDELINES, TREATS, ETC.

In general, a moderate degree of sodium restriction is beneficial in patients with significant heart disease. Severe sodium restriction is **not** recommended. Often, sodium intake can be significantly reduced simply by discontinuing the use of table food/scraps at home, or by substituting low-salt foods to use as treats or for administering medications.

A large variety of sodium-restricted veterinary diets are available. We encourage you to consider offering a few different kinds to your pet to find one that he/she likes. However, it is most important that your pet is eating well, thus a diet change is only recommended if your pet likes the new food. Most of these diets are available through a pet store or your regular veterinarian. We do not recommend attempting a diet change in dogs currently receiving a prescription diet for another medical condition, or who are known to have particularly sensitive digestive tracts.

A list of sodium restricted dog/cat foods and a list of acceptable treats will be provided with this bulletin today, but are also available for viewing online at:

https://heartsmart.vet.tufts.edu/forms/

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