



The Golden Retriever Club of America, Inc.

Golden Retrievers for Participation in Research:

Subclinical Diet-Associated Dilated Cardiomyopathy

AKC Canine Health Foundation Grant # 02661

Principal Investigators: Darcy Adin, DVM, *Co-investigators: Lisa Freeman, DVM, PhD and John Rush, DVM, MS, Tufts University; Rebecca Stepien, DVM, MS, University of Wisconsin, Madison; Amara Estrada, DVM and Margaret Sleeper, VMD, University of Florida; Joshua Stern, DVM, PhD, University of California, Davis*

Dilated cardiomyopathy (DCM) is a serious disease of the heart muscle whereby the heart becomes enlarged with weak contractions. DCM can result in abnormal heart rhythms, congestive heart failure or sudden death. In dogs, DCM most often occurs in large- and giant-breeds, such as Doberman Pinschers, Boxers, Irish Wolfhounds, and Great Danes; in these dogs, survival time after diagnosis is often only months, even with aggressive medical therapy. Recently, veterinary cardiologists have recognized DCM more frequently in *all* breeds of dogs including mixed breeds, and even those not usually associated with DCM. There is suspicion that the disease in some dogs is associated with boutique, exotic ingredient, or grain-free (BEG) diets. Some affected dogs on such diets have shown reversal or improvement of their disease after changing their diet, supporting a potential association between consumption of a BEG diet and development of DCM. A specific cause, however, has not been identified, despite extensive nutritional testing of the dog foods and the canine patients. Moreover, the extent of the problem is unknown because only dogs that are symptomatic for DCM have been reported. It is possible that more dogs may be affected but not yet showing signs of heart disease. To investigate the extent of diet-associated heart problems in dogs, this multi-institutional team of veterinary cardiologists and nutritionists will prospectively screen a large population of apparently healthy dogs for DCM and compare important cardiac disease measures, including ultrasound of the heart, blood biomarker and taurine concentrations, and the frequency of DCM in dogs eating BEG versus non-BEG diets.

The University of Florida, College of Veterinary Medicine is currently recruiting healthy dogs of 3 different breeds (Golden Retrievers, Miniature Schnauzers and Doberman Pinschers) for a study evaluating the effect of diet type on heart function.

Inclusion Criteria:

- Dogs must be healthy and without significant medical conditions. Treated hypothyroidism is allowable.
- Dogs must be one of 3 breeds (Doberman Pinschers, Miniature Schnauzers or Golden Retrievers).
- Owners must be willing to provide a diet history and permit ultrasound and blood testing.
- All visits take place on Wednesdays at the University of Florida, Veterinary Hospital

Exclusion Criteria:

- A recent diet change or unknown diet history
- Dogs eating home cooked diets
- Dogs with significant medical conditions
- Dogs that are symptomatic for heart disease (these dogs may be candidates for a different clinical trial at UF if they have DCM)

Procedures: Dogs enrolled in the study will have a physical examination, ultrasound of the heart (echocardiogram), and blood tests (whole blood and plasma taurine concentrations, NT-proBNP and troponin I). DNA testing will be performed for Dobermans. Owners will be asked to fill out a diet history form. Any dogs that are found to be abnormal on ultrasound or blood testing will be offered follow-up evaluations at 3, 6, 9 and 12 months after a diet change.

Cost: If your dog is eligible for the study at the time of the evaluation, the study will cover the costs of the examination, echocardiogram (ultrasound) and blood tests. If follow-up evaluations are recommended after a diet change, these costs will also be covered by the study at each timepoint (3 months, 6 months, 9 months and 12 months). The costs of other tests, hospitalization, or medications are not covered by the study, nor is financial incentive provided.

Study Contact: **Please review the eligibility checklist at the end of this document before contacting the Study. Answers to all questions must be "Yes."**

The Cardiology Service at UFL Small Animal Hospital (352) 392-2235

or email Dr. Darcy Adin, adind@ufl.edu

or email the Clinical Studies Team, VM-ClinicalStudies@ufl.edu

For more information:

<https://research.vetmed.ufl.edu/clinical-trials/small-animal/investigation-into-subclinical-diet-associated-dilated-cardiomyopathy/>

If you can answer yes to all of the following questions and are interested in participating in this study, please call the Small Animal Hospital at (352) 392-2235 to make a Wednesday appointment with Dr. Darcy Adin in Cardiology. There is a link on the website for a diet history form that should be filled out and brought to the appointment. The study will cover an echocardiogram and blood testing (including taurine testing).

- My dog is a Golden Retriever, Miniature Schnauzer or a Doberman Pinscher
- My dog has been eating the same commercial dog food for at least the last 6 months
- My dog is clinically healthy with no major medical concerns
- My dog does not take supplemental taurine
- My dog does not receive any medications except thyroid supplementation and tick / flea / heartworm prevention
- My dog does not have known heart disease
- I am willing to provide a diet history and will fill out the form prior to the appointment
- I am willing to travel to Gainesville for an appointment at the University of Florida
- I am willing to allow my dog to have an echocardiogram (ultrasound of the heart) and blood testing

*If you cannot answer yes to all of these questions, your dog will not qualify for this study. We are happy to answer any questions regarding these criteria. Thank you!