



FDA Provides Update on Investigation into Potential Connection Between Certain Diets and Cases of Canine Heart Disease

February 19, 2019

The U.S. Food and Drug Administration today is providing an update on its investigation into reports of dilated cardiomyopathy (DCM) in dogs eating certain pet foods. The update covers reports of DCM received by FDA through November 30, 2018.

This update does not include reports received in December and January due to the lapse in appropriations from December 22, 2018, to January 25, 2019. Because the Anti-Deficiency Act does not except activities that are solely related to protecting “animal health,” FDA was not able to continue its investigation during that time.

The FDA first alerted (</animal-veterinary/cvm-updates/fda-investigating-potential-connection-between-diet-and-cases-canine-heart-disease>) the public about this investigation in July 2018. Since then, the FDA’s Center for Veterinary Medicine (CVM) has taken a multi-pronged approach to the investigation, collaborating with a variety of components of the animal health sector to collect and evaluate information about the DCM cases and the diets pets ate prior to becoming ill.

Based on the information gathered as part of our investigation to date, our advice to pet owners remains consistent. The agency has not identified specific

recommendations about diet changes for dogs who are not displaying DCM symptoms, but encourages pet owners to consult directly with their veterinarians for their animal's dietary advice. FDA-CVM investigative activities include:

- Analyzing cases statistically to search for correlations between diagnosed DCM cases and what those dogs did or did not eat.
- Working with the Veterinary Laboratory Investigation and Response Network (Vet-LIRN), a collaboration of government and veterinary diagnostic laboratories to test blood, serum and tissues from affected animals.
- Collaborating with Chesapeake Veterinary Cardiology Associates (CVCA) to collect case summaries and blood/serum/tissue of dogs diagnosed with DCM to see if there are unique factors that separate diet-associated DCM from genetic. The FDA is also reviewing echocardiograms of dogs who are not showing symptoms of DCM to evaluate the significance of early changes in heart function.
- Consulting with board certified veterinarians in animal nutrition to identify nutritional factors such as nutrient bioavailability and ingredient digestibility that may contribute to the development of heart disease.
- Examining ingredient sourcing/processing and product formulation with pet food manufacturers.

Between January 1, 2014, and November 30, 2018, the FDA received 300 reports of DCM (294 canine reports, 6 feline reports); 276 of these (273 canine, 3 feline) were reported after the July public notification about FDA's investigation. Some of these reports involved more than one affected animal from the same household. While there are dog breeds (typically large and giant breeds, plus Cocker Spaniels) that are known to have a genetic predisposition to dilated

cardiomyopathy, the reports to the FDA continue to span a wide range of breeds, many that do not have a known genetic predisposition. The FDA has received reports of cats with DCM, but due to the low number of reports (10 since January 2014), dogs are the primary focus of the agency's investigation. For details about the number of reports, visit the DCM Investigation webpage (</animal-veterinary/news-events/fda-investigation-potential-link-between-certain-diets-and-canine-dilated-cardiomyopathy>).

In cases in which dogs ate a single primary diet (i.e., didn't eat multiple food products, excluding treats), 90 percent reported feeding a grain-free food. Approximately 10 percent reported feeding a food containing grains and some of these diets were vegan or vegetarian. A large proportion of the reported diets in DCM cases – both grain-free and grain-containing – contained peas and/or lentils in various forms (whole, flour, protein, etc.) as a main ingredient (listed within the first 10 ingredients, before vitamins and minerals). The products included commercially available kibble, canned and raw foods, as well as home-cooked diets.

The agency appreciates the support from pet owners and veterinarians who have submitted data through case reports that included extensive diet histories, medical records, diagnostic samples of blood, serum, and/or tissue, and echocardiograms. Due to the high volume of reports, the agency cannot respond to each report individually, but each report is valuable and becomes part of the FDA's investigation.

The FDA continues to encourage pet owners and veterinary professionals to report both symptomatic and asymptomatic cases of dogs suspected to have DCM connected to diet by using the electronic Safety Reporting Portal (<http://www.safetyreporting.hhs.gov/>) or calling their

state's FDA Consumer Complaint Coordinators ([/safety/report-problem/consumer-complaint-coordinators](#)). Please see the link below about "How to Report a Pet Food Complaint ([/animal-veterinary/report-problem/how-report-pet-food-complaint](#))" for additional instructions. The FDA will continue to provide updates on the progress of this investigation and will alert the public about significant developments.

Additional Information

- [FDA Investigation into Potential Link between Certain Diets and Canine Dilated Cardiomyopathy \(/animal-veterinary/news-events/fda-investigation-potential-link-between-certain-diets-and-canine-dilated-cardiomyopathy\)](#)
- [Questions & Answers: FDA Center for Veterinary Medicine's Investigation into a Possible Connection Between Diet and Canine Heart Disease \(/animal-veterinary/animal-health-literacy/questions-answers-fda-center-veterinary-medicines-investigation-possible-connection-between-diet-and\)](#)
- [Vet-LIRN Investigative Update \(February 2019\) \(/animal-veterinary/science-research/vet-lirn-update-investigation-dilated-cardiomyopathy\)](#)
- [How to Report a Pet Food Complaint \(/animal-veterinary/report-problem/how-report-pet-food-complaint\)](#)
- [Veterinary Laboratory Investigation and Response Network \(Vet-LIRN\) \(/animal-veterinary/science-research/veterinary-laboratory-investigation-and-response-network\)](#)

Issued by FDA Center for Veterinary Medicine.

For questions, Contact CVM (</about-fda/center-veterinary-medicine/contact-cvm>).