

# Questions & Answers: FDA Center for Veterinary Medicine's Investigation into a Possible Connection Between Diet and Canine Heart Disease

On July 12, 2018, FDA issued a [public notification](#)

[\(/AnimalVeterinary/NewsEvents/CVMUpdates/ucm613305.htm\)](#) about the agency's investigation into reports of canine dilated cardiomyopathy (DCM) in dogs eating certain pet foods. While it is early in the investigation, the Center for Veterinary Medicine recognizes that you may have questions. Below we have compiled answers to address some of the frequently asked questions raised by pet owners and veterinarians.

## 1. What potential connection is the FDA investigating?

FDA is investigating a potential dietary link between canine dilated cardiomyopathy (DCM) and dogs eating certain pet foods containing legumes like peas or lentils, other legume seeds, or potatoes as main ingredients. We began investigating after FDA's Center for Veterinary Medicine (CVM) received a number of reports of DCM in dogs eating these diets. DCM itself is not considered rare in dogs, but these reports are unusual because many of the reported cases occurred in breeds of dogs not typically genetically prone to the disease and were reported to have been fed the same type of diet (labeled as "grain-free").

## 2. What is the FDA doing about this possible connection?

The FDA's Center for Veterinary Medicine (CVM) and the Veterinary Laboratory Investigation and Response Network, a collaboration of government and veterinary diagnostic laboratories, are investigating this potential association. We are working with board certified veterinary cardiologists and veterinary nutritionists to better understand the clinical presentation of the cases. The agency has also been in contact with pet food manufacturers to discuss these reports and to help further the investigation. In addition, we are analyzing information from case reports submitted by pet owners and veterinarians. We will continue to work with all of these stakeholders to help advance our ongoing investigation.

## 3. What is canine dilated cardiomyopathy (DCM)?

DCM is a disease of a dog's heart muscle and results in an enlarged heart. As the heart and its chambers become dilated, it becomes harder for the heart to pump, and heart valves may leak, which can lead to a buildup of fluids in the chest and abdomen (congestive heart failure). If caught early, heart function may improve in cases that are not linked to genetics with appropriate veterinary treatment and dietary modification.

## 4. Why did the FDA notify the public about the possible connection if the agency doesn't have definitive answers?

While it is early in the investigation, the FDA's Center for Veterinary Medicine (CVM) felt a responsibility to shed light on an early signal that we have been made aware of and to solicit reports from pet owners and vets that may know of related cases. The data provided through reports will help inform the investigation.

## **5. How many cases have been reported to the FDA?**

Prior to issuing our [public notification \(/AnimalVeterinary/NewsEvents/CVMUpdates/ucm613305.htm\)](https://www.fda.gov/animal-vest/NewsEvents/CVMUpdates/ucm613305.htm) on July 12, 2018, the FDA received sporadic reports involving 30 dogs and seven cats. In the reports we received, some of the dogs showed signs of heart disease, including decreased energy, cough, difficulty breathing, and episodes of collapse. We are aware that the veterinary cardiology community has received more reports (approximately 150 as of 7/12/18). Since issuing the public notification, CVM has received many additional reports, but we are still in the process of reviewing them.

## **6. What brands of food have been included in the reports to the FDA?**

There is a range of different brands and formulas included in the reports. Rather than brands, the common thread appears to be legumes, pulses (seeds of legumes), and/or potatoes as main ingredients in the food. This also includes protein, starch and fiber derivatives of these ingredients, (e.g., pea protein, pea starch, or pea fiber). Some reports we have received also seem to indicate that the pets were not eating any other foods for several months to years prior to exhibiting signs of DCM.

## **7. What are legumes?**

Legumes are part of the Fabaceae plant family, and are the fruit or seed of these plants. Common legumes include peas, beans, lentils, chickpeas, soybeans, and peanuts. Legumes are used for both human and animal food and have become a common plant-based source of protein.

## **8. Does the FDA think this possible link includes diets with rice?**

Rice is a grain, not a legume. The current reports do not suggest there is any link between diets with rice and DCM in dogs.

## **9. Are sweet potatoes and red potatoes classified as potatoes?**

Yes.

## **10. What does the FDA consider a “main ingredient”?**

There is no hard and fast rule for what qualifies as a “main ingredient.” We generally consider a "main ingredient" to be listed in a food’s ingredient list before the first vitamin or mineral ingredient.

## **11. Does the FDA know what it is about these foods that may be connected to canine DCM?**

At this time, it is not clear what it is about these diets that may be connected to DCM in dogs. Taurine deficiency is well-documented as a potential cause of DCM, but it is not the only cause of DCM. Nutritional makeup of the main ingredients or how dogs process them, main ingredient sourcing, processing, amount used, or other factors could be involved.

## **12. How do I know if my pet’s food is one of the diets discussed in the FDA’s public notification?**

We suggest reviewing the ingredient list on your pet’s food to see whether legumes and/or potatoes are listed as one of the main ingredients.

## **13. Should I avoid grain-free diets?**

High levels of legumes or potatoes appear to be more common in diets labeled as “grain-free,” but it is not yet known how these ingredients are linked to cases of DCM. Additionally, legumes and potatoes may appear as ingredients in foods that are not labeled as “grain-free.” Changes in diet, especially for dogs with DCM, should be made in consultation with a licensed veterinarian.

## **14. Do I need to change my dog’s diet?**

At this time, we are not advising dietary changes based solely on the information we have gathered so far. If you have questions or concerns about your dog's health or its diet, we suggest that you consult your veterinarian for individualized advice that takes into account your dog's specific needs and medical history.

#### **15. What's the safest diet for my dog?**

Different dogs have different nutritional needs based on a number of factors, so nutrition advice is not one-size-fits-all. The FDA recommends consulting your veterinarian for personalized advice about what to feed your dog.

#### **16. What should I do if my dog is experiencing symptoms of DCM?**

If your dog is showing possible signs of DCM or other heart conditions, including decreased energy, cough, difficulty breathing and episodes of collapse, you should contact your veterinarian. Your veterinarian may ask you for a thorough dietary history, including all the foods (including treats) the dog has eaten.

#### **17. How do vets and consumers submit reports to the FDA?**

CVM encourages pet owners and veterinary professionals to report cases of DCM in dogs suspected of having a link to diet by using the electronic [Safety Reporting Portal \(http://www.safetyreporting.hhs.gov/\)](http://www.safetyreporting.hhs.gov/) or calling their state's [FDA Consumer Complaint Coordinators \(/Safety/ReportProblem/ConsumerComplaintCoordinators/default.htm\)](/Safety/ReportProblem/ConsumerComplaintCoordinators/default.htm).

#### **18. What information does the FDA need included in the reports?**

Please see "[How to Report a Pet Food Complaint \(/AnimalVeterinary/SafetyHealth/ReportProblem/ucm182403.htm\)](/AnimalVeterinary/SafetyHealth/ReportProblem/ucm182403.htm)" for additional instructions and information.

#### **19. How long will the FDA's investigation take?**

There is no way to know how long the investigation will take, but CVM is hopeful that as we gather more data from case reports, we will gain a better understanding of this possible connection. We will continue to convey our observations publicly as the investigation progresses.