



## Canine Dilated Cardiomyopathy - DCM

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Leading with Technical Expertise - White Paper

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### What Is Canine DCM?

Dilated Cardiomyopathy (DCM) is a disease that affects the heart muscle, resulting in a decreased ability for the heart to pump blood.<sup>[1]</sup> This condition normally leads to congestive heart failure.

The exact cause of canine DCM is not yet known and is likely multifactorial, which may include: genetic predisposition, nutritional factors, prior illness, or infectious disease. Several breeds such as Boxers, Doberman Pinschers, Great Danes, Golden Retrievers, Irish Wolfhounds and Cocker Spaniels are known to show a higher incidence of DCM, suggesting a strong heritable genetic cause. More recently, cases that have been reported have included smaller and mixed breeds.<sup>[1,2]</sup>

Symptoms of DCM in dogs include lethargy, labored breathing, low appetite, coughing, panting, and sudden collapse.<sup>[2]</sup> Dogs exhibiting these symptoms should be examined by their veterinarian immediately.

### Recent Events

In 2018, the FDA released a statement that they are investigating a possible link between canine DCM in dogs consuming diets containing peas, lentils, other legumes and potatoes.<sup>[1]</sup> The FDA noted that diets containing these ingredients are more commonly found in “grain-free” diets. Thus, an association was made with canine DCM and diets that are marketed as “grain-free,” with the assumption that low levels of the unique amino acid taurine could be to blame. The link between taurine and heart disease is not new. It was most notably found with cats in the late 1980’s, resulting in taurine being identified as an essential amino acid for this species.<sup>[3]</sup> However, while dogs can synthesize taurine from two other amino acids, methionine and cysteine, there has been documented research in the 2000’s where diet was correlated with low taurine and canine DCM in specific breeds.<sup>[4,5]</sup>

Where this has become puzzling is ‘Why Now’? Dogs have been consuming diets containing peas, other legumes and potatoes for decades. In addition, the grain-free association seems unfounded, as the lack of grains would not cause a taurine deficiency, due to grains being inherently low in taurine. The challenge is that this issue has focused on ingredients rather than nutrients, and many factors such as environment, manufacturing, feeding regime or total nutrition could be a few of many contributing factors.

In 2019, the FDA released two more updates regarding their investigation, in addition to publishing a list of brands and products reported to be implicated with canine DCM.<sup>[2,6]</sup> The cases were primarily from dry diets with a low representation of semi-moist, wet and alternatively processed pet foods. Of importance to note, the diets reported ranged across multiple brands, multiple protein sources and many contained grains.



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To date, the FDA announcements have provided no cause and effect of canine DCM. In fact, the FDA does not advise any dietary changes to be made based solely on this investigation.

Since this white paper was initially issued in late 2019, industry and academia have engaged in nutritional research studies and scientific reviews to gain a better understanding of this complex issue.<sup>[7,8,9]</sup> While there could be a dietary association among many other factors discussed previously, there is still no scientific evidence that grain-free diets are a causative factor to this disease in dogs. Further, a comprehensive study was published in 2020 by veterinary, PhD and animal nutrition experts, which also concluded that there is no definitive link of grain-free diets with DCM.<sup>[10]</sup>

### What Is Next?

- First and foremost, it is important to ensure that our pets are fed complete and balanced nutrition based on their life-stage and individual needs. The focus should be on fact based nutrition and science when choosing the most balanced diet for our pets.
- Pet parents should speak to their veterinarian or animal nutrition experts to best understand the most appropriate diet to feed their pet, based on the science supporting the products. Seeking specific information from pet food brands is always appropriate, as they have the insight to their products and formulations.
- Experts across the pet food industry, including R&D teams, nutrition-focused committees, and academia are actively researching and investigating the cause of canine DCM.
- DCM in dogs has clearly proven to be a complex issue that requires long-term research, likely taking years to come to a root cause and recommendation. Implicating grain-free foods or specific ingredients is an oversimplification of the issue. Research & investigation thus far has shown that taurine and diet are likely playing a role, but not an exclusive roll.
- Millions of cats and dogs are thriving from the foods that have been scientifically formulated and diligently manufactured, based on decades of research. Ask questions, inquire and make informed decisions.



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**Our Commitment** – Leading with Technical Expertise – Leah and Jarrod are here to provide guidance and insights – do not hesitate to connect with us at Simmons Pet Food, [pfccomments@simfoods.com](mailto:pfccomments@simfoods.com). We would love to hear from you and be part of your pet’s nutrition solution!

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