

GRAIN-FREE AND NON-TRADITIONAL DIETS AND THE LINK TO CANINE DILATED CARDIOMYOPATHY

What is Dilated Cardiomyopathy (DCM)?

Dilated cardiomyopathy (DCM) is a disease of the heart muscle that causes the heart to enlarge and lose its muscular strength, ultimately resulting in heart failure. Several breeds of dogs are genetically predisposed to irreversible DCM including Boxers, Dobermans, Great Danes, and Irish Wolfhounds.

What is Diet-Associated DCM?

In 2018, the FDA announced that unusual breeds of dogs had begun to develop DCM. These cases were also unusual in that the changes to the heart muscle were often reversible after a diet change. The most commonly associated diets were labelled grain-free, contained exotic protein sources (for example, kangaroo), or were made by small manufacturers ("boutique" brands). As of July 2020, there have been 1100 self-reported instances of dogs with DCM that the FDA (Food and Drug Administration) has compiled.

Facts About Boutique, Exotic Protein, and Grain-Free Diets ("BEG" Diets)

While grain-free diets are a highly marketed option for dog food, there is no scientific evidence that dogs benefit from being fed a grain-free diet. In fact, grains are a nutritious source of energy, protein, vitamins, and minerals and account for a very small portion of diagnosed food sensitivities in dogs.

Many companies that manufacture BEG diets do not meet standards that veterinary nutritionists set for recommending pet foods. These standards include employing a qualified nutritionist (a residency-trained veterinarian or a person with a PhD in animal nutrition), having appropriate manufacturing and quality testing procedures, investing in research into their diets, and appropriate product labelling. These guidelines are outlined by the World Small Animal Veterinary Association at the following website: https://wsava.org/wp-content/uploads/2021/04/Selecting-a-pet-food-for-your-pet-updated-2021_WSAVA-Global-Nutrition-Toolkit.pdf

Research About Diet-Associated DC

Since 2018, many studies have been conducted trying to find the link between DCM and BEG diets. The most common ingredients in these BEG diets are pulses (peas, lentils, chickpeas, beans), sweet potatoes, and potatoes. Research has focused on the difference between BEG diets and grain-inclusive traditional diets and whether there are compounds in BEG diets that may affect the absorption or availability of nutrients in the intestinal tract.

There has been an abundance of proof that these diets can influence the heart, and that changing the diet to a grain-inclusive diet can improve heart health in affected dogs. It is unknown if diet ingredients, manufacturing, or environmental factors play a role in the development of diet-associated DCM. At this time, there is no evidence that a specific nutrient deficiency is causing diet-associated DCM.

Dietary Recommendations

While the exact cause of diet associated DCM has not yet been discovered, out of an abundance of caution veterinary nutritionists and cardiologists recommend dogs be placed on a grain-inclusive diet if possible. Additionally, diets should follow WSAVA guidelines. Common brands that follow WSAVA guidelines include: Hill's, Purina, Royal Canin, Alpo, Beneful, Farmina, Cesar, Eukanuba, Iams, Pedigree, and Merrick.

More information regarding diet associated DCM can be found at the following website: <https://www.fda.gov/animal-veterinary/animal-health-literacy/questions-answers-fdas-work-potential-causes-non-hereditary-dcm-dogs>

A blog written by veterinary nutrition educators and researchers and a list of peer-reviewed scientific journal articles can be found here: <https://vetnutrition.tufts.edu/2021/09/diet-associated-dcm-research-update/>