

# Grain Free Diets Are they Causing Heart Disease?



It has been nearly a year since the US Food and Drug Administration (FDA) released it's first alert to pet owners, regarding a possible connection between 'grain free' and other diets and cases of heart disease in dogs. Despite the ongoing investigation, and multiple warnings from both the FDA, and board certified veterinary cardiologists and nutritionists, the word doesn't seem to be spreading fast enough!

More and more cases are being diagnosed, often too late, as well meaning pet owners continue to feed the implicated diets to their canine companions. Dilated cardiomyopathy, or DCM, is a well known heart disease that has been recognized

for years. DCM is a disease of the heart muscle, resulting in an enlarged heart, making it difficult for the heart to pump. DCM often results in congestive heart failure, in which fluid builds up in the chest and abdomen. DCM is particularly concerning, because there are

often no clinical signs until the disease is quite advanced. Unlike other heart diseases, there is rarely a heart murmur heard during a regular physical exam, and chest x-rays are often normal. An echocardiogram (or cardiac ultrasound) is the only way to

definitively diagnose DCM, a costly test that is not performed routinely, but rather only when heart disease is suspected. Although the underlying cause of DCM is unknown, it has been widely accepted to be a genetic disease, most typically affecting Boxers, Doberman Pinschers, Great Danes, and other large, and giant breed dogs. More recently however, veterinary cardiologists have been reporting a sharp increase in cases of DCM in dogs, in both the typical breeds and in breeds not generally associated with DCM.

As cardiologists started to question why they were collectively seeing such an uprising in the number of DCM cases, they began to note that the common thread between all of these dogs appeared to be diet. Most of these dogs were eating 'BEG' diets, which stands for Boutique, Exotic ingredient or Grain Free. Others were eating raw, homemade or vegan diets. Early theories suggest that feeding these diets appears to lead to a decreased uptake of taurine, an amino acid required for heart health. While not all dogs that have been

identified as having DCM have had low taurine levels, some of the mild to moderate cases have resolved with a diet change and taurine supplementation. Investigators at the FDA, as well as at various veterinary institutions across North America are gathering information to better understand if (and how) taurine absorption and metabolism may have a role in the newly discovered Nutritional DCM.

**By Dr. Kristin Baird**

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**“ *My dog is eating a grain free/boutique/exotic ingredient diet – what should I do?* ”**

While it remains unclear exactly what dietary factors are contributing to DCM, the consumption of 'BEG' diets does appear to be a common denominator in the vast majority of affected dogs. Although not every dog that consumes these very popular diets will develop DCM, enough cases have been identified over the last 12 months to warrant both caution and concern.

## **Consider an echocardiogram**

In an ideal world, every dog that has consumed a 'BEG' diet for a decent period of time would have an echocardiogram to screen for DCM. This requires consultation with a veterinary cardiologist however, and may not be feasible or affordable for all dog owners

## **Reconsider your dog's diet**

Consider changing your dog's diet to a diet containing more typical ingredients, and that has been extensively researched and tested by board certified nutritionists. Your veterinarian is an excellent resource for helping you choose a safer alternative

## **If you have been feeding your dog a 'BEG' diet, monitor for early signs of heart disease**

weakness, slowing down, decreased ability to exercise, shortness of breath, coughing or fainting may be seen.

If any of these signs are noticed, your veterinarian will want to listen for a heart murmur or arrhythmia, or may recommend chest x-rays, bloodwork, an EKG, or referral to a cardiologist

Keep in mind however, that many dogs with DCM show NO clinical signs until the disease is severe, so a normal physical examination or chest x-rays will not rule out DCM

# How do I choose a new food?

Because the exact mechanism of Nutritional DCM is unknown, it's difficult to know exactly what diets are 'safest'. Cardiologists and nutritionists are currently recommending sticking with diets that meet WSAVA (World Small Animal Veterinary Association) guidelines.

WSAVA doesn't recommend specific diets per se, but instead provides recommendations on the information you should obtain

from your chosen pet food company to ensure a properly balanced, appropriately tested and researched, and safely produced and manufactured food for your dog.

If your pet food company cannot or will not provide answers to these particular questions, you should be very cautious about feeding their food.



WSAVA guidelines can be found at <https://www.wsava.org/wsava/media/arpita-and-emma-editorial/selecting-the-best-food-for-your-pet.pdf>.

Good Sources of Information Regarding Nutritionally Mediated DCM and Diet Choice

- [taurinedcm.org](http://taurinedcm.org)
- <https://vetnutrition.tufts.edu/>

## Common Pet Food Myths

### Grain Free is better!

- This is a commonly believed myth that has no scientific basis! Allergies to grains are **very** uncommon, accounting for less than 1% of food allergies in dogs.
- Marketing ploys have convinced well-meaning dog owners to think that their dogs are basically 'domesticated wolves' and can't tolerate grain. The fact is that over the thousands of years of the domestication of dogs, they evolved from a primarily carnivorous diet to foods rich in starch. Studies show that digestibility (which directly provides nutrient availability) of starches such as corn, barley, potato and rice is greater than 99% in dogs!

### Exotic ingredients are more natural and healthier than typical ingredients!

- Another common marketing ploy
- There is no evidence to suggest that bison, kangaroo or venison are healthier or more bioavailable than chicken, beef, or pork
- Unless your dog has a food allergy (which is much rarer than marketing campaigns will have you believe!), there is no reason to feed your pet exotic ingredients

### By products are bad!

- The exact definition of a by-product is a product made in the manufacture of something else
- If we discarded all of the 'by-products' made in the production of our own food, we would be losing out on some of the most nutrient dense ingredients contained in our pet's food
- Most of the by-products used in pet foods are organ meat, such as heart, liver, and kidney (which also happen to be excellent sources of taurine!)

Bottom line.....Pet owners should ask themselves if they're buying the food because it sounds good to them, or whether it is a good food because of veterinary research and evidence!

While WSAVA doesn't recommend specific diets, they do provide a list of questions that your pet food company should be able to answer in full. To date, the only pet food companies that can confidently meet all of these standards are **Purina, Science Diet, Royal Canin, and Eukanuba**. In addition, none of the currently identified cases of nutritional DCM have reported feeding diets from any of these companies.