The Great Grain Diet Debate

“Gluten-free”, “Sugar-free”, “Dairy-free.” These labels are commonly seen in your local woolies as healthy and natural alternatives for us human consumers. With the focus on healthy eating at an all-time high it is no surprise that this trend has made its way into the pet food aisle as well. Grain-free diets have become increasingly popular over recent years. This article will break down a few of the common misconceptions and help you gain insight into the best and healthiest diet for your pet.

What is a grain-free diet?

A grain-free diet is where grains (ie. corn, rice, barley, oats, wheat, etc) have been substituted with other carbohydrates such as potatoes or legumes (peas, lentils, etc.)

Owners often switch their pet to a grain free diet due to a suspected allergy. This a common misconception as studies have shown that less than 1% of dogs and cats have food allergies, and the majority of those that do are allergic to animal **proteins** such as beef, rather than grains.

Does my pet need grains?

Grains tend to get a bad reputation. They are often viewed as ‘fillers’ in pet food, which implies they provide no nutritional value, when in fact grains are an important source of energy and nutrients for both dogs and cats. Grains provide our pets with essential amino acids, fatty acids, vitamins, and minerals. Grains are also a great source of fiber which can help support your pet’s digestive health and nourish the good bacteria living in their intestinal tract.
We often hear cat owners say, ‘cats are carnivores, they just need protein.’ Cats are obligate carnivores and therefore require more protein than dogs, however they can still use carbohydrates as a source of nutrients. There are many studies which demonstrate that cats are capable of digesting properly cooked and processed grains.

Recent studies

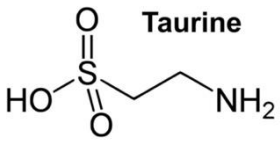
Currently, the link between grain-free diets and a heart condition known as DCM is being investigated by the FDA and preliminary data have been published.

What is dilated cardiomyopathy (DCM)?

Dilated cardiomyopathy (DCM) is a condition of the heart where the heart becomes enlarged and weakened. It is the second most common acquired cardiac disease diagnosed in dogs. DCM is be caused by a variety of factors with the primary causes being genetic (Doberman Pinschers, Boxers, Great Danes, among others) and taurine deficiency (American Cocker Spaniels, Golden Retrievers, Newfoundlands, St. Bernards, Labradors). Recently, diet-associated DCM has been recognized.

Diet-associated DCM is DCM that has developed secondary to a grain-free or exotic ingredient diet. Currently, the link between grain-free diets and DCM is being investigated by the FDA and preliminary data have been published.

What is taurine?



Taurine is an amino sulfonic acid that is essential for proper heart function. In dogs, taurine can be created by the metabolism of methionine and cysteine, which are typically obtained from meat protein sources. Taurine deficiency is a lack of taurine. This can be due to inadequate supply of the precursors (methionine and cystine), reduced bioavailability of taurine or the precursors, elevated fibre content, increased urinary loss of taurine, or altered metabolism at the intestine level.

You may be thinking can I just supplement taurine and continue a grain-free diet?

At the moment, we would not recommend supplementing grain-free diets with taurine as a substitute. This link to heart disease may be a result of a lack of taurine but could also be that some ingredients block taurine metabolism.

Therefore, there could be adequate taurine levels in the body, but the access to this supply of taurine could be restricted due to certain dietary factors.

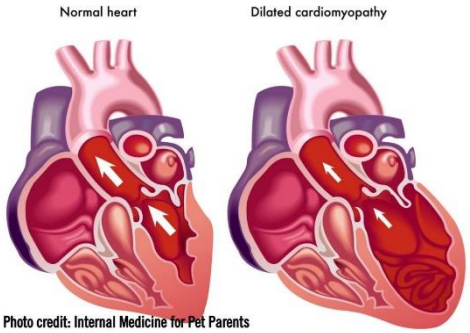


Photo credit: Internal Medicine for Pet Parents

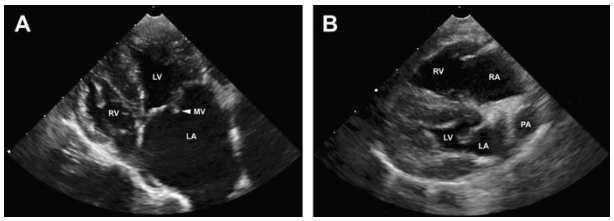
What do we currently know about diet-associated dilated cardiomyopathy?

The FDA began investigating cases of diet-associated DCM in July 2018, and since then have had over 500 reports of suspect diet-associated DCM in dogs.

At this time, the specific cause is still unknown but is likely to be multifactorial. We have seen dogs that have been on grain-free diets their entire lives without any echocardiographic evidence of DCM. There are also dogs of the same household that have developed DCM after being placed on the diet. It is likely that both have a genetic predisposition in addition to prolonged feeding of the diet to result in DCM.

What do you do if your dog is on a grain-free diet?

Be sure to watch for early signs of heart disease: Weakness, slowing down, less able to exercise, shortness of breath, coughing, or fainting. If you notice any of these signs be sure to have your pet checked by one of our vets at Vet HQ who will listen for a heart murmur or abnormal heart rhythm (although not all dogs with DCM have any changes that can be heard with a stethoscope).



We may recommend some additional testing such as xrays, blood tests or an echocardiogram.

An **echocardiogram** is an ultrasound of the heart and is the **BEST** test to diagnose DCM.

How do you know if you are feeding a high-quality food to your pet?

Like humans browsing the aisles of woolies, dogs can have their own unique nutritional needs. When choosing the right dog or cat food for your pet make sure to talk with your vet and do your research! We are here to help you find the right food for your furry friend!

Dr Ashley Harrison