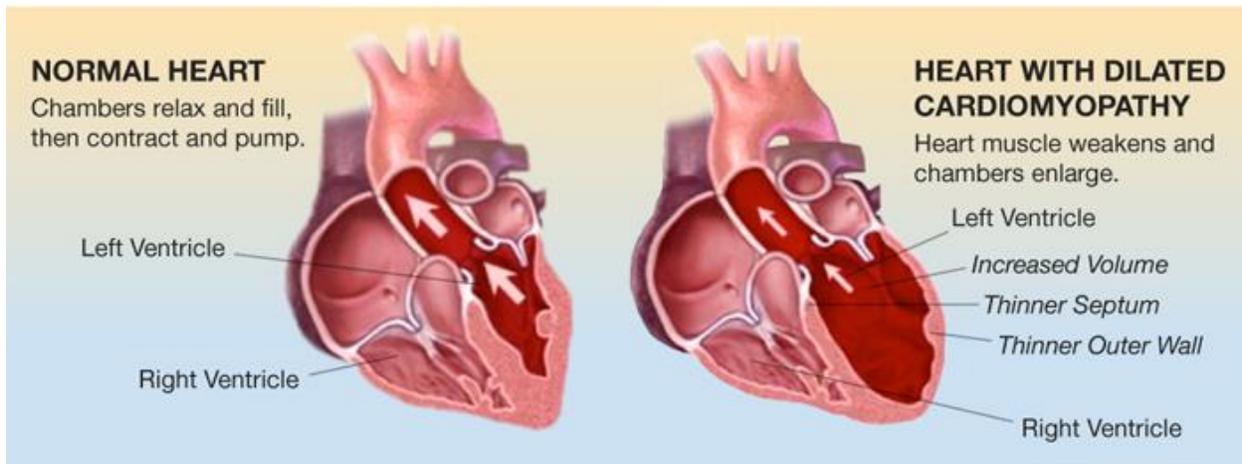




# LOTUS<sup>®</sup>

## Grain-Free Recipes and Canine Dilated Cardiomyopathy



There has been quite a bit of concern about a possible correlation between grain-free diets for dogs and canine dilated cardiomyopathy.

The first topic that should be addressed is that the heart issue is likely caused by a food having a high percentage (over 30%) of legume seeds (peas, chick peas, lentils), not that a food is grain-free or that a diet has potato (potatoes are not legumes).

A diet high in legume seeds can block the absorption of amino acids which could result in a taurine deficiency. The other factor is most likely a lower percentage of fresh meats and or organ meats that supply the amino acids methionine and cysteine. The fact that some grain-free diets may be high in legume seeds and low in fresh meat is what could be causing the cases of canine dilated cardiomyopathy in dogs.





## What Makes Lotus Better

3 of our 4 grain-free formulas keep the legume seed content around 20% or lower. The Lamb has a legume content that is in the high 20% but it also has a high fresh meat content of 38% with no rendered protein meals, so the amino availability is very high.

We use a lot fresh meat, up to 40%! Fresh meat amino acids are more bio-available than the amino acids from protein meals. Our Lotus Oven-Baked Grain-Free Lamb, Lotus Oven-Baked Grain-Free Sardine and Herring, and our Lotus Oven-Baked Grain-Free Turkey all use fresh meat only (no rendered proteins).



Our dog foods are oven-baked which means the amino acids in the meat don't get denatured like they would in an extruded food.

Typically, extruded kibble loses about 20% of the bio availability of the amino in the food. In third party testing of amino acids, Lotus showed that there was very little, to no loss of most of the amino acids during baking - 90% to 100% retention.

Our tests showed that Lotus is meeting the required amount for Methionine-cystine at .70% for growth and reproduction even after baking. These are the two amino acid building blocks that will produce the taurine the dog needs.





# LOTUS



## GRAIN-FREE RECIPES & GOOD GRAIN RECIPES



### Grain-free recipes and Canine Dilated Cardiomyopathy

**NORMAL HEART**

Chambers relax and fill then contract and pump.

VS.

**DILATED CARDIOMYOPATHY**

Heart muscle weakens and chambers enlarge.

There has been quite a bit of concern about a possible correlation between grain-free diets for dogs and canine dilated cardiomyopathy.

The first topic that should be addressed is that the heart issue is likely caused by food having high percentage (30%-40%) of legume seeds (peas, chickpeas, lentils) in the food.



A diet high in legume seeds can block the absorption of amino acids and the reabsorption of taurine in the bloodstream.

### What makes Lotus Better



3 out of our 4

diets grain-free foods have been formulated to keep legume seed content at levels around 20% or lower.



Lamb Recipe



The lamb has a legume content that is 22%.



but it also has a fresh meat content or 38%



with **no rendered protein** meals so the amino acid availability is very high.



We use a lot of fresh meat, up to 40%. Fresh meat amino acids are more bioavailable than the amino acids from protein meals. Our Lotus Oven-Baked Grain-Free Lamb, Lotus Oven-Baked Grain-Free Sardine & Herring, and our Lotus Oven-Baked Grain-Free Turkey all use fresh meat only (no rendered proteins).



**Up to 40% Fresh Meat**



Oven Baked

**90% - 100%** Retention of Amino Acid

VS.



Extruded

**20% Loss** of Amino Acid

### Oven-baked options with good-grains

