

Grain-Free Food and Cardiac Diseases in Dogs?

The Food and Drug Administration released a statement in July 2018 indicating it was investigating a possible connection between grain-free diets and dilated cardiomyopathy (DCM), a type of canine heart disease - specifically if taurine deficiency contributes to the development of this illness.

No research has been conducted yet to determine if grain-free diets cause heart disease in dogs.

Dr. Dodds of Hemopet Labs compiled a list of previous studies conducted on the possible dietary causes of DCM:

- ♥ **Plasma and whole blood taurine in normal dogs of varying size fed commercially prepared food** (Delaney et al., 2003): mean whole blood taurine concentrations were lower in dogs fed diets containing whole grain rice, rice bran or barley, and lamb/lamb meal and rice diets
- ♥ **Taurine deficiency in Newfoundlands fed commercially available complete and balanced diets** (Backus et al., 2003): results indicate a high prevalence of taurine deficiency among an environmentally and genetically related group
- ♥ **Low plasma taurine concentration in Newfoundland dogs is associated with low plasma methionine and cysteine concentrations** (Backus et al., 2006): authors noted that taurine deficiency is suggested to result from reduced sulfur amino acid bioavailability in ingredients like rendered meat
- ♥ **Dietary beet pulp decreases taurine status in dogs fed low protein diet** (Ko and Fascetti, 2016): rather than rice, beet pulp showed the most significant effect in lowering taurine concentrations

What is Taurine?

Taurine is an amino acid often present in animal protein (muscle and organ meat).

Cats require taurine supplementation in their food.

Supplementation is not needed for dogs; the canine body can synthesize it from other amino acids like cysteine and methionine.

Taurine is present in dog food but it is not listed on the label since there are no minimum standards established by the Association of American Feed Control Officers.

So what does it all mean?

The consumption of grain-free food is more popular and there has been a presumed uptick in DCM cases, but these two things are not necessarily connected. If you are concerned, your veterinarian can take a whole blood sample to measure dogs' methionine, cysteine and taurine levels.

The FDA is not dismissing this research and specifically stated, "The underlying cause of DCM is not truly known, but is thought to have a genetic component." They also did not issue a recommendation that pet owners should stop feeding grain-free foods.