Dilated Cardiomyopathy and Diet in Dogs

By Leilani Alvarez, DVM, DACVSMR, CVA, CCRT, CVCHM, Joseph Wakshlag, DVM, PhD, DACVN, DACVSMR and Lucy Postins, BA (Hons), Founder & Chief Integrity Officer, The Honest Kitchen, Inc.

July 6, 2019

This article is intended to assist consumers, retailers and veterinarians in making appropriate choices about the foods they feed their dogs and provide important information based on valid evidence, regarding Dilated Cardiomyopathy (DCM) in dogs. If you have any concerns that your dog has DCM, have him or her evaluated by a board-certified veterinary cardiologist.

In 2018, the FDA issued a statement to the public, announcing that it was investigating whether or not certain grain-free diets are linked with Dilated Cardiomyopathy (DCM) in dogs. In June 2019, an update was published with research to-date, and the investigation is ongoing. As a responsible and proactive pet food company, we intend to provide up-to-date and reliable information based on scientific research and consultation with experts in veterinary nutrition. We believe it is best to obtain information from reliable sources.

Dilated Cardiomyopathy is a disorder of the heart muscle in which the heart becomes enlarged, the major chambers dilate, and the heart does not function properly. Certain breeds of dogs are genetically predisposed to develop DCM, including Doberman Pinschers, Great Danes, Irish Wolfhounds, Portuguese Water Dogs, Boxers and Cocker Spaniels. More recent publications and research suggest that Golden Retrievers may have an impaired ability to process taurine, which could lead to taurine-deficient DCM.

In normal dogs, taurine is synthesized in the body from other amino acids found in the proteins typically consumed in the diet (namely, the sulfur-containing amino acids cysteine and methionine); therefore, taurine itself is not known to be a required nutrient. Natural sources of protein that are rich in these sulfur-containing amino acids include beef, turkey, chicken, fish and eggs, which also contain variable amounts of taurine. These are all common ingredients in The Honest Kitchen diets. Cats, unlike dogs, are not able to make their own taurine in high enough quantities and must have it supplemented in their diet. Unlike people, both cats and dogs will conjugate this taurine to bile acids. These bile acids become the bile fluid that is stored in the gallbladder and is used by the body to digest fats, and during the digestion process, this taurine will then be reabsorbed back into the body for re-use or the taurine can be degraded by microbes in the GI tract.

In order to avoid dietary-related taurine deficiency in dogs, it is important to ensure the primary protein source in the diet is rich in cysteine and methionine, so adequate taurine synthesis can occur. Golden Retrievers may have an impaired ability to synthesize taurine in their bodies or altered transport into the heart muscle, which means they may require taurine to be supplied in their diets (like cats). Many dogs with DCM have completely normal blood taurine levels, and conversely, many dogs with low taurine have no signs...
of DCM at all. More confusing is that there have been occasional cases of dogs with normal blood taurine and DCM that improved with taurine treatment, suggesting a very complex problem that is not entirely clear.

The FDA has not stated grain-free diets are the cause of DCM or heart disease in dogs. Thus far, the FDA has not distinguished differences in nutrients (e.g. protein, fat, fiber, cysteine, methionine, or taurine) between grain-inclusive or grain-free diets. The FDA has found that dogs have developed DCM when eating both grain-free and grain-inclusive diets, particularly rice-based products. Foods with and without various ingredients—ranging from Kangaroo to Lamb & Rice—have been fed to the pets that developed DCM as listed in the FDA’s report and therefore it is impossible at this stage to draw any conclusions about what types of foods are best suited to dogs who may be prone to DCM.

While there are a high number of grain-free diets implicated in the research to date, there appears to be a high correlation, but no causation. It is likely that DCM in these dogs is a multifactorial problem which may be related to a change in the bacterial flora of their gut which can degrade taurine, protein sources, manufacturing processes and/or ash content in the diet leading to altered bioavailability of important amino acids and/or taurine availability and reabsorption.

The Honest Kitchen foods include taurine as part of their nutritional guaranteed analysis, based on natural taurine from the meat sources as well as an added human grade taurine supplement. Additionally, all Honest Kitchen canine diets are rich in natural sources of cysteine and methionine and neither potatoes nor legumes constitute a large portion of the diet.

It is currently accepted by various veterinary experts, including the authors, that both cooked potatoes and legumes are safe, healthy nutritious ingredients when used in moderation (just as with any ingredient).

How to Make Sensible Food Choices for Your Dog

– Firstly, every pet is an individual and should be fed accordingly. Some dogs do very well on grains and others do not. Food sensitivities and tolerances vary between animals. It is best to follow a reputable veterinarian’s recommendation on your pet’s diet rather than on inconclusive or incomplete data. As yet, no conclusions have been drawn by the FDA about specific ingredients that should be avoided. Dogs with DCM as listed by the FDA, have been eating a very broad array of diets both with and without grains, legumes and potatoes, as well as varying protein sources, and other ingredients. Therefore, it is currently not possible to say with certainty what, if any, ingredients should be fed or avoided.

– Choose a food that contains plenty of animal-based protein such as meat, fish and eggs as the top ingredients. This is true for all complete & balanced Honest Kitchen dehydrated diets and Whole Food Clusters (the dehydrated base mixes do not contain meat because they are designed to be mixed with a separate source of protein).

– Choose pet foods that do not rely on legumes as their primary source of protein and that use a moderate percentage in the overall formula. The majority of protein in all Honest Kitchen recipes (approximately 71% in canine diets and more than 80% in feline diets) is from animal-based sources. When legumes are used in Honest Kitchen formulas, they are always in whole food form, and never add up to more than the total percentage of meat.

– Owners of breeds prone to DCM should consult with their veterinarian and/or board-certified veterinary cardiologist for feeding and supplementation needs.

If you have further questions, please contact us at questions@thehonestkitchen.com or 1.866.437.9729.
Authors

Leilani Alvarez, DVM, DACVSMR, CVA, CCRT, CVCHM
Dr. Leilani Alvarez is the Director of the Tina Santi Flaherty Rehabilitation & Fitness Service and head of the Integrative and Rehabilitative Medicine Department at the renowned Animal Medical Center in New York City. She is an integrative veterinarian, utilizing both conventional and holistic modalities. She is board certified in veterinary sports medicine and rehabilitation and leads one of only 5 traditional residency programs nationwide in canine sports medicine and physical rehabilitation. She is the 2017 recipient of the prestigious John Sherman Award for Excellence in Veterinary Rehabilitation.

Joseph Wakshlag, DVM, PhD, DACVN, DACVSMR
Dr. Joe Wakshlag received his DVM from Cornell in 1998 and became boarded in Veterinary Clinical Nutrition in 2008. He completed a doctorate degree in Pharmacology in 2005. He is a charter member of the American College of Sports Medicine and Rehabilitation. He served as Associate Professor of Sports Medicine, Rehabilitation and Clinical Nutrition at the College of Veterinary Medicine, Cornell University, between 2013 and 2018. His research interests include obesity management and nutritional intervention for the canine athlete. Dr. Wakshlag is an Associate Professor of Integrative Medicine and Nutrition at the University of Florida.

Lucy Postins, BA (Hons), Founder & Chief Integrity Officer, The Honest Kitchen, Inc.
Lucy Postins is the Founder and Chief Integrity Officer of The Honest Kitchen, where she helps define the company’s future direction, safeguards its long-term sustainability efforts and ensures it follows its core values as the business continues to grow and evolve. With almost two decades of experience as a companion animal nutritionist, Lucy is passionate about advanced nutrition and holistic health, including complementary therapies like Ayurveda, Traditional Chinese Veterinary Medicine, Herbalism and Homeopathy.

About The Honest Kitchen
The Honest Kitchen produces a line of Human Grade food, treats and supplements for pets made with love in a human food facility (not in a pet food plant) to ensure the highest possible quality standards. The private company was founded by Lucy and Charlie Postins in 2002, and is based in San Diego, CA. The company employs over 50 people, 31 dogs and 6 cats. The Honest Kitchen’s products are developed with uncompromising attention to detail by a company of pet lovers with a passion for food.

Disclaimer
This document is for informational purposes only and is not a substitute for expert veterinary care.