

## New Pet Food Recall, This One Is Critical

Stop feeding these brands immediately due to dangerously high levels of this compound. Can cause renal dysfunction and death, and the first 72 hours are crucial to save your pet's life. If you feed commercial food, you must be familiar with these 12 telltale symptoms of toxicosis.

**Analysis by Dr. Karen Shaw Becker**

### STORY AT-A-GLANCE

- Recently, certain brands of dry dog food have been recalled for excessive levels of vitamin D
- Vitamin D toxicosis is a potentially life-threatening emergency that requires immediate veterinary intervention
- Pets can also be deficient in vitamin D, however, this is a less common scenario and usually occurs when they are fed a homemade, unbalanced diet
- The best way to know if your dog or cat is getting enough, but not too much vitamin D is with a blood test

***Editor's Note: This article is a reprint. It was originally published December 14, 2018.***

As the headline in a recent issue of the Whole Dog Journal states, "Some Dog Food Recalls Are More Critical Than Others; This One Is Critical."<sup>1</sup>

### Dry Dog Food Recalled for Dangerously High Levels of Vitamin D

The WDJ is referencing a recall for elevated levels of vitamin D in Nutrisca brand dry dog food, specifically:<sup>2</sup>

- 4 lb. bags of Nutrisca Chicken and Chickpea Dry Dog Food; Bag UPC: 8-84244-12495-7
- 15 lb. bags of Nutrisca Chicken and Chickpea Dry Dog Food; Bag UPC: 8-84244-12795-8
- 28 lb. bags of Nutrisca Chicken and Chickpea Dry Dog Food; Bag UPC: 8-84244-12895-5

The bags show a "best by" date (on the back or bottom of each bag) of February 25, 2020 through September 13, 2020. Apparently, Nutrisca became aware of the vitamin D problem after receiving complaints from three consumers whose pets developed vitamin D toxicity after eating the **kibble**.

The excessive amounts of vitamin D were traced to a formulation error. Unfortunately, based on the number of pet food recalls for excessive amounts of vitamin D, these errors occur all too frequently. In addition to the Nutrisca products, Whole Dog Journal also notes a recall by Natural Life Pet Products of one of their kibble formulas due to dangerously high levels of vitamin D.

The recall was for 17.5 lb. bags of Chicken and Potato dry dog food, bag UPC: 0-12344-08175-1, which were sent to retail outlets in 8 states: Alabama, California, Georgia, Florida, North Carolina, South Carolina, Tennessee and Virginia.<sup>3</sup> Per the FDA recall announcement for both brands:

*"Consumers should stop feeding the product listed above. Dogs ingesting elevated levels of Vitamin D may exhibit symptoms such as vomiting, loss of appetite, increased thirst, increased urination, excessive drooling, and weight loss. Vitamin D when consumed at very high levels can lead to serious health issues in dogs including renal dysfunction. Consumers with dogs who have consumed the product listed above and are exhibiting these symptoms, should contact their veterinarian.*

*Consumers who have purchased the product affected by this recall should dispose of it or return it to the place of purchase for a full refund."*

Nutrisca and Natural Life Pet Products contact information: Phone (888) 279-9420 from 8 A.M. to 5 P.M. Central Standard time, Monday through Friday, or by email at [consumerservices@nutrisca.com](mailto:consumerservices@nutrisca.com) for more information.

## **Vitamin D Toxicosis (Hypervitaminosis D)**

Vitamin D is a fat-soluble vitamin. Your pet's body absorbs it in the same way dietary fats are absorbed, and excess amounts are stored in the liver. Vitamin D toxicity is a very serious and potentially life-threatening emergency that requires immediate veterinary intervention. After accidental ingestion of a compound containing vitamin D, the first 72 hours are crucial in saving the animal's life. Symptoms of toxicity can include:

- Excessive drooling
- Abdominal pain
- Vomiting (sometimes with blood)
- Dark tarry feces
- Loss of appetite
- Weight loss
- Increased thirst and urination
- Constipation
- Weakness
- Muscle tremors
- Depression
- Seizures

Avenues of intoxication not pet food-related include the ingestion of rodent bait and commercial skin creams containing high levels of vitamin D. In addition, dogs and cats can also ingest too much when well-intentioned owners supplement diets with sufficient amounts of D with even more, in the form of tablet, pill or liquid D supplements or multivitamins containing vitamin D.

## Vitamin D Deficiency in Pets

Vitamin D deficiency has been linked to many diseases in humans. In recent years, studies have also shown links between low levels of vitamin D and a number of diseases in cats and dogs, including congestive heart failure, neoplasia, kidney disease, infectious illnesses, IBD and feline oral resorptive lesions (FORL).<sup>4</sup>

A study from Cornell University's College of Veterinary Medicine determined that vitamin D may play a role in congestive heart failure (CHF) in dogs similar to the part it plays in human heart disease.<sup>5</sup> The Cornell researchers compared blood levels of vitamin D in dogs with CHF and healthy dogs.

The dogs with CHF had lower blood levels of vitamin D than the healthy dogs. In addition, as with humans, low blood levels of vitamin D were linked to poor survival rates in the dogs.

In another study, researchers at the University of Edinburgh's Royal (Dick) School of Veterinary Studies in the U.K. evaluated blood samples from 99 cats admitted to the University's Small Animal Hospital with life-threatening conditions.<sup>6</sup> Among the values checked was the level of vitamin D at the time of admission.

The researchers discovered that cats with significantly higher levels of vitamin D in their blood had better survival rates 30 days after admission than cats with lower levels.

In my experience, the most common reason for low vitamin D levels in pets is from well-intentioned pet parents feeding a nutritionally unbalanced homemade diet. When people guess at nutritional adequacy (and don't follow a recipe that has been analyzed to be nutritionally complete), the end result is often nutritional deficiencies, including low vitamin D.

## How to Ensure Your Pet Is Getting Enough, but Not Too Much Vitamin D

The animal research and veterinary communities still have much to learn about optimal blood levels of vitamin D in dogs and cats and how best to achieve them. An important study published in 2014 established optimal ranges for vitamin D in dogs at 100 to 120 ng/mL;<sup>7</sup> however, a range has yet to be established specifically for cats, so we're currently using the 100 to 120 ng/mL for both.

We also haven't yet figured out how to quickly raise serum 25(OH)D levels in pets, since supplementing at high levels doesn't seem to do the trick (and it could be dangerous).<sup>8</sup> Most commercial pet food formulas contain at least the Association of American Feed Control Officials (AAFCO) minimum recommended amount of vitamin D, through amounts found in pet food ingredients plus the addition of a vitamin D supplement.

There has been some controversy over how well synthetic vitamin D is absorbed and utilized by the body, as well as how the body reacts and responds to synthetic nutrients, in general. But for pet food to be labeled as nutritionally complete and balanced, most manufacturers add a synthetic form of vitamin D.

If you prepare a homemade diet, food sources of vitamin D include halibut, salmon and other fish (sardines), as well as cod liver oil (also high in vitamin A). Cheese, yogurt or kefir, liver, and free-range eggs contain small amounts of vitamin D, but not enough.

Contrary to popular belief, none of these food sources contain enough vitamin D to meet minimum nutrient requirements for most carnivores. Mushrooms also contain vitamin D<sub>2</sub>, and when exposed to UV light can provide some additional vitamin D to your pet's diet (but again, not enough to meet minimum nutrient requirements).

In addition, dogs and cats can't derive adequate levels of D from exposure to sunshine, unlike some other mammals. Because it can be challenging to meet optimal vitamin D levels for immune health, supplementation may be unavoidable in a D-deficient diet (which most homemade diets are). I don't recommend additional vitamin D supplementation above and beyond feeding a balanced diet, unless blood tests show your pet is deficient.

So to summarize this confusing topic, commercial diets can run the risk of containing excessive levels of D, and if you feed a commercial diet you should be familiar with the symptoms of toxicosis. Homemade diets may be vitamin D-deficient, and each animal's ability to absorb and utilize the vitamin D in any diet is variable. If you want to make sure your pet has optimal levels of this important hormone-vitamin, ask your veterinarian to check blood levels at your next visit.

## Sources and References

[PetfoodIndustry.com](#) November 5, 2018

<sup>1</sup> [Whole Dog Journal](#), November 8, 2018

<sup>2,3</sup> [FDA.gov](#), UCM 625015, November 2, 2018

<sup>4</sup> [IVC Journal](#), June 16, 2015

<sup>5</sup> [Kraus, MS et al, "Relation of vitamin D status to congestive heart failure and cardiovascular events in dogs", \*Journal of Veterinary Internal Medicine\*](#)

<sup>6</sup> [PLoS ONE](#), May 13, 2015

<sup>7</sup> [Veterinary and Comparative Oncology](#), 8 July 2014

<sup>8</sup> [Vitamin D Council](#), November 29, 2016

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