

# Veterinary Connections



News about Animal Health, Food Safety, and One Health  
Army Public Health Center

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## BEG Diets and Your Dog: What's the Big Deal?

> Content contributed by MAJ Danielle Tulloss, DVM, DIMA – Arizona Branch Veterinary Services, Public Health Activity - Fort Hood

Dog owners always want what's best for their four-legged furry friend, especially when it comes to what type of food to provide for them. A variety of sources promote information on what's considered the best dog food out there to include the internet, pet stores, and pet food companies themselves. Unfortunately this information may not always be scientifically sound and can make it more challenging for owners to make informed decisions. Marketers have successfully convinced many well-meaning dog owners that newer boutique, exotic-ingredient, and grain-free (BEG) brands of pet foods are superior to other mainstream food producers that have been safely making pet foods for decades. Companies may use words or phrases such as, "holistic" and "biologically appropriate" to convey that their foods are superior, yet these phrases don't always have approval for use by the U.S. Food and Drug Administration (FDA).

Since 2018, scientific evidence has increased awareness about the potential health risks to pets fed BEG diets. The FDA recently published several articles and a recent report discussing what is known between the association of BEG diets and a type of nutritional mediated dilated cardiomyopathy (nm-DCM). DCM is a type of heart disease in which the heart enlarges and no longer functions properly; this can lead to heart failure and death. Veterinarians now are seeing breeds of dogs not typically known to naturally develop DCM be affected by this condition.

The FDA report, published June 2019, includes information about more than one dozen dog food brands that have been associated with DCM in dogs. More than 90% of the diets studied by the FDA associated with reported cases of nm-DCM contained peas and/or lentils and a smaller proportion contained potatoes or sweet potatoes. Ninety percent of the diets were labeled "grain-free". Right now an exact cause for why some dogs fed BEG diets have developed nm-DCM has not been identified, but it is thought the relationship between the two has many factors involved. Further research is being done to explain better why these diets have resulted in nm-DCM cases. Many cases are reversible, meaning once the dog is switched to a non-BEG diet, their heart begins to heal and can sometimes even return to normal function.

### What should I do with this new information?

Owners should consult with their veterinarian to determine the best diet for their dog, particularly if they are currently being fed a BEG diet. Different dog breeds and life stages have different nutritional needs to consider. Veterinarians may also recommend a prescription diet if a dog has been diagnosed with a health condition that may benefit from a specially formulated diet.

If owners want to do their own research prior to speaking with their veterinarian, the FDA has published an online article called: "Questions & Answers: FDA Center for Veterinary Medicine's Investigation into a Possible Connection Between Diet and Canine Heart Disease" (<https://www.fda.gov/animal-veterinary/animal-health-literacy/questions-answers-fda-center-veterinary-medicines-investigation-possible-connection-between-diet-and>).



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## BEG Diets and Your Dog: What's the Big Deal?

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This article addresses some of the frequently asked questions raised by pet owners and veterinarians. This can be used as a resource to make a list of questions and topics before a visit to discuss with the veterinarian. Self-education about dog diets is best complemented by following up with a veterinarian office visit to answer the questions owners may have.

### How do I make an informed decision about the best diet to feed my pet?

The World Small Animal Veterinary Association (WSAVA) is a professionally recognized organization that develops collaborative veterinary guidelines based on scientific evidence and has an international standard for pet nutrition. In addition, the Association of American Feed Control Officials [AAFCO] establishes standards for the nutritional adequacy of pet food; WSAVA uses these standards to make their recommendations. WSAVA provides recommendations to owners with a set list of questions and criteria to use when examining a particular pet food company or diet. Owners can find the document, "WSAVA Global Nutrition Committee: Recommendations on Selecting Pet Foods" (<https://www.wsava.org/WSAVA/media/Documents/Committee%20Resources/Global%20Nutrition%20Committee/English/Selecting-the-Best-Food-for-your-Pet.pdf>) online to review

the recommendations. Many veterinarians recommend feeding a diet manufactured by a company that meets the WSAVA Guidelines. Brands that meet the WSAVA guidelines have not been identified as causing nm-DCM.



Food selection can be daunting, but working closely with a veterinarian to determine which diet is best to meet the nutritional and medical needs of individual pets can go a long way to ensure a healthy life ahead for them.

#### References:

FDA Investigation into Potential Link between Certain Diets and Canine Dilated Cardiomyopathy. <https://www.fda.gov/animal-veterinary/news-events/fda-investigation-potential-link-between-certain-diets-and-canine-dilated-cardiomyopathy>. Accessed July 27, 2019. Diet-associated dilated cardiomyopathy in dogs: what do we know? <https://doi.org/10.2460/javma.253.11.1390>. Accessed July 27, 2019. Vet-LIRN Update on Investigation into Dilated Cardiomyopathy. <https://www.fda.gov/animal-veterinary/science-research/vet-lirn-update-investigation-dilated-cardiomyopathy>. Accessed July 27, 2019. World Small Animal Veterinary Association Nutritional Assessment Guidelines. <https://www.wsava.org/WSAVA/media/Documents/Guidelines/WSAVA-Global-Nutritional-Assessment-Guidelines-2011-final.pdf>. Accessed July 27, 2019.

## Rodenticides— What are they? And what do you need to know to keep your pet safe?

> Content contributed by CPT Mary Pico, DVM, OIC, Public Health Activity-Ft. Lewis, Fairchild Section

Rodenticides are pesticides, specifically designed to kill small mammals; when used appropriately, they are generally consumed by and kill rodents such as rats and mice. Rodenticides are often made of highly appetizing baits to entice rodents to eat them. Unfortunately, pets often find these baits appetizing as well and can eat them out of bait stations or chew up a box of bait refills. Pets can also be exposed secondarily by eating a poisoned rodent.

Rodenticide poisoning consistently ranks in the top five most frequent calls to the Pet Poison Helpline. There are a variety of types and formulations of rodenticides available to the public. Toxicity from any type of rodenticide can cause varying signs and severity of illness if consumed by your pet. **One thing remains constant, regardless of which type is involved—the earlier you seek veterinary care the better!** This can mean the difference between a pet going home after one day or a lengthy hospital stay and long-term side effects. Sadly, some cases are so severe that the pet does not make it even after receiving veterinary care.

### What can you do to keep your pets safe?

**Prevent ingestion!!** If you have rodenticides around your home, protect bait stations from easy access, keep additional bait out of reach, and pick up dead rodents as soon as possible. If your pet still manages to access the bait either at home or elsewhere [because let's face it, pets are clever at getting into trouble!] there a few steps you should take.



### Oh no! I think my pet ate rodenticide!

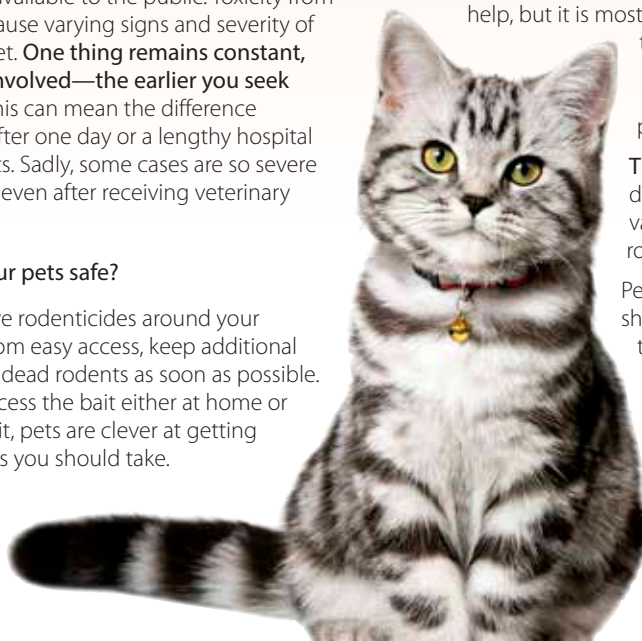
**First: DON'T WAIT.** Call your veterinary office and/or one of the available poison information hotlines (Animal Poison Control, Pet Poison Helpline, etc.) immediately! If it's caught soon enough, your veterinarian can take steps to reduce the amount of toxin that gets into your pet's system and minimize the effects of the rodenticide.

**Second:** Try to figure out what type of rodenticide was involved. The color and physical appearance cannot always be relied on to determine what type of rodenticide was ingested. Knowing the brand name may help, but it is most important to look at the package label to see what the active ingredient is and how much is in each cube, pellet, or tray etc. This allows veterinarians to determine expected signs and an ideal treatment plan.

**Third:** Estimate how much was eaten. The toxic dose, or amount which can cause harmful effects, varies depending on what species ate it, the type of rodenticide, and the weight of the individual pet.

Pets can be masterful at getting a hold of things they shouldn't or get loose and eat inappropriate items they come across without the owner knowing. So sometimes your first clue that they ate rodenticide is the signs of toxicity.

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## Rodenticides— What are they? And what do you need to know to keep your pet safe?

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Asking neighbors if they have rodenticide might reveal the answer, but other times diagnosis and treatment turn into detective work. While your veterinarian can still treat and care for your pet without knowing the cause, these tips can help them provide the best care possible.

### Can I do anything to control rodents around my home without using rodenticides?

Thinking like a rodent can help you consider effective prevention. By looking at your home from the perspective of a small furry animal that needs shelter to hide from its predators, comfy places to sleep or raise young, and an adequate supply of munchies to eat, you can better zero in on some of the possible key points to make its environment less hospitable.

- Be aware that rodents can fit through gaps and holes no bigger than the diameter of a pencil. Be diligent about filling or blocking even these very small access points.
- If food is in a container or bin, securely replace the lid immediately after each use.
- Do not store pet food or other animal feed in unprotected bags where rodents can access them.
- Quickly pick up any food items or scraps that fall to the floor, and keep designated garbage cans or bins as far away from entryways into your home as possible.
- Keep outside areas and inside floors clear of piled items that rodents can use for nesting such wood products, paper, and other sturdy material.
- Monitor for rodents or signs of them, such as droppings, nest material, or gnaw marks along baseboards and walls to monitor the success or failure of your rodent control program.



Rodenticide Reference Chart

Rodenticide Active Ingredient	Type	Signs	Notes
Warfarin	1st generation anticoagulant	Difficulty breathing, pale, coughing, lethargy, less commonly bruising and bleeding gums from blood loss	The first rodenticide produced, requires vitamin K for treatment
Chlorphacinone			
Diphacinone			
Brodifacoum	2nd generation anticoagulant	Difficulty breathing, pale, coughing, lethargy, less commonly bruising and bleeding gums from blood loss	More toxic and longer lasting than 1st generation, requires vitamin K for treatment
Bromadiolone			
Difethialone			
Difenacoum			
Cholicalciferol	Vitamin D poisoning	Decreased or loss of appetite for food, vomiting/diarrhea, weakness, increased drinking/urination	Can cause organs and tissues to mineralize and harden
Bromethalin	Neurotoxin	Brain swelling: paralysis, convulsions	No antidote, supportive care only
Zinc Phosphide	Converted to corrosive Phosphine gas	Vomiting, diarrhea, stomach pain, stumbling, seizures, behavior change	Vomiting can expose others to low levels of phosphine gas

**References:**



Protect your Family, Pets, and Livestock from Rodents and Rodenticides. <https://www.avma.org/public/Health/Pages/RodentsandRodenticideUse.aspx>. Accessed August 22, 2019. Rodenticide Reminder. <https://www.petpoisonhelpline.com/uncategorized/rodenticide-reminder/>. Accessed August 22, 2019

### Goal of Veterinary Connections publication:

- Veterinary Connections is a quarterly publication written by Army Veterinary Service personnel and published by the Army Public Health Center to inform and educate Service members, beneficiaries, and retirees about Animal Health, Food Safety, and One Health.
- One Health refers to the intersection and overlap between animals, humans, and the environment.
- Army Veterinary Service personnel serve around the world supporting the Department of Defense as proponents for Animal Health and Food Protection.

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# Food Recalls: Frequently

## asked questions... Answered!



Whether you keep up to date on the latest news from television, the radio, or your favorite internet or social media site, you've probably seen alerts about different food products being recalled. It seems like someone is always warning you about something that isn't safe in your food or your pets' food. Have you ever wondered "who" recalls food and why? Do you know where to find information about the latest recall? Do you know what to do if you have a recalled food item in your home? Don't fret; we have the answers to all of your burning questions!

### What is a food recall?

A food recall occurs when there is reason to believe that a food may cause the consumer (human or animal) to become ill. A food item may be recalled for a number of reasons including if an item is discovered to contain: a harmful organism such as *Salmonella*; a foreign object such as broken glass, plastic, or metal; or a major allergen that does not appear on the product label.

### Who decides when a recall is necessary?

Recalls are voluntarily started by the manufacturer or distributor of the food item. Depending on the type of food product, the U.S. Department of Agriculture (USDA) (meat, poultry, and processed egg products) or the U.S. Food and Drug Administration (FDA) (all other food products) may recommend a recall to the manufacturer after an inspection of the food facility. If a company refuses to recall the product, the FDA and USDA have the legal authority to seize the products.

### How are unsafe products discovered?

There are multiple ways an unsafe or improperly labeled food item can be identified:

1. The company that manufactures or distributes the product informs the FDA or USDA.
2. Test results received by the FDA or USDA, as part of their regular sampling program, indicate the products are contaminated or mislabeled.
3. During routine inspections, the FDA or USDA discover unsafe or improperly labeled foods.
4. Data from the Centers for Disease Control and Prevention (CDC) or state and local health departments reveal unsafe or mislabeled food, especially when an outbreak of foodborne illness is identified and traced back to a specific food item.

If the FDA or the USDA identify the potential for unsafe or mislabeled food items, the overseeing agency will conduct a preliminary investigation to determine if there is need for a recall.

### How can I find out about food recalls?

Visit FoodSafety.gov (<https://www.foodsafety.gov/recalls-and-outbreaks>); this site provides food safety and food recall information from both the FDA and the USDA. If you prefer to be notified automatically of recall alerts, you can sign up to receive recalls, market withdrawals, and safety alerts directly from the FDA at: <https://www.fda.gov/safety/recalls-market-withdrawals-safety-alerts>. The FDA inspects more than food products, so if you sign up for this notification, you will also receive information about other non-food product recalls. You can sign up for USDA recall alerts by navigating to <https://www.fsis.usda.gov/wps/portal/fsis/topics/recalls-and-public-health-alerts/current-recalls-and-alerts> then clicking on "receive email notification when recalls or public health alerts are issued".

### What should I do when there is a food recall?

The first thing to do is read the recall information and verify whether you have any of the products on-hand. Remember to check your freezer and other places where you might have food stored away (emergency kits, recreational vehicles, bunkers, vacation homes). The recall information will have very specific information to help you identify whether your food product is affected. If you discover you have a recalled food product in your home, don't panic. Do not open or consume the food. The recall announcement will give instructions on what to do with the food.

Now that all of your frequently asked questions about food recalls are answered, you should be prepared to handle any potentially recalled items in your home.

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