

The Carcinogen Hiding in Your Pet's Food

How much of this carcinogenic toxin is in your pet's body right now? Depending on what your pet eats, her levels may be 4 to 12 times higher than those in a human on a per kilogram basis. Find out which type of food has the highest concentrations, and the type with no detectable levels.

Analysis by Dr. Karen Shaw Becker

STORY AT-A-GLANCE

- Recent research into animal exposure to glyphosate (a carcinogen) in pet food shows that dogs and cats have levels 4–12 times higher than those of humans on a per kilogram basis
- The highest concentrations of glyphosate have been found in grain-free kibble, followed by regular kibble, then canned food; dogs fed raw food had no detectable levels of glyphosate in their urine
- Emerging studies of children and adults in the U.S. show a significant reduction in glyphosate levels as the result of eating organic food
- Concerned pet parents can participate in an ongoing study to help determine their animal companion's glyphosate exposure, and the source(s) of exposure
- Steps you can take to protect your furry family member include reducing environmental and dietary exposure to glyphosate, and providing your pet with a detox protocol as often as needed

Much of the scientific research into toxic glyphosate, the chemical found in herbicides such as Monsanto's Roundup, has focused on the effects of environmental exposure on people and animals. Glyphosate has been linked to a long list of diseases in both people and pets, including alterations to **gut bacteria**, oxidative stress, fatty liver disease, kidney toxicity, neurotoxicity, cancer and more.

In Europe, where poison control centers keep track of such things, there have been incidents of acute glyphosate poisoning in pet dogs and cats that led to fatal outcomes in some instances.¹ The direct and high-level exposure in those cases was most often from grass-eating or walking on ground that had been recently sprayed with a glyphosate-containing product.

Glyphosate in Commercial Pet Food

In a 2019 study published in the journal *Science of The Total Environment*, researchers in New York State evaluated concentrations of glyphosate and its derivatives in urine samples from 30 cats and 30 dogs. They found the mean urinary concentration in cats to be 2-fold higher than in dogs. In addition, exposure doses were 2 to 4 orders of magnitude below the current acceptable daily intake for humans.²

In a 2018 study, Cornell University researchers analyzed glyphosate residues in 18 commercial pet foods from 8 manufacturers.³ The study results revealed that:⁴

- Glyphosate was detected in every product (including the one GMO-free product in the group, which had higher levels than several of the other 17)
- The concentration of glyphosate was correlated with crude fiber content, meaning it likely came from a plant product
- The average daily intake of glyphosate from all products combined was estimated at exposure levels 0.68% to 2.5% of that for humans in the U.S. and European Union
- However, the most contaminated products were estimated at exposure levels of 7.3% and 25% above the average daily intake for humans
- Overall, commercial pet foods have so much glyphosate that pet exposure is 4–12 times higher than that of human exposure on a per kilogram basis

A study by the Health Research Institute Laboratories (HRI) of glyphosate levels in dogs and cats included the following results:⁵

- Cats are averaging 8 ppb which is 16 times more than that found in the average of human urine
- Dogs are averaging 15.8 ppb which is 32 times the human average
- Dogs eating **raw food** have virtually no detectable glyphosate
- Dogs eating canned food have the lowest levels
- Dogs fed dry kibble have higher levels than dogs on canned diets
- Dogs eating grain-free kibble have the highest levels of all, likely thanks to ingredients such as oats, pea protein, chickpeas and **lentils** may be a cause
- The researchers have tested crops like oats and legumes, and they deliver the highest glyphosate levels to human consumers

Avoiding Glyphosate in Your Pet's Diet

Recently, the results of a two-part study were published that evaluated the effects of organic diet interventions on glyphosate levels in U.S. children and adults. The study is small in scope, but as my colleague Dr. Jean Dodds points out, it's notable for its simplicity, geography, diversity and thoroughness.⁶ The researchers observed significant reductions in 14 out of 15 pesticides including glyphosate in study participants who began eating organic foods.^{7,8}

If you're interested, participation in an **ongoing HRI Labs study** can help you determine whether your pet needs a change in diet or environmental exposures (or both, or in some cases, neither).

When it comes to your pet's diet, look for USDA organic certification. If you prepare your pet's food at home — which is a great way to pick and choose the ingredients you want to use — avoid cooking oils that contain corn or soy products, even if they're organic.

Organic vegetable oils, even if they're glyphosate-free, are not biologically appropriate, so they have no place in your carnivorous pet's diet. Corn and soy as carbohydrate sources are totally unnecessary in your dog's or cat's diet.

If you're feeding grains to your pet, I recommend transitioning away from kibble and high carbohydrate foods to a high-quality dehydrated raw diet, or gently cooked food free of grains and genetically modified ingredients.

Reducing Your Pet's Environmental Glyphosate Exposure

The following are some commonsense steps you can take to help reduce your pet's risk of glyphosate exposure:

1. Don't apply chemicals to your yard or your garden. Switch to more natural — or my recommendation — all-organic yard sprays. And be aware that even though you go green, your neighbor may be spraying chemicals that can potentially contaminate your property and pose a risk to both you and your pet.
2. Try to avoid allowing your pet access to any outdoor area unless you can confirm no chemicals have been sprayed there. If you do cross through areas you know or assume have been treated, make sure to rinse your pet's paws and lower legs off as soon as you get home. **Foot soaks** are a great way to instantly remove chemicals your pet has walked through. If he's been in tall brushy grass, rinse from the shoulders down.
3. If you live in a townhouse or other community environment that applies chemicals to common areas, I recommend reserving a little spot close by that you can detoxify after each application. Water the chemicals applied to the grass down into the soil. Keep your pet on a leash and next to you on the sidewalk until you reach your chemical-free destination. It's a great way to prevent your pet (and yourself) from walking through those toxic chemicals.
4. Develop the habit of removing your shoes outside your door to prevent tracking residual chemicals inside your home.

Why It's a Good Idea to Detox Your Pet

I also encourage periodic detoxification for pets. The level of environmental exposure to chemicals will dictate the appropriate frequency and type of detox that is most suitable. For example, if your furry family member has constant exposure to toxic chemicals all summer, it's a good idea to supply a daily detox protocol.

But if his sole source of chemical exposure is, say, a once-a-month heartworm pill, or if you're applying **flea and tick chemicals** directly on your pet, then provide a detox the week after each pill or topical treatment. I also recommend switching to an all-natural, chemical-free flea and tick protocol if at all possible.

There are many detoxifying herbs and supplements on the market to choose from. When it comes to glyphosate, research shows supplemental glycine, activated charcoal, humic and fulvic acids and bentonite clay can be beneficial for animals.⁹

The rule of thumb for a detox protocol is that it should not cause any visible changes in your pet — no vomiting, diarrhea, or change in behavior.

Sources and References

^{1,4,5} [Hemopet, January 12, 2020](#)

² [Karthikraj, Rajendiran, and Kurunthachalam Kannan. "Widespread Occurrence of Glyphosate in Urine from Pet Dogs and Cats in New York State, USA." *Science of The Total Environment*, vol. 659, Apr. 2019, pp. 790–795, doi:10.1016/j.scitotenv.2018.12.454](#)

³ [Zhao, Jiang, et al. "Detection of Glyphosate Residues in Companion Animal Feeds." *Environmental Pollution*, vol. 243, Dec. 2018, pp. 1113–1118, doi:10.1016/j.envpol.2018.08.100](#)

⁶ [Hyland, C. et al. *Environmental Research* Volume 171, April 2019, Pages 568-575](#)

⁷ [Fagan, J. et al. *Environmental Research* Volume 189, October 2020, 109898](#)

⁸ [Hemopet, November 16, 2020](#)

⁹ [Gerlach, H. et al. *J Environ Anal Toxicol* 2014, 5:2](#)