

This Food Additive Pushed My Rottie Into Liver Failure – Don't Let It Happen to You

When I was a vet student, my Rottweiler Gemini suffered liver failure after consuming food with this ingredient. I was furious. Unfortunately, it's still used in pet foods on the market today. It may not be on the label, so here's how to find out if it's there or not. Be very careful.

Analysis by [Dr. Karen Shaw Becker](#)

STORY AT-A-GLANCE

- Fish is a popular ingredient in commercial pet food; unfortunately, most fish is contaminated with mercury, industrial chemicals and toxic preservatives
- A recent study revealed that many commercial dog and cat foods contain high levels of mercury, especially formulas containing fish
- Much of the fish meal used in pet food is preserved with ethoxyquin, a cancer-causing agent
- My recommendation is to avoid feeding fish to your dog or cat, with the exception of sardines packed in water
- Be sure to supplement your pet's diet with a high-quality omega-3 fatty acid like krill oil

Editor's Note: This article is a reprint. It was originally published October 14, 2017.

Fish has become a very popular ingredient in commercial pet food as a source of protein. This troubles me because I don't recommend feeding a lot of fish to dogs and cats (more about that shortly).

Mercury Concentrations in Some Pet Foods Are Well Above Levels Considered 'Safe' for Small Mammals

Recently, scientists at the University of Nevada, Reno (UNR), measured the mercury in over 100 dog and cat foods on the market and published the results in the journal *Animal Feed Science and Technology*.¹ Not surprisingly, their results showed that some of the pet foods had mercury levels above what is considered "safe" for other animals, and of course this was especially true of formulas containing fish.

The researchers evaluated 54 dog foods and 47 cat foods, both wet and dry formulas, across the price spectrum. The foods they tested contained from 1 to 604 nanograms per gram (ng/g) of mercury. Fourteen of the 101 samples, all of which contained fish, had mercury levels above 100 ng/g, which is considered the daily "safe" level for river otters.

For small mammals, 70 ng/g per day is considered "safe," so the researchers considered the 100 ng/g to be a "reasonable level of concern" in dog and cat food.

Certain types of fish accumulate more mercury and other toxins — especially predatory fish such as tuna, sharks and swordfish — because they're higher up the food chain and eat smaller contaminated fish. The study results indicate that pet foods containing salmon and trout tend to have the highest levels of mercury. The body of water a fish lives in also impacts the levels of mercury, other heavy metals and pollutants it accumulates.

Cat Foods With Fish Contain the Highest Levels of Mercury

The researchers found that cat foods tend to have more mercury than dog food, again, especially formulas containing fish. One brand from Fussie Cat made with tuna and prawns had 604 ng/g mercury in one batch and 373 ng/g in another. Other brands with high concentrations of mercury:

- Merrick Purrfect Bistro with tuna nicoise, 278 and 124 ng/g in different lots
- Tiki Cat with ahi tuna and mackerel, 335 ng/g
- Tiki Cat with ahi tuna, 234 ng/g
- Hill's Science Diet adult 1 to 6 years with tuna, 282 ng/g

The UNR study authors suggest that pet food producers can avoid mercury-laden fish by understanding more about the species of fish they use in their formulas. For example, plankton-eating fish like Asian carp and other fish that eat low on the food chain are safer bets. I wonder if Big Pet Food is listening?

A Personal Story About the Deadly Toxins in Fish-Flavored Pet Food

Unfortunately, the majority of seafood these days is contaminated by toxic metals like mercury, as well as industrial chemicals like PCBs, dioxins and pesticides such as DDT. These toxins are absorbed by the smallest ocean plants and animals at the low end of the food chain.

As larger ocean dwellers come along and consume contaminated plants and prey, the toxins accumulate and become more concentrated in the bodies of the bigger fish. That's how the largest predators in the ocean end up heavily laden with toxins. As the UNR study demonstrates, this includes tuna, which many people regularly feed their cats. Some dogs, but mostly kitties, eat a lot of potentially contaminated tuna.

To make matters worse, the fish in pet food is heavily preserved during the manufacturing process, often with a chemical preservative called ethoxyquin, which is known to cause cancer. Ethoxyquin is banned in human food except in very small quantities allowed as preservatives in spices.

When I was a veterinary student, my Rottweiler Gemini went into liver failure after consuming dog food containing ethoxyquin. I was a poor student and the food was free, supplied by a major pet food manufacturer who was giving it away to vet students. It was determined Gemini's liver failure was caused by the ethoxyquin in the food.

I was very angry that a major veterinary line of dog food contained chemicals that had the potential to kill the pets we were learning how to save as vet students. Then and there, I committed to never feed Gemini processed food again. It was actually the beginning of my quest to have clean, healthy, pure foods in the pet food supply chain, which is an **ongoing battle** to this day.

It's Nearly Impossible to Avoid Ethoxyquin in Formulas With Fish Meal

Unfortunately, ethoxyquin is still being used in many pet foods currently available on the market. It is used to preserve the fat in almost all fish meal — fat made from waste products.

It's important to keep in mind that if the label doesn't list exact ingredients, including the precise meat source, you have absolutely no idea what's in there. And because ethoxyquin is added before the raw ingredients are shipped to pet food manufacturers, it doesn't get listed or disclosed on the product label.

The pet food company you purchase your cat's or dog's food from may not be adding ethoxyquin, but that doesn't mean it isn't in the fish meal in that food. Don't make the mistake of assuming if the fish meal product label doesn't list ethoxyquin, it's not in there.

Unless the label specifically states the formula is ethoxyquin-free (which means they've done third-party testing, which they will show you), or you call the manufacturer's 1-800 number and are told it's not in the raw materials they purchase nor added during their own manufacturing process, you should assume the formula contains ethoxyquin. Fish meal made from farmed fish also happens to be one of the main pet food ingredients also contaminated with mycotoxins.²

Additional Concerns With Feeding Fish to Pets

I'm a big advocate of rotating proteins in your pet's diet. That's because any food that is over-consumed can create food sensitivities and nutritional imbalances over time. Fish, as it turns out, is one of the most highly allergenic foods for cats. Allergies cause systemic inflammation. Kitties that eat allergenic foods over and over can end up with lung inflammation that can lead to **asthma**, which is one of the more commonly diagnosed inflammatory conditions in cats.

Links have also been established between mercury and asthma, and ethoxyquin and asthma, so it's easy to start to see the bigger picture with regard to diet-related inflammatory conditions.

Fish fed in high amounts can ultimately lead to thiamine deficiency, which can cause loss of appetite, seizures and even death. Long-term ingestion of fish in cat food can also deplete vitamin E resources. Vitamin E deficiency can cause a painful condition called steatitis, which is yellow fat disease. If left untreated, steatitis can be life-threatening.

Seafood is a very rich source of iodine, but cats' bodies aren't equipped to process high levels of iodine. Many animal nutritionists, including me, believe there's a link between cats consuming too many iodine-rich foods and hyperthyroidism. There's also been a link established between pop-top cans or canned cat food and hyperthyroidism.

Pet food companies now sell "low-iodine" formulas for hyperthyroid cats. A better approach is to avoid feeding cats fish-based food in the first place. Avoiding foods high in iodine seems like a good way to prevent hyperthyroidism in kitties.

Finally, the magnesium content in fish has been linked to urinary tract diseases in cats. A diet overloaded with the mineral magnesium can predispose your kitty to magnesium ammonium phosphate crystals, also known as MAP crystals or struvite crystals. Crystals are a big problem for many cats today.

My Recommendation

My advice is to be very choosy about the fish you feed your pet, and I certainly don't recommend feeding an exclusive diet of fish protein to dogs or cats.

Fish are a rich source of omega-3 fatty acids, which are essential to your pet's well-being. If you supplement your pet's diet with fish, I suggest you use sardines packed in water. Sardines don't live long enough to store toxins in their bodies, and they're a terrific source of omega-3s.

Feeding wild-caught salmon in rotation with other proteins is also an excellent way to get those omega-3s into your dog or cat. If you choose not to feed any fish, I recommend you supplement your pet's diet with **krill oil** or another omega-3 fatty acid.

Sources and References

[PetfoodIndustry.com November 29, 2016](#)

¹ [Animal Feed Science and Technology, Volume 222, December 2016, Pages 190-193](#)

² [Techna](#)
