

Do You Feed Your Kitty This Favorite Food? 2 Reasons to Stop It Today

Yes, cats can be finicky eaters. But this particular food is a disaster waiting to happen. Studies link it to a disease that's skyrocketing in the kitty population. It's also linked to inflammatory diseases like asthma. For your precious kitty's sake, read and take heed.

Analysis by Dr. Karen Shaw Becker

STORY AT-A-GLANCE

- Hyperthyroidism has increased dramatically in U.S. cats over the last three decades
- Exposure to flame retardant chemicals (PBDEs and PCBs) has been linked to feline hyperthyroidism
- Earlier studies have identified flame retardant chemicals in house dust as a potential risk for cats
- A recent study points to fish-flavored cat food as a source of PBDE and PCB byproducts
- Fish diets are also problematic because they can be too high in iodine, highly allergenic for cats, and are linked to feline asthma, as well as thiamine and vitamin E deficiencies

Editor's Note: This article is a reprint. It was originally published March 14, 2016.

I have some new information to report on the subject of hyperthyroidism in cats, and I'm afraid it won't be welcome news for those of you who feed fish or fish-flavored cat food to feline family members.

Feline hyperthyroidism has increased dramatically in the U.S. in the last 30+ years. It's the most common endocrine disorder of kitties, with over 10% of cats over the age of 10 diagnosed with the disease.

The thyroid is a butterfly-shaped gland at the base of the throat. When this little gland overproduces thyroid hormone, hyperthyroidism is the result. The disease is usually caused by a benign tumor on the thyroid gland called an adenoma. In rare cases, the tumor is a carcinoma, which is cancer.

Exposure to Flame Retardant Chemicals (PBDEs) Linked to Feline Hyperthyroidism

The sudden appearance and rapid increase in cases of hyperthyroidism in cats has generated quite a bit of research into potential causes, one of which appears to be exposure to flame retardant chemicals (polybrominated diphenyl ethers, or PBDEs). PBDEs are recognized endocrine and thyroid disruptors.

In a 2015 study published in the journal *Environmental Science & Technology*, researchers analyzed the blood from 60 pet cats for the presence of flame retardant chemicals, specifically decabromodiphenyl (BB-209), polybrominated diphenyl ethers (PBDEs), hydroxylated PBDEs (OH-PBDEs), and 2,4,6-TBP.¹

The objective of the study was to evaluate the differences in the levels of the chemicals in healthy cats and cats diagnosed with hyperthyroidism. Of the 60 cats in the study, 23 had normal thyroid function and 37 were hyperthyroid.

The study results showed that the hyperthyroid cats had higher blood levels of PBDEs on a fat weight basis.

Another earlier study published in the Journal of Toxicology and Environmental Health suggested that flame retardant chemicals in house dust are linked to thyroid disease in cats.²

The study authors concluded that cats are primarily exposed to flame retardant chemicals by ingesting house dust — which of course occurs every time they groom themselves.

Indeed, housecats do seem to have extraordinary exposure to PBDEs. In 2012, Swedish researchers demonstrated that serum PBDE levels in Swedish cats were about 50 times higher than in the Swedish human population.³

And a 2007 study showed that PBDE levels in U.S. cats were 20 to 100-fold greater than median levels in U.S. adults.⁴

Fish-Flavored Cat Food Identified as Potential Culprit

A newly-released study seems to shed even more light on the connection between flame retardant compounds and feline hyperthyroidism, suggesting that fish-flavored cat food could be a culprit.⁵

A team of Japanese scientists evaluated cat food and feline blood samples and discovered that the type of polychlorinated biphenyl (PCB) and PBDE byproducts found in both the food and blood samples are derived from marine organisms.

The researchers were also able to simulate the way in which the bodies of cats convert the type of chemical present in the food into the type of chemical seen in the cats' blood samples.

Based on their results, the team concluded that the byproducts detected at high levels in cats' blood samples likely came from fish-flavored food and not exposure to PCBs or PBDEs. However, further work is needed to determine the link between the metabolites (byproducts) and hyperthyroidism.

How PBDEs Wind Up in Cat Food

For those of you wondering how these chemicals wind up in fish-flavored cat food, Dr. Jean Hofve of Little Big Cat explains it quite well:

“There is a link between the feeding of fish-based cat foods and the development of hyperthyroidism, which is now at epidemic levels.

New research suggests that cats are especially sensitive to PBDEs (which, among other things, are used as fire-retardants in carpeting and furniture), chemicals found at higher levels in both canned and dry cat foods than dog foods; and more in dry than canned cat foods.

Fish-based foods are even worse, because marine organisms produce PDBEs naturally and can bioaccumulate up the food chain to high levels in fish; this compounds the exposure cats get from fabrics and dust.

Predatory fish at the top of the food chain, such as tuna and salmon, may contain very elevated levels of heavy metals (including mercury) as well as PCBs, pesticides, and other toxins.

Tilefish (listed on pet food labels as 'ocean whitefish') are among the worst contaminated, along with king mackerel, shark, and swordfish.

These fish are so toxic that the FDA advises women of child-bearing age and children to avoid them entirely; and recommends only 1 serving of albacore tuna per week due to its high mercury levels (yellow or 'light' tuna is far safer for us, but still inappropriate for cats). If these fish are dangerous to children, cats are at even higher risk!

PCBs (polychlorinated biphenyls) in particular are toxic industrial chemicals that were banned in the U.S. in 1979. However, they are used elsewhere in the world; and because they are stable in the environment, they are still a concern in ocean waters.

Recent research found high levels of PCBs in dry and canned pet foods. Scientists also found that cats retain PCB metabolites in their blood longer than dogs."⁶

More Reasons to Avoid Feeding Fish to Cats

The risk of hyperthyroidism isn't the only reason for concern when feeding fish to cats.

I often mention the need to rotate proteins in your pet's diet. That's because any food that is consumed often can create an allergy over time. And fish, as it turns out, is one of the most highly allergenic foods for kitties. It's simply not a species-appropriate diet for cats.

Allergies cause systemic inflammation. Cats who eat allergenic foods over and over can end up with lung inflammation that can also lead to asthma. And of course asthma is one of the more commonly diagnosed inflammatory conditions in cats. There also appears to be a link between mercury and asthma, and ethoxyquin (a toxic preservative still found in some pet foods) 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 also 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 aren't designed to process a lot of iodine. Many animal nutritionists, including me, believe there's a link between iodine-rich foods and feline hyperthyroidism. There's also been a link established between pop-top cans or canned cat food and hyperthyroidism.⁷

Last but not least, 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.

Tips for Helping Your Cat Avoid Hyperthyroidism

- Feed a balanced, fresh food, and species-appropriate diet
- Avoid feeding your cat a fish-based diet
- Also avoid feeding soy products to your kitty, as they have been linked to thyroid damage
- Rid your environment of flame retardant chemicals
- Provide your cat with an organic pet bed
- Purchase a high-quality air purifier for your cat's environment

I also recommend checking your kitty's thyroid levels annually after the age of 7.

Sources and References

[Phys.org, January 6, 2016](#)

¹ [Environmental Science & Technology, April 21, 2015, 49\(8\), pp 5107-5114](#)

² [Journal of Toxicology and Environmental Health A, 2012;75\(4\);201-12](#)

³ [Archives of Environmental Contamination and Toxicology, July 2012, \(63\)1, pp 161-168](#)

⁴ [Environmental Science & Technology, September 15, 2007, \(41\)18, pp 6350-6356](#)

⁵ [Environmental Science & Technology, 2016, 50 \(1\), pp 444-452](#)

⁶ [Little Big Cat](#)

⁷ [Journal of the American Veterinary Medical Association, March 15, 2004, Vol. 224, No. 6, Pages 879-886](#)
