

## Study Links Endocrine Disorder in Cats, Flame Retardants

**Research suggests flame retardants in household fabrics, contaminants also found in certain types of cat food, may be linked to feline hyperthyroidism.**

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One of the most common endocrine disorders in cats ? feline hyperthyroidism ? may be linked to flame retardants in household fabrics as well as certain types of cat food, according to a new study.

The Environmental Protection Agency analyzed blood samples from 23 cats, 11 of whom had feline hyperthyroidism. Cats who tested positive for the disease had elevated levels of the environmental contaminants called polybrominated diphenyl ethers (PBDE). The PBDE levels were three times higher in cats with hyperthyroidism than those who tested negative, the study shows.

Flame retardants in the form of PBDEs were first added to household materials such as furniture and mattresses approximately 30 years ago to aid in fire prevention, which was around the same time feline hyperthyroidism was first diagnosed. Cats may ingest the PBDEs through household dust while grooming themselves, researchers say.

Increased levels of PBDEs were also found in wet cat food that contains seafood, as compared to dry or non-seafood products. The report states that the levels in cat food are consistent with recent measurements of PBDE in edible marine life and corresponding human food.

"Our results show that cats are being consistently exposed to PBDEs," says Janice A. Dye, DVM, Ph.D., at the Environmental Protection Agency in Research Triangle Park, N.C. "Because they are endocrine-disrupting agents, cats may well be at increased risk for developing thyroid effects." Dye added that this is a preliminary study and more research is needed on the topic.

Feline hyperthyroidism symptoms include weight loss, increased appetite, higher energy levels and irritability. The disorder is treatable once diagnosed and proper medication dispersed.

"While the link between hyperthyroidism in cats and their elevated PBDE levels requires additional confirmation, it's clear that house cats may be able to serve as sentinels for indoor exposure to PBDEs for humans who share their houses," says Linda S. Birnbaum, Ph.D., the study's co-author.

Several states have banned the uses of some PBDEs in commercial products; however, no regulations currently exist for limiting PBDE content in food, Birnbaum adds.