

Chemical Combination Culprit in Recalled Dog and Cat Food

Researchers say the two chemicals are harmless alone, but result in rapid kidney failure when ingested together.

Chemicals found in recalled pet food earlier this year – melamine and cyanuric acid – are relatively harmless alone, but are deadly to cats if combined, according to a new study by researchers at the University of California, Davis.

While dogs were also affected by the tainted foods, cats were much more susceptible to their effects.

Cats who ate food tainted with melamine and cyanuric acid experienced extensive kidney failure within 12 hours, however those who ate food containing just one of the chemicals did not experience any illness, the study revealed. In addition, fan-shaped crystals appeared in the urinary tracts of cats who ingested both chemicals, something not normally seen in healthy cats.

The pilot study was led by veterinary toxicologist Birgit Puschner at the California Animal Health and Food Safety Laboratory at the university's veterinary school.

"The results of this study demonstrate that a single oral exposure of cats to melamine and cyanuric acid can result in kidney failure," Puschner said. "The study also provides information that will help veterinarians better diagnose the causes of kidney failure in cats."

Melamine and cyanuric acid are widely believed to be the chemicals responsible for the death and illness of numerous cats and dogs during the massive pet food recall earlier this year.

The study is believed to be the first to report on the combined effects of the two chemicals in any animals. The researchers suggest further studies to determine the lowest dose of combined chemicals that result in kidney failure in order to provide an accurate assessment of contaminated food.

The study is published in the November issue of the "Journal of Veterinary Diagnostic Investigation."

To read earlier DogChannel articles on the spring recall, [click here](#).