The Alarming Toxic Chemicals Lurking Inside Pet Food Bags

If your pet's food comes out of a bag, you need to know about this warning by the Environmental Working Group (EWG). Recent testing detected at least seven potentially toxic chemicals on 11 pet food packages from seven pet food brands that could place both you and your pet at risk.

Analysis by Dr. Karen Shaw Becker
Mar 26, 2023 • 6 min read

STORY AT-A-GLANCE

- The Environmental Working Group (EWG) released a report recently that proves the presence — at high levels in some cases — of potentially toxic chemicals in pet food bags
- These chemicals, per- and polyfluoroalkyl substances (PFAS), are ubiquitous in the environment (air, soil, drinking water, household dust); humans and animals absorb PFAS and the chemicals remain in their bodies for many years, if not life
- In 2020, researchers discovered the presence of PFAS at levels of exposure above the minimum risk level in the feces of dogs and cats living in New York State
- Earlier research uncovered a possible link between PFAS blood levels and hyperthyroidism in cats 10 years and older, but these chemicals have also been linked to other endocrine problems as well as infertility and immune system dysregulation
- There are several steps you can take to limit your family's exposure to PFAS; also consider taking action to reduce your animal companion's chemical load

As many of you who read here regularly know, potentially toxic chemicals called per- and polyfluoroalkyl substances (PFAS) (aka "forever chemicals") are used in the manufacture of thousands of products, from ammunition, artificial turf, climbing ropes, and guitar strings, to pet food bags (to help "resist moisture, fats and oils, and otherwise keep products fresh").[1]

PFAS belong to a family of more than 3,000 structures of highly fluorinated chemicals used in industrial processes and consumer products.[2] As a result, these chemicals are ubiquitous in our environment, having migrated into the air, household dust, food, soil and ground, surface and drinking water. According to one pet food industry journal:

> *"Along with their ubiquity, the problem arises from how slowly PFAS break down in the environment and in animals' bodies. People and animals absorb PFAS, and the chemicals remain in their bodies for many years, if not life."*[3]

Fluorine/PFAS Found in Dog and Cat Food Packaging

According to a recent report by the Environmental Working Group (EWG), testing uncovered PFAS (specifically the chemicals PFBA, PFPeA, PFHxA, PFHpA, x62FTCA, x62diPAP and PFPrA) on 11 pet food packages from 7 pet food brands sold at Walmart and other retailers.

While the ultraprocessed pet food industry is quick to point out that "the PFAS had not been identified in the pet foods themselves,"[4] as the EWG report explains:

> *"Although our research found the suggestion of PFAS in pet food bags, we haven't concluded that the chemicals had migrated from the packaging to the food itself.*
>
> *But other research has established the potential for PFAS in packaging to contaminate the food within, which would put families and their four-legged friends at further risk."*[5]

EWG contracted with an independent, certified laboratory to perform testing for total fluorine (in parts per million/ppm), the presence of which indicates the likely presence of PFAS (but not the specific types) (in parts per billion/ppb). Further testing for detectable levels of PFAS was performed on the four products with the highest concentrations of fluorine, with the following results:

Cat Food	Total Fluorine	Total PFAS
Meow Mix Tender Centers Salmon & Chicken Flavors Dry Cat Food	630 ppm	5.5 ppb
Purina Cat Chow Complete Chicken	310 ppm	244.7 ppb

Dog Food	Total Fluorine	Total PFAS
Kibbles n' Bits Bacon and Steak	590 ppm	14.3 ppb
Blue Buffalo's Life Protection Formula Chicken and Brown Rice Recipe	140 ppm	1.7 ppb

Pet Poop Samples Reveal Significant Exposure to PFAS

While the EWG did not conclude that the PFAS chemicals found in pet food packaging had migrated to the food itself, there's no question that dogs and cats are being exposed to these toxins in a multitude of ways.

For example, in 2020, researchers discovered the presence of PFAS "at levels that suggest exposures above the minimum risk level" in the feces of dogs and cats living in New York State.[6] Further, this level of exposure in animal companions may also have implications for pet parents.

For the study, which was published in the journal Environmental Science & Technology Letters,[7] researchers measured 15 different PFAS in 78 samples of cat and dog poop using high-performance liquid chromatography and tandem mass spectrometry. They detected 13 different PFAS in the samples, the most abundant of which in both cats and dogs were longer chain perfluorocarboxylic acids.

In estimating the pets' PFAS exposure levels, the researchers found that for three compounds (perfluorooctanoic acid, PFOA; perfluorononanoic acid, PFNA; and perfluorooctanesulfonic acid, PFOS) and for total PFAS, estimated exposure levels were above the minimal risk levels set by the U.S. Agency for Toxic Substances and Disease Registry. Because pets share homes with humans, it's logical to assume owner exposure as well.

PFAS Linked to Feline Hyperthyroidism

A 2018 study conducted by a team of researchers at the California Environmental Protection Agency looked at blood levels of PFAS in two separate groups of Northern California cats, most of which were at least 10 years old. The first group of 21 was evaluated between 2008 and 2010; the second group of 22 was sampled between 2012 and 2013.[8]

The researchers observed that the higher the blood levels of PFAS, the more likely the cat was to be hyperthyroid. One type of PFAS, perfluorooctanoic acid (PFOA) was significantly higher in hyperthyroid kitties. These findings "… may indicate a possible link between PFAS levels and cat hyperthyroid, warranting a larger study for further investigation," according to the research team.

In a bit of good news, the scientists noted a slight decline in PFAS blood levels between the first group of cats tested 8 to 10 years ago, and the second group tested more recently. This mirrors recent results in humans as more companies phase out use of these chemicals, and presumably, as people gradually replace PFAS-treated household items.

How to Reduce Your Family's Exposure to PFAS

Your best bet is to avoid all products that contain or were manufactured using PFAS, previously referred to as perfluorochemicals (PFCs), which will typically include products that are stain-resistant, waterproof, or nonstick. From the Environmental Working Group:[9]

- Find products that haven't been pre-treated and skip optional stain-repellent treatment on new carpets and furniture
- Cut back on fast food and greasy carryout food, since these foods often come in PFC/PFAS-treated wrappers
- Especially when buying outdoor gear, choose clothing that doesn't carry Gore-Tex or Teflon tags, and be wary of all fabrics labeled stain-or water-repellent
- Avoid nonstick pans and kitchen utensils — opt for stainless steel or cast iron instead
- Pop popcorn the old-fashioned way, on the stovetop, since microwaveable popcorn bags are often coated with PFCs/PFAS on the inside
- Choose personal care products without "PTFE" or "fluoro" ingredients; also avoid Oral-B Glide floss, which is made by Gore-Tex

More Tips to Decrease Your Pet’s Chemical Exposure

- Provide chlorella to your dogs and cats, which helps remove PFAS from their system.
- Filter your pet’s drinking water, and yours, to remove contaminants such as PFAS as well as fluoride, chlorine, heavy metals, and others. Household tap water typically contains enough toxic minerals, metals, chemicals, and other unhealthy substances to damage your pet's health long term.
- Minimize exposure to outdoor pollutants and chemicals by keeping your pet away from outdoor areas that are heavily laden with pesticides, herbicides, or fertilizers. If your four-legged family member likes to eat grass or other outdoor greenery, make sure she's not grazing where chemicals have been sprayed.

  If you're not sure what your pet may have been exposed to or you suspect something outside is causing skin irritation, do a simple foot soak when you bring her home. It can make a dramatic difference in reducing her overall chemical burden. Switch to natural lawn care for your own home.
- Improve your pet's indoor air quality by forbidding smoking in your home and using only nontoxic cleaning products. Avoid air-scenting products, which are heavily laden with chemicals and known to cause or worsen respiratory conditions like asthma in both people and pets. Also consider investing in an air purifier to control dust mites.
- Provide an organic, chemical-free pet bed that specifically states it contains all-natural fibers and hasn’t been chemically treated.
- Refuse any chemical given once a month on a schedule without discussion (e.g., year-round flea, tick and heartworm pesticides that may be unnecessary), or twice a year in the case of most general dewormers. Do request routine tick-borne disease screening tests and fecal exams.

  Use chemical pest and parasite preventives only when absolutely necessary, and for the minimum time necessary to protect your pet. Look for safe, natural alternatives to monthly chemical preventives.

Sources and References

[1, 3, 4] Petfood Industry.com, November 9, 2022

[2] ScienceDaily, September 19, 2018

[5] Environmental Working Group News, November 3, 2022

[6] American Chemical Society News Release, February 5, 2020

[7] Ma, Jing et al. Environ. Sci. Technol. Lett. 2020, 7, 3, 135–142 Publication Date: February 5, 2020

[8] Environmental Toxicology and Chemistry, September 19, 2018

[9] EWG Guide to Avoiding PFCs