The Chemicals You Are Unknowingly Exposing to Your Pet

Groundbreaking FDA action reveals a disturbing source of danger to your pets, hidden within the very place designed to keep their food fresh.

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STORY AT-A-GLANCE

- In February 2024, the FDA announced the welcome news that grease-proofing substances containing Per and Polyfluoroalkyl Substances (PFAS) are no longer being sold by manufacturers for food contact use in the U.S. market, including the pet food market
- Both humans and animals absorb PFAS, and the chemicals remain in the body for many years, if not for life; health risks associated with PFAS include increased testicular and kidney cancer and infertility
- Research has also uncovered a possible link between PFAS blood levels and hyperthyroidism in cats 10 years and older; these chemicals have also been linked to other endocrine problems as well as immune system dysregulation
- In late 2022, the Environmental Working Group (EWG) released a report that demonstrated the presence — at high levels in some cases — of PFAS in pet food bags; these chemicals and also ubiquitous in the environment (air, soil, drinking water, household dust)
- 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

In a bit of welcome news, a February 28, 2024 "Constituent Update," from the U.S. Food and Drug Administration (FDA) announced that:

> *"… grease-proofing substances containing Per and Polyfluoroalkyl Substances (PFAS) are no longer being sold by manufacturers for food contact use in the U.S. market [including the pet food market]. The completion of the voluntary market phase-out of these substances used on food packaging paper and paperboard, eliminates the primary source of dietary exposure to PFAS from authorized food contact uses."*[1]

These potentially toxic "forever chemicals" are used in the manufacture of thousands of products, from ammunition, artificial turf, climbing ropes, and guitar strings, to (until the FDA announcement) fast-food wrappers, microwave popcorn bags, take-out paperboard containers, and pet food bags (to help "resist moisture, fats and oils, and otherwise keep products fresh").[2] According to senior reporter Tim Wall, writing for PetfoodIndustry.com:

> *"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. Scientists have identified health risks from some PFAS, although not necessarily those used on pet food packages. Those risks included increased* ***testicular and kidney cancer risk*** *and* ***infertility****."*[3]

In 2020, the FDA obtained commitments from manufacturers to stop selling grease-proofing substances containing certain types of PFAS for use in human and pet food packaging. The February announcement marks the fulfillment of those voluntary commitments, and in addition, other manufacturers have also voluntarily stopped selling grease-proofing agents in the U.S. that contain different types of PFAS.

Fluorine/PFAS in Dog and Cat Food Packaging

According to a November 2022 report by the Environmental Working Group (EWG), testing uncovered PFAS on 11 pet food packages from 7 pet food brands sold at Walmart and other retailers. And while the **ultraprocessed pet food industry** was 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. Get additional detox strategies **here**.
- 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] FDA.gov, Constituent Update, February 28, 2024

[2,4] Petfood Industry.com, November 8, 2022

[3] PetfoodIndustry.com, March 1, 2024

[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