



TAKE OUT TOXICS

PFAS CHEMICALS IN FOOD PACKAGING



SAFER CHEMICALS HEALTHY FAMILIES fights for strong chemical policy, works with retailers to phase out hazardous chemicals and transform the marketplace, and educates the public about ways to protect our families from toxic chemicals.



TOXIC-FREE FUTURE fights for strong health protections for people and the environment, using the powerful combination of science, advocacy, and grassroots organizing.



MIND THE STORE campaign challenges big retailers to eliminate toxic chemicals and substitute them with safer alternatives.

Acknowledgments

We are grateful to the following partner organizations for assisting in our initial research to identify the range of products potentially treated with PFAS available on store shelves: Alaska Community Action on Toxics, Center for Environmental Health, Clean and Healthy New York, Clean Water Action California, Clean Water Action Connecticut, Clean Water Action Massachusetts, Clean Water Action Rhode Island, Conservation Voters for Idaho, Ecology Center, Environmental Health Strategy Center, Healthy Legacy, North Carolina Conservation Network, Oregon Environmental Council, Texas Campaign for the Environment, U.S. Public Interest Research Group, Women for a Healthy Environment, and Women for Progress.

We appreciate the sample collection carried out by Alaska Community Action on Toxics, Clean and Healthy New York, Clean Water Action Connecticut, Clean Water Action California, Clean Water Action Massachusetts, Conservation Voters for Idaho, Environmental Health Strategy Center, Healthy Legacy, and North Carolina Conservation Network. We also appreciate Center for Environmental Health, Ecology Center, and Silent Spring Institute for both collecting and processing the samples.

Thanks also go to Graham Peaslee and his laboratory at the University of Notre Dame for conducting fluorine content testing on the samples.

Shari Franjevic, Liz Hitchcock, Beth Kemler, Lauren Olson, Dr. Graham Peaslee, Cheri Peele, Ivy Sager-Rosenthal, Gretchen Lee Salter, Mike Schade, Dr. Laurel Schaidler, and Laurie Valeriano provided valuable comments on the report.

EXECUTIVE SUMMARY

Per- and polyfluoroalkyl substances, or PFAS, are highly persistent, mobile, and toxic chemicals whose use has resulted in widespread contamination of drinking water. In fact, some PFAS are so persistent that they don't degrade at all in the environment—so levels will only get higher over time if their use continues. PFAS are used to treat paper used to serve, display, or package food, to stainproof furniture, carpets, and clothing, in firefighting foam, and in many industrial uses. Exposure has been associated with liver damage, harm to the immune system, developmental toxicity, and cancer.

Paper products used for food packaging are often treated with PFAS for water and grease resistance. In previous testing, sandwich wrappers, french-fry boxes, and bakery bags have all been found to contain PFAS. At the same time, many of the same types of items have tested free of PFAS, indicating alternatives are widely available and competitively priced. Since the chemicals can migrate into food, and contaminate landfills and compost after disposal, the use of PFAS to treat food packaging can lead to unnecessary long-term exposure to harmful chemicals. People are exposed to PFAS from multiple sources, including the uses named above, and through multiple routes, including food, dust, air, and water.

A number of major U.S. retailers operating grocery stores have taken action to address the use of other toxic chemicals in items they sell. So far, however, none has publicly committed to ensuring products in use at the store (such as wrappers for deli sandwiches) or products sold at the store are free of PFAS. To investigate the extent to which grocery stores are using and selling PFAS-containing food packaging, we tested food-contact papers from five of the nation's largest grocery chains and their subsidiaries: Ahold Delhaize (parent of Food Lion, Stop and Shop, and Hannaford); Albertsons; Kroger; Trader Joe's; and Whole Foods Market (Amazon). See the table below for a summary of our test results for each retailer.

We tested 78 samples collected from 20 stores in 12 states. In testing those samples for the presence of fluorine, with high levels indicating likely PFAS treatment, we found the following:

1. **Likely PFAS treatment in 10 of the 78 samples of food contact materials.** The most common items likely treated with PFAS were take-out containers and bakery or deli papers.
2. **In many cases, retailers use or sell packaging that is free of PFAS treatment, indicating that PFAS-free alternatives are widely available and competitively priced.**
3. **Our tests of packaging for cook-at-home food and home baking supplies, including microwave and oven-cook food trays, butter wrappers, baking cups, and rolls of parchment paper, did not find any items likely treated with PFAS.**

While the majority of products tested were PFAS-free, some of the items found to have likely PFAS treatment, such as take-out containers, are very widely used. In other words, PFAS use in a single item type, found in multiple stores across the country, can translate into large quantities of PFAS-treated paper used and disposed of. The results are intended to highlight opportunities for retailers to phase out PFAS, switch to safer alternatives, and provide a guide for where they should focus their attention.

TABLE 1: RESULTS OF SCREENING RETAILER FOOD-CONTACT MATERIALS FOR LIKELY PFAS TREATMENT

ITEM CATEGORY	Ahold Delhaize	Albertsons	Kroger	Trader Joe's	Whole Foods (Amazon)	TOTAL BY PRODUCT CATEGORY
Take-out container		0/2	1/1		4/5	5/8
Bakery or deli paper	1/6	1/7	1/11	0/6	1/8	4/38
Single-use plate	1/3	0/2	0/1	0/1		1/7
Tray for cook-at-home food	0/1	0/1	0/1	0/3	0/2	0/8
Baking or cooking supplies	0/4	0/5	0/4	0/2	0/2	0/17
TOTAL BY RETAILER	2/14	1/17	2/18	0/12	5/17	10/78

Summary of total fluorine screening results by item category and retailer. The number of samples with high fluorine content (indicative of intentional PFAS treatment) is shown relative to the total number of samples tested.

This summary does not intend to grade retailers in relation to one another or provide a guide that a particular product at a given retailer is likely PFAS-treated or PFAS-free.

These findings indicate that retailers could reduce the flow of PFAS into our food, bodies and the environment by replacing treated items with PFAS-free items, and that action by policymakers and others can reduce PFAS contamination.

Grocery chains and other food retailers should do the following:

- 1. Adopt and implement a public policy with clear quantifiable goals and timelines for reducing and eliminating PFAS in ALL private label and brand name food contact materials.** Retailers should publicly report on progress and announce when their products are PFAS-free.
- 2. Agree to meet the new Washington State ban on PFAS use in food packaging not just in Washington, but in every state in the U.S.**
- 3. Develop a comprehensive safer chemicals policy to reduce and eliminate other toxic chemicals, such as ortho-phthalates, in food contact material.**

Other parties also have a role to play:

- 1. States should ban PFAS in food contact materials and ensure safer alternatives are used.**
- 2. State and local governments should specify PFAS-free food serviceware in contracts.**
- 3. Commercial composting facilities should immediately ban all PFAS-treated materials.**
- 4. Individuals should call on food retailers and elected officials to ban PFAS in food contact materials.**