



October 7, 2021

SUPPORT H.2348/S.1494

Senator Joanne Comerford
Representative Marjorie Decker
Co-Chairs, Joint Committee on Public Health
General Court of the Commonwealth of Massachusetts
24 Beacon St.
Boston, MA 02133

Dear Co-Chairs Comerford and Decker, and Committee members:

We write to strongly urge you to protect Massachusetts residents from exposure to a class of chemicals that threaten public health by supporting H.2348/S.1494, legislation that would ban the intentional use of PFAS in food packaging. There is an urgent need for the enactment of this bill.

Consumer Reports is an independent, nonprofit organization - with over 75,000 activists in Massachusetts - that works with consumers for truth, transparency, and fairness in the marketplace through rigorous, independent testing and research. We empower and inform consumers, incentivize corporations to act responsibly, and help policymakers prioritize the rights and interests of consumers in order to shape a truly consumer-driven marketplace.

Per- and polyfluorinated alkyl substances (PFAS) are a group of more than 4,700 chemicals that are very widespread and dangerous. Three characteristics of PFAS make them especially dangerous to humans. First, they are extremely persistent, resistant to breaking down naturally in the environment and remaining in people's bodies for years. This is why they have been described as "forever chemicals." Second, they are highly mobile, spreading quickly in the environment and prevalent throughout our environment. Finally, they can be toxic at very low doses—even at parts per trillion levels, they have been associated with a variety of severe health effects, including cancer.

Because PFAS are so persistent, prevalent, and toxic, they must be regulated. Indeed, given their widespread use, PFAS are detectable in the blood of 97 percent of people in the United States.^[1] Some of the toxic effects associated with exposure to these chemicals include immunotoxicity, cancer, thyroid disease, birth defects, and decreased sperm quality.^[2] They reduce the immune response to childhood vaccines and may increase the risk of infectious disease.^[3]

In addition, PFAS exposure has been directly linked to several underlying conditions that make people more vulnerable to severe symptoms of COVID-19, including obesity, asthma, kidney

disease, and high cholesterol.^[4] Compared to people with no underlying conditions, patients who have these conditions are six times as likely to be hospitalized with COVID-19 and 12 times as likely to die of the disease.^[5]

Among the ways that consumers can be exposed to PFAS are through food that contains PFAS. H.2348/S.1491 should reduce consumer exposure to PFAS through banning its intentional use in food packaging.

Some manufacturers add PFAS to food packaging to make it water- and grease-resistant, which can contaminate the food with which it comes into contact. Indeed, the Food and Drug Administration (FDA) reported in 2019 that it had detected PFAS in a variety of foods purchased around the country, including produce, meats and seafood.^[6] People are exposed when they eat the contaminated food. Just last year, PFAS were detected in the packaging of foods sold by major retailers.^[7] This prompted some retailers to announce a switch to safer alternatives, thereby demonstrating the availability of and feasibility of non-PFAS food packaging.

We also believe that all the PFAS compounds should be treated as a class. EPA's 2015 Significant New Use Rule for PFOA- and PFOA-related chemicals provided a definition for a category of a subgroup of the so-called long-chain PFAS chemicals, which are defined as having 8 or more carbon atoms. The idea was that these long-chain PFAS have more persistent in the environment and more likely to bioaccumulate than short-chain PFAS (having 7 or fewer carbon atoms), and so short-chain PFAS should be not persist in the body, so would not bioaccumulate and would consequently be less toxic.

These short-chain PFAS emerged as a replacement to long-chain PFAS in food packaging due to safety concerns in 2011.^[8] Indeed, beginning in 2011, FDA started working with industry to get them to voluntarily remove long-chain PFAS as food contact materials. In 2016, FDA had revoked the regulation of the remaining uses of long-chain PFAS in food packaging (see 81 FR 5, January 4, 2016 and 81 FR 83672, November 22, 2016).^[9] Again, the thinking was that the short-chain PFAS should be relatively safe for use as food contact substances.

However, in July 2020, FDA announced a voluntary phase out of use of certain short-chain PFAS (6:2 FTOH) for use as food contact substances after FDA scientists published their analyses of certain short-chain PFAS that showed that they did persist in rodent studies, such that “the data suggest the potential of 6:2 FTOH to also persist in humans from chronic dietary exposure. Further scientific studies are needed to better understand the potential human health risks from dietary exposure to food contact substances that contain 6:2 FTOH.”^[10]

In addition, a draft EPA toxicity review of two short chain PFAS, GenX (a replacement for PFOA) and PFBS (a replacement for PFOS), show that GenX is almost as toxic as PFOA. Thus, the short-chain PFAS are not necessarily less persistent in the human body and nor significantly less toxic than long-chain PFAS. In addition, a study published in 2020 looked at the Key

Characteristics of Carcinogens framework for cancer hazard identification for 26 PFAS chemicals, including long-chain and short-chain PFAS, and found that all 26 chemicals had at least one key characteristic of a carcinogen.^[11] These studies suggest that short-chain PFAS are not necessarily safer than the long-chain PFAS that they are replacing.

Since many PFAS are so resistant to break down, their presence in food ware means that they will leach out in the landfill and enter the environment. Indeed, even some compostable food ware has been shown to be able to release PFAS in the environment.^[12] In addition, the increase in the consumption of take-out foods as a result of the pandemic has increased the risk of consumer exposure to PFAS.

There are alternatives to PFAS-treated food ware,^[13] and major retailers and restaurants including Panera Bread, Taco Bell, Chipotle, Whole Foods Market, Sweetgreen, Cava, Freshii,^[14] McDonald's,^[15] Trader Joe's,^[16] Ahold Delhaize,^[17] Rite Aid,^[18] Amazon.com,^[19] and Wendy's^[20] have committed to and/or already started the switch to these safer alternatives.

Conclusion

H.2348/S.1494 is a bill that would go a long way toward protecting consumers from exposure to PFAS through food packaging. By enacting H.2348/S.1494, Massachusetts could join Connecticut, New York, Maine, California, Minnesota, Vermont and Washington in banning PFAS from food packaging materials. We strongly urge you to support these bills.

Sincerely,

Michael Hansen, Ph.D.
Senior Scientist
Consumer Reports

Brian Ronholm
Director, Food Policy
Consumer Reports

^[1] Lewis RC, Johns LE, Meeker JD. 2015. Serum Biomarkers of Exposure to Perfluoroalkyl Substances in Relation to Serum Testosterone and Measures of Thyroid Function among Adults and Adolescents from NHANES 2011–2012. *Int J Environ Res Public Health*. 12(6): 6098–6114. At:

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4483690/pdf/ijerph-12-06098.pdf>

^[2] <https://www.atsdr.cdc.gov/pfas/health-effects/index.html>

^[3] Grandjean P and E Butdz-Jørgensen. 2013. Immunotoxicity of perfluorinated alkylates: calculation of benchmark doses based on serum concentrations in children. *Env Health* 12(35). At: <https://ehjournal.biomedcentral.com/articles/10.1186/1476-069X-12-35>

^[4] <https://www.atsdr.cdc.gov/pfas/health-effects/index.html>

^[5] Stokes EK, Zambrano LD, Anderson KN et al. 2020. Coronavirus Disease 2019 Case Surveillance—United States, January 22–May 30, 2020. *MMWR Morb Mortal Wkly Rep* 2020; 69:759–765. DOI: <http://dx.doi.org/10.15585/mmwr.mm6924e2>

^[6]

<http://blogs.edf.org/health/2019/11/20/fdas-updated-results-for-pfas-in-food-suggest-progress-but-raise-questions-about-its-method/>

^[7] <https://toxicfreefuture.org/packaged-in-pollution/>

^[8] <https://www.fda.gov/food/chemicals/authorized-uses-pfas-food-contact-applications>

^[9] *Id.*

^[10]

<https://www.fda.gov/news-events/press-announcements/fda-announces-voluntary-agreement-manufacturers-phase-out-certain-short-chain-pfas-used-food>

^[11] Temkin AM, Hocevar BA, Andrews DQ, Naidenko OV and LM Kamendulis. 2020. Application of the key characteristics of carcinogens to per- and polyfluoroalkyl substances. *Int J Environ Res Public Health* 17(5). At: <https://www.mdpi.com/1660-4601/17/5/1668/htm>

^[12] Choi JC, Lazcano RK, Yousefi P, Trim H and LS Lee. 2019. Perfluoroalkyl acid characterization in U.S. municipal organic solid waste composts. *Environ. Sci. Technol. Lett.* 6(6): 372-377. At: <https://pubs.acs.org/doi/abs/10.1021/acs.estlett.9b00280?>

^[13] Hogue, C. 2021. What's after PFAS for paper food packaging? *C&EN* 99(36). At:

<https://cen.acs.org/materials/coatings/PFAS-paper-food-packaging/99/i36>

^[14] <https://toxicfreefuture.org/pfas-free-paper-food-packaging-alternatives-a-resource-for-restaurants-and-retailers/>

^[15] <https://corporate.mcdonalds.com/corpmcd/our-purpose-and-impact/our-planet/packaging-and-waste.html/asdf>

^[16]

<https://www.bizjournals.com/bizwomen/news/latest-news/2019/03/trader-joes-pledges-to-eliminate-1-million-pounds.html?page=all>

^[17] <https://www.grocerydive.com/news/ahold-delhaize-pledges-to-clean-up-its-store-brands/563352/>

^[18] <https://www.riteaid.com/corporate/chemical-policy>

^[19] https://sustainability.aboutamazon.com/amazon_chemicals_policy_food.pdf

^[20] Pg. 34 in https://www.wendys.com/sites/default/files/2021-04/Wendys-2020-CSR-0419_FINAL.pdf