

Why is our kale contaminated with PFAS? ...when the FDA told us plant foods were safe!

The Food and Drug Administration (FDA), the Environmental Protection Agency (EPA) and the Centers for Disease Control and Prevention (CDC) have been the three key U.S. agencies monitoring poly- and per-fluoroalkyl substances (PFAS), commonly referred to as ‘forever chemicals’, in humans, in our diets, and in the environment.

While data showing these incredibly pervasive and persistent chemicals were present in the vast majority of human blood samples tested as part of the National Health and Nutrition Examination Survey (NHANES) as early as 2011, the agencies have been lackadaisical with regard to taking decisive regulatory action that will reduce exposure.

The Biden Administration has committed to take “significant action to accelerate efforts prevent PFAS release and expand PFAS cleanup and remediation to safeguard human health and protect the environment”.¹

However, the Administration has not responded boldly enough given the severity and implications of PFAS contamination, and has yet to propose a blanket ban on PFAS use by industry.

This is despite having been informed by the CDC that “exposure to a select number of PFAS in the United States is widespread as suggested by nearly universal detection of these chemicals in serum collected from NHANES participants.”²

Where is all the PFAS coming from?

Given the ubiquitous presence of PFAS in humans cannot be linked only to known hotspots of contamination of aquifers which would result in associated, noncontiguous distribution of detectable PFAS exposures—not the contiguous exposures that evidently occur—the Alliance for Natural Health USA has been determined to learn more about sources of PFAS exposure.

As with exposure to any contaminant, there are only 3 routes of exposure, namely: oral (e.g. via food, water, pharmaceuticals, supplements), dermal [skin] (e.g. via personal care products, clothing), and inhalation (e.g. contaminated air).

¹ White House Council on Environmental Quality. *Biden-Harris Administration Progress on Per- and Poly-fluoroalkyl Substances: Steps Taken and Ongoing Actions*, March 2023: <https://www.whitehouse.gov/wp-content/uploads/2023/03/CEQ-PFAS-Report-March-2023.pdf>.

² National Health and Nutrition Examination Survey (NHANES). 2017-2018 Data Documentation, Codebook, and Frequencies. Perfluoroalkyl and Polyfluoroalkyl Substances: https://www.cdc.gov/Nchs/Nhanes/2017-2018/SSPFAS_J.htm.

PRESS BACKROUNDER

Drinking water

The EPA proposed in March 2023 new drinking water limits for six PFAS (4 parts per trillion (ppt) for two chemicals and 1 ppt for four chemicals) which it expects to be able to turn into law via the National Primary Drinking Water Regulation (NPDWR) by the end of the 2023.³ If fully implemented, the EPA claims “the rule will prevent thousands of deaths and reduce tens of thousands of serious PFAS-attributable illnesses.”³

Food

An update issued by the FDA in May 2023 found no detectable PFAS in vegetables and other fresh or processed plant foods it analyzed as part of the Total Diet Survey (TDS). In its update, the FDA states:

“The data shared today are consistent with our previous TDS testing results; no PFAS have been detected in over 97% (701 out of 718) of the fresh and processed foods tested from the TDS. At least one type of PFAS was detected in 44% (14 out of 32) of the TDS seafood samples and in 74% (60 out of 81) of the samples from our 2022 targeted seafood survey.”⁴

At a time when public trust in authorities and governments is very low,⁵ we decided to test the null hypothesis that any randomly selected sample of fresh vegetable should be free of detectable PFAS. Given that the FDA’s own surveys, via the TDS, had only included 4 samples of kale so far, we had Eurofins, using FDA-validated methods, test for the presence of 20 PFAS in 8 samples of kale (half organically-grown, half conventionally-grown), from 4 states.

Our finding of significant levels (100-250 ppt) of PFAS in seven out of eight samples of kale was entirely unexpected, and strongly suggests the FDA’s data cannot be trusted. It has been the trigger for us to initiate a wide campaign on PFAS with the aim of forcing the government to issue a blanket ban on PFAS compounds. Any piecemeal bans on the most conspicuous, well studied PFAS will likely result in industries substituting other, less studied PFAS, which, ultimately, will not reduce the total burden of PFAS to which we and our environments are exposed.

Find out more at: [BanPFAS.org](https://banpfas.org).

³ Environmental Protection Agency. Per- and Polyfluoroalkyl Substances (PFAS). Proposed PFAS National Primary Drinking Water Regulation: <https://www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas>.

⁴ FDA Update on PFAS Activities, May 31, 2023: <https://www.fda.gov/food/cfsan-constituent-updates/fda-update-pfas-activities>.

⁵ Pew Research Center. Public Trust in Government: 1958-2022: [https://www.pewresearch.org/politics/2022/06/06/public-trust-in-government-1958-2022/#:~:text=Public%20trust%20in%20government%20remains,the%20time"%20\(19%25\)](https://www.pewresearch.org/politics/2022/06/06/public-trust-in-government-1958-2022/#:~:text=Public%20trust%20in%20government%20remains,the%20time).