

# Why is our kale contaminated with PFAS when the FDA told us our produce was safe?



*This week, I'm sharing an important message from the Alliance for Natural Health, for which I serve as President of the Board of Directors and Medical Director. I urge you to support our efforts to ban PFAS! You can learn more by listening to my recent podcast interview with ANH Executive Director Rob Verkerk, and by watching a video I've narrated on the dangers of these "forever chemicals."*

—Dr. Hoffman

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Life on this planet requires clean air, water, food to thrive.

But life — including human life — is being increasingly compromised by the toxic burden of the over 350,000 new-to-nature, industrial chemicals and chemical mixtures used by industry, from agriculture and food, to automotive, aeronautics, consumer products, pharmaceuticals, and a wide range of other sectors.

The US chemical industry is a nearly \$800-billion business, and chemical

distributors deliver more than nine tons of chemical sector products to industry every 8.4 seconds.

Among the most concerning of chemical contaminants is a very large group of some 12,000 chemicals, called PFAS for short.

They've been dubbed "forever chemicals". These chemicals – with chemical name [say slowly and deliberately] poly- and per-fluoro-alkyl substances – hence the PFAS acronym – are often referred to as "forever chemicals" for good reason. That's due to the immense strength of the carbon-fluorine bond found in all PFAS compounds – one of the strongest known in chemistry. This makes them incredibly persistent in the environment, as well as in the human body.

They're used in a wide range of industrial and consumer applications, mostly for their ability to repel grease and water.

That means you'll find them in non-stick cookware, microwave popcorn bags, pizza boxes, fast-food wrappers, water-resistant clothing, furniture protection products, in aqueous film-forming foams used for fire-fighting, lubricants, and hundreds of other products.

PFAS only really started getting national attention after a West Virginia farmer Wilbur Tennant started raising concerns in the late 1990s about how he felt pollution from a DuPont factory near Parkersburg, West Virginia, was making his cattle sick.

The Dupont factory was making Teflon and illegally dumping wastewater contaminated with one specific PFAS, namely PFOA, also known as C8 because of its 8-carbon chain – into groundwater – for over 50 years.

This led to a class action lawsuit alleging contamination affecting around 70,000 people relying on potentially contaminated water.

The lawsuit triggered the formation of the C8 study group which eventually tracked elevated rates of six conditions to residents in the vicinity of the Dupont factory. These conditions were testicular cancer, kidney cancer, thyroid disease, ulcerative colitis, pregnancy-induced hypertension, and high cholesterol.

Many years of studies of the residents followed and soon revealed the much greater scope of the problem.

We've now discovered that the chemical industry has known for years a lot about the dangers of PFAS, but it used tobacco industry tactics to hide this knowledge from public view.

The problem is that these chemicals are now everywhere, even in places you wouldn't expect. They're in your clothes. They're in the "biosolids" used to grow your food. They're in grease-proof fast food wrappers. They're in cosmetics and contact lenses. The list goes on.

The FDA of course is the regulator responsible for food and drugs. Realizing just how widely PFAS chemicals have been used by industry and as well as the persistence of the molecules themselves, as demonstrated by increasing evidence of contaminated water supplies, the FDA has been looking since 2019 to see if PFAS is in American food.

It's developed methods that allow accredited labs to measure PFAS down to the part

per trillion level – and the toxicological science now tells us that any measurable amount, particularly when we're exposed to low levels from multiple sources – could present a health or environmental concern.

You might find yourself breathing easy when you look at the FDA's Total Diet Study results from 2019 through to 2021 – these are the most recent available data – there are no 2022 or 2023 data publicly available as yet.

The FDA tells us that from the PFAS testing it's done as part of the Total Diet Study that no detectable PFAS could be found in 701 out of 718 samples. Yes, that's over 97% of samples. All but three of the contaminated 17 samples were seafood, especially tilapia and shrimp. The three other samples were a protein powder, ground beef, and ground turkey.

So what does this mean to you?

Probably what it means to us! There should be no PFAS in wholesome vegetables that should make up the bulk of any healthy diet.

In a world where public trust of government authorities is at an all-time low, we decided to test this null hypothesis.

For us, kale is the archetypal healthy vegetable. It's loaded with antioxidants, cancer-protective compounds, fiber, vitamins C and K along with a bunch of other vitamins and minerals including iron and magnesium – and more.

To test this null hypothesis that the FDA is right that there's no contamination of vegetables, we conducted a pilot study – and we've used kale as our model.

So ANH team members from four different states went to their local groceries and each bought both a sample of conventionally grown kale and another of organic kale. We shopped for kale in Stop & Shop in New York, in Weis in Pennsylvania, in Publix in Georgia, and in Whole Foods in Arizona.

The kale was packaged up in PFAS-free materials supplied by one of America's leading PFAS testing labs – then analyzed, using methods accredited by the FDA.

Then the bombshell. All but one of the 8 samples we collected was found to be PFAS contaminated. Let's get this in perspective. We tested twice the number of samples of kale in this pilot than the FDA tested in 3 years – and 4 out of 4 of the organic samples were found to be contaminated. As shocking as it might sound – this might suggest eating organic isn't necessarily a way of guaranteeing PFAS-free food.

But remember: our study is a pilot. And, as with any pilot, we need to be careful not to extrapolate too far.

We've just published a detailed report with our findings, conclusions, and recommendations – and we think our report shows that we should be very concerned about what the FDA is telling the American public.

On the basis of grossly inadequate testing, the FDA tells us the only real problems with PFAS in food are in drinking water and seafood.

Yet, in our pilot – based on findings from a top-tier lab using FDA's own testing methods – we found nearly 90% of kale samples we purchased were contaminated.

Here's the thing: We're concerned that the FDA and the EPA are trying to cover up a

much bigger problem than they'd have us believe.

It's also clear that the US is way behind some other parts of the world – especially Europe which has already set in motion a plan to ban 10,000 PFAS chemicals.

Some states are taking action because of their own concerns and the lack of action from federal authorities.

But at the moment it's looking like another game of Whack-A-Mole – industry is trying to take out of circulation some of the very few well-studied PFAS chemicals like C8 – and they're replacing them with less studied versions.

Remember when they did this with phthalates?

But switching from one PFAS to another still means you're putting these chemicals – along with their super-strong carbon-fluorine bonds – into the environment and into people's bodies.

So where to from here?

The first step is we need to raise awareness of the problem.

After years of covering up the seriousness of our exposure to toxic PFAS chemicals, the Alliance for Natural Health USA is fed up with government cronyism that permits chemical companies to continue poisoning our bodies, our children, and our environment with PFAS.

We need you to help us wake up the public as well as US regulatory agencies, notably the FDA and the EPA, over the seriousness of this issue. We need to understand just how much of our food is contaminated and come to terms with the fact the problem might extend way beyond drinking water and seafood.

The FDA and EPA – the very agencies that are charged with protecting our health and our environment – have largely turned a blind eye to the chemical companies that have spent decades hiding the horrific truth about the dangers of PFAS as they continued to contaminate our soil, water, air, and food.

We must recognize that food is just one route by which we can be exposed to PFAS. We're also exposed to PFAS in the air we breathe, the water we drink, and the products we use every day. Then, if we add to that the fact that PFAS accumulate in body fat, tissues, and organs—it's looking ever more like we're sitting on a ticking time bomb.

We need to let the FDA know we're watching what it's doing – we're going to be that watchdog, protecting natural health which is increasingly threatened by ubiquitous poisons like PFAS. We're raising money now to do more testing. The more money we raise, the more we can test. Please make donations via [BanPFAS.org](https://banpfas.org) or [ANH-USA.org](https://anh-usa.org).

Our report calls for US regulatory agencies to wake up to the full gravity of this problem and to take meaningful steps to protect human and planetary health by banning these chemicals altogether. We need to get a clear answer on why the FDA isn't planning a total ban on all 10,000 plus PFAS chemicals set to be implemented in Europe in 2026.

U.S. regulatory agencies have proven themselves incapable or unwilling to meaningfully address the extensive contamination by PFAS. While the piecemeal approach of individual state policies is positive – it just isn't enough, nor is it

happening quickly enough.

The problem needs to be cut off at the source. That means banning all 12,000 PFAS as soon as practicably possible.

We need federal action NOW to initiate these bans on PFAS chemicals!

It also means prioritizing studies that shine more light on the extent of the problem which requires that the FDA validate more methods to analyze many more PFAS. So far the FDA has only validated methods for a paltry 30 of some 12,000 PFAS that are being used by industry. That means – scarily – there’s currently no way of analyzing the 99.75% of PFAS that are out there!

We’re going to keep you up-to-date with what we learn from the available science, and studies by US regulatory agencies, universities, other research organizations and independent scientists and non-profits, to help you make informed decisions about how you can minimize your exposure to PFAS.

Go to [BanPFAS.org](https://banPFAS.org) and find out more. Please also share this link as widely as you can.

As Margaret Mead implied – and Erin Brockovich demonstrated to all Americans – it is only thoughtful, concerned, and committed citizens that are able to protect us from the ravages of greedy corporates with their revolving doors with government agencies.

Thank you for listening, watching, and sharing, as well as supporting our efforts in any way you can.