

## Silent Threats: How Everyday Chemicals Are Fueling Cancer, Dementia & Fertility Loss

We live in a world full of products and materials designed to make life easier: non-stick pans, waterproof jackets, stain-resistant carpets, slick packaging, and pest-control sprays. But many of these are laced with synthetic chemicals that don't break down easily and quietly accumulate in our bodies and the environment. A recent global investigation by Deep Science Ventures found over 3,600 of these man-made chemicals circulating in people via food, air, and water, and flagged about 80 of them as particularly hazardous.

### What the Science is Showing

Researchers have connected long-term exposure to these chemicals with serious health outcomes. For example, one study linked elevated levels of a class of chemicals known as “forever chemicals” (Per- and polyfluoroalkyl substances or PFAS) in women's blood with a 30-40 % lower chance of achieving pregnancy and a live birth. Similarly, the major investigation also found significant associations between chemical exposure and rising rates of cancer (including cancers of the bladder, colon, liver, and more), dementia and other cognitive issues, and declining fertility across populations.

### How These Chemicals Get Into Us

Many of these dangerous chemicals are what scientists call *endocrine disruptors*. They interfere with our natural hormone systems, which regulate everything from how our bodies grow to how our brains work and our reproductive systems function. They find their way into us through everyday routes: food wrapped in certain plastics, carpets treated with certain coatings, water contaminated by industrial chemicals, the air we breathe, and even household products. Over time, the accumulation can subtly, and sometimes dramatically, undermine our health.

### What You Can Do

While we await larger-scale policy change and tighter regulation, there are practical steps people can take to reduce their chemical burden:

- Check labels and choose household items, cookware, and food packaging marked “PFAS-free.” Be cautious of rebranded non-stick terms such as “ceramic-coated,”\* “PTFE-free,” or “PFOA-free,” which may still contain PFAS chemicals. Choose cast iron, glass, ceramic, or stainless steel instead. With proper seasoning, a cast-iron pan\*\* can function like a non-stick surface.
- Avoid heating food in plastic containers or using plastic-wrapped foods longer than necessary. For heating and storage, use glass containers. Heating food on the stove is healthier.
- Choose fragrance-free, lowest-emission, healthy personal-care and cleaning products.. Always read labels and do not choose products with ‘perfume’, ‘parfum’, or ‘essential oils’. These terms can include many chemicals which are not declared on the label.
- Ventilate indoor spaces well, reduce dust, which often carries chemical residues, and consider water-filtration options if contaminants are suspected.
- Stay informed about the materials in your home, office and community, especially if you live near industrial zones or use many plastic/synthetic products.

## A Call for Action

In short, the invisible burden of everyday synthetic chemicals is becoming a visible health problem. From fertility loss to cognitive decline to rising cancer rates, the evidence is mounting that what we bring into our homes and bodies matters, not just in the short term, but for our long-term health. By staying alert, making informed choices, and advocating for change, we can begin to shrink the silent risks we all face.

\*The difference between “ceramic-coated” and “ceramic” cookware is important. Ceramic-coated cookware is typically made from aluminum or another metal and then covered with a synthetic non-stick coating marketed as “ceramic.” Despite these labels, many ceramic-coated products still contain PFAS or PFAS-replacement chemicals, even when



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marked “PFOA-free” or “PTFE-free,” and the coating can wear off over time. In contrast, **100% ceramic cookware** is made entirely from kiln-fired clay, contains **no PFAS** and **no synthetic non-stick coating**, and is a safer option for people trying to reduce chemical exposures. It is also more durable and stable at high temperatures.

\*\* Serious Eats: [How to Season Cast Iron](#)