

What is PFAS and Why is it Bad?

For decades, chemicals have been added to microwave popcorn bags, pizza boxes, fast food wrappers, and disposable food service items and other food packaging to make them water and grease resistant.

These chemicals of concern are polyfluoroalkyl substances known as PFAS, and have been shown to migrate out of foodware and into our food and they are toxic.

PFAS are known as **Forever Chemicals** because they are extremely persistent in the environment. They do not break down in the body and merely build up, so there is no safe level of exposure. Nearly every U.S. resident has PFAS in his or her body, with biomonitoring studies finding PFAS in blood, breast milk, umbilical cord blood, amniotic fluid, placenta, and other tissues.

They have been connected to serious potential health effects including; kidney and testicular cancer, liver and kidney damage, hormone and thyroid damage, leading to delayed puberty, obesity, infertility, lower birth weights and preterm births. These chemicals have also been linked to attention-deficit hyperactivity disorder (ADHD) and damage to the immune system, possibly leading to autoimmune disorders.

Exposure to these compounds has been linked to a number of health concerns:

- **Cancer:** PFAS induces tumors in laboratory animals, and there is evidence linking PFAS exposure to kidney and testicular cancer.
- **Hormone disruption:** PFAS affects estrogen production and response, thyroid hormone signaling, and on receptors involved in regulation of fat metabolism.
- **Liver and kidney toxicity:** PFAS are associated with multiple effects on liver and kidney, including liver lesions, kidney degeneration, and damage to liver function.
- **Harm to the immune system:** PFAS damages the immune system, possibly leading to autoimmune disorders.
- **Reproductive and developmental toxicity:** Laboratory tests show disrupted reproductive cycles, and impaired growth of the uterus and ovaries. Maternal exposure to PFAS resulted in lower birth weight and lowered general fertility.

For more information see

[Safer Chemicals Healthy Families](#)

[Safer Chemicals Full Report on PFAS in Food Packaging](#)

[Center for Environmental Health Guide to Safer Foodware](#)

