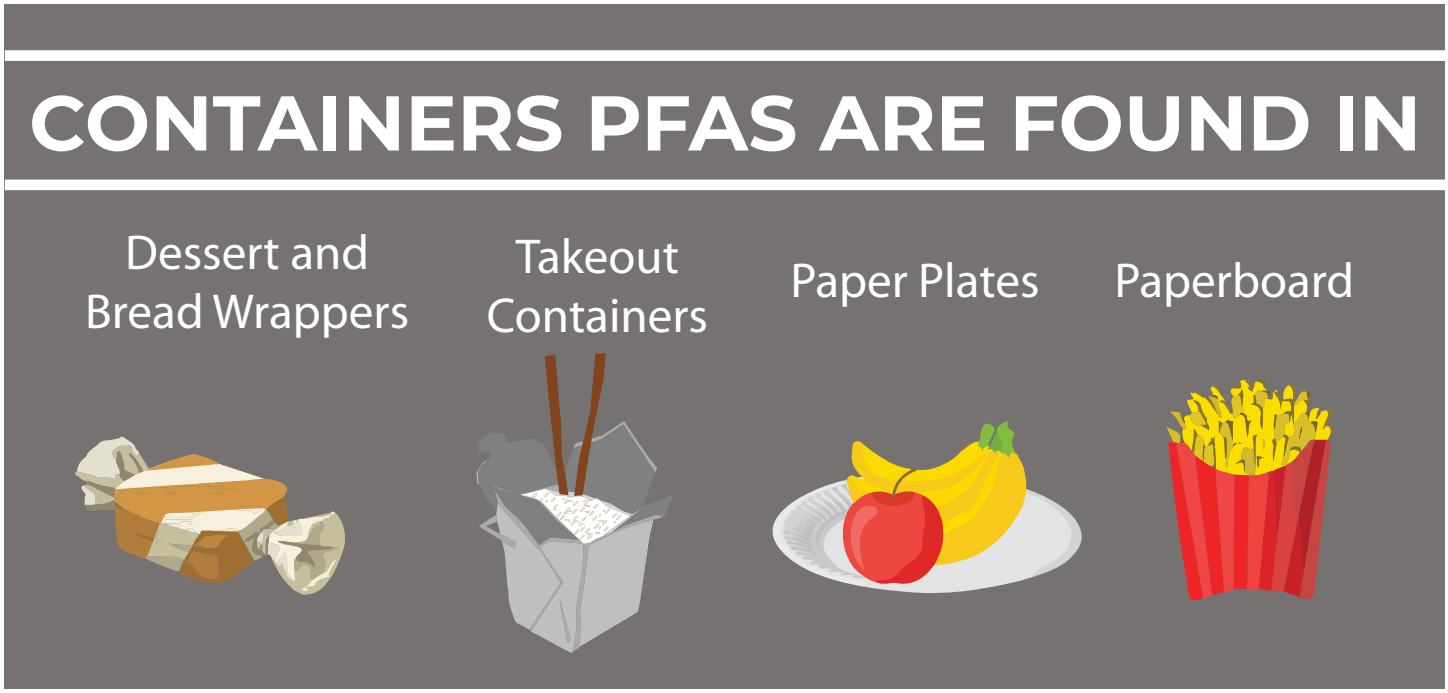
Transitions2earth

How Compostable Plates can be Hazardous to your Health

Compostable and biodegradable paper plates and bowls have surged into the market with the claim that they are better for the environment than plastic alternatives. Made from leftover wheat stalks, sugar cane or other plant waste that would have been thrown away, these products claim to be an incredible solution to the plastics crisis. We know now that there is more to the story.

Compostable and biodegradable plates and bowls, also known as **"molded fiber"**, do reduce the need for plastic and lower the amount of plastic waste. However, while thought to be eco-friendly, molded fiber plates and bowls are likely to be dangerous to your health and the health of the environment.



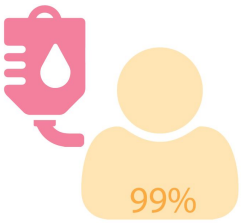
Molded fiber paper plates were created to meet a need to reduce the growing amount of waste entering the environment. The fibrous plates are made with natural materials that will break down yet still retain the properties of their non eco-friendly counterparts: namely, oil and water resistance.

In traditional paper plates and bowls, there is a plastic film that provides the oil and water resistance. As eco-friendly plates are designed to eliminate the need for plastic, another material was needed to achieve oil and water resistance. PFAS have been introduced as the solution to this problem. When applied to paper plates and bowls instead of plastic, PFAS are able to provide the water and oil resistant features. Using the PFAS class of chemicals allowed molded fiber paper items to match the functionality of their plastic counterparts with the supposed benefit of being eco-friendly.

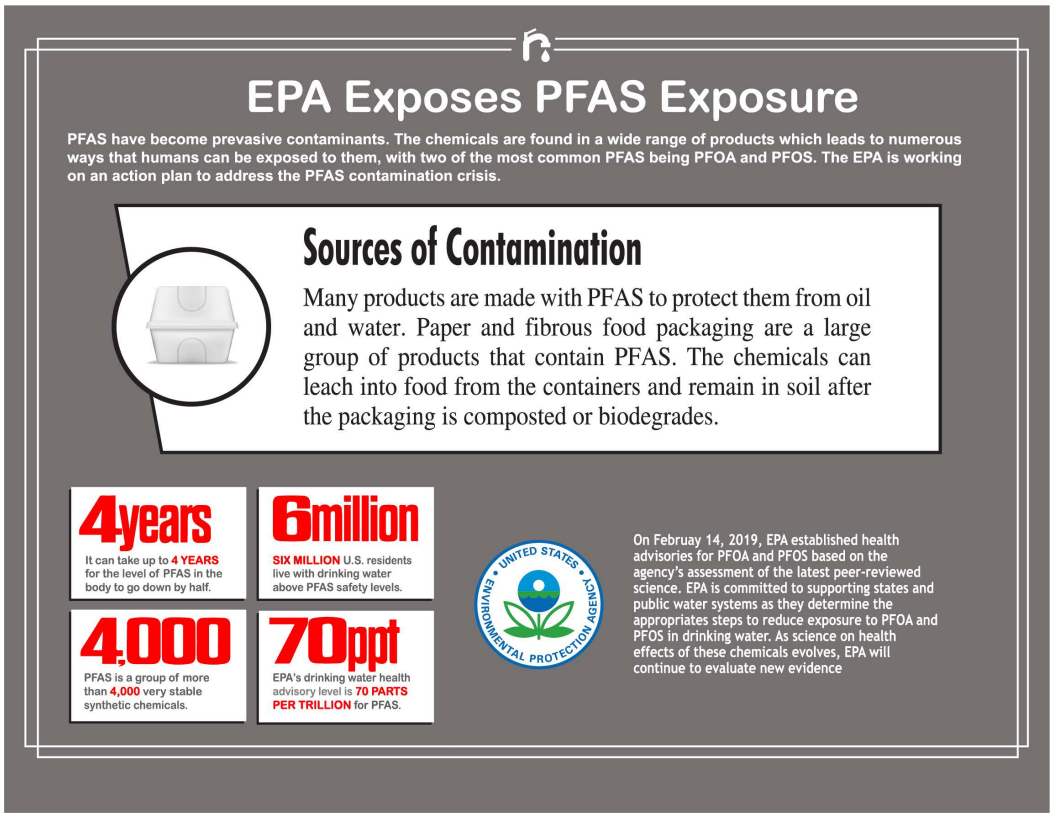
So what are PFAS? **PFAS stands for Per- and polyfluoroalkyl substances.** The substances are referred to as fluorinated chemicals and previously called PFCs, FCs, or fluorocarbons. They are a class of chemicals developed in the 50's and 60's by 3M and DuPont to enhance water and oil repellency in everything from GoreTex jackets to stain resistant carpet. You can read more from the EPA.

In small amounts the FDA states that PFAS is not harmful to humans. Yet while there is no legal safety limit, the EPA administered a health advisory of PFAS over 70 parts per trillion in water. If the body interacts with a higher amount of the chemicals, PFAS can disrupt vital body functions. Research from organizations such as the CDC has found that **PFAS can lead to health risks such as:**

- Increasing the risk of cancer
- Affecting growth, learning, and behavior of infants and older children
- Lowering a woman's chance of getting pregnant
- Interfering with the body's natural hormones
- Increasing cholesterol levels
- Affecting the immune system

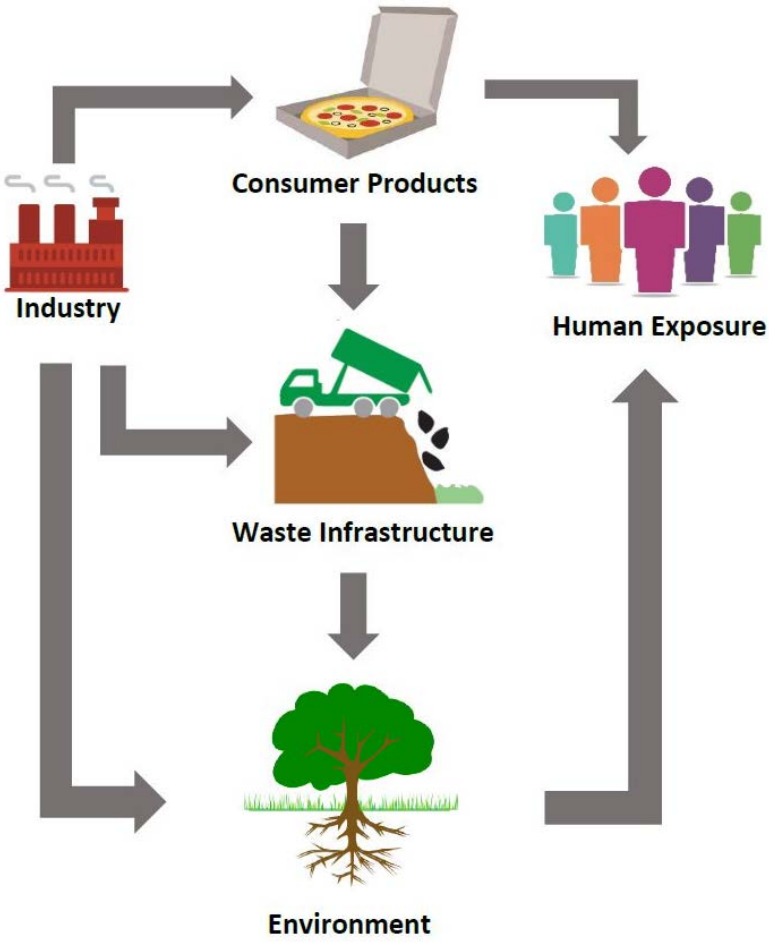


PFAS is found in the blood of more than 99% of Americans.



One plate or bowl with PFAS may not cause negative effects in the body, yet PFAS can bioaccumulate in both the body and the environment. It is not known if PFAS can break down, the chemicals have an unknown half life, so the chemicals may remain in the body and the environment indefinitely as **"Forever Chemicals"**. So using one plate or one bowl with PFAS may not have enough of the chemicals to harm you, yet multiple plates or bowls may provide enough exposure to negatively affect your body in the long run.

The danger of molded fiber paper plates does not mean that consumers should turn their back on the environment and switch back to to plastic-coated paper plates. Technology for sustainable products is constantly improving and in this case is moving toward biodegradable and/or compostable paper tableware that is both eco-friendly and non-toxic; an alternative that is both plastic and PFAS free.



At Transitions2earth we hold the safety of our consumers as a top priority. That is why we are discontinuing all our products that contain PFAS; our **biodegradable and compostable paper (Bagasse) plates and bowls.** Yet we still want to encourage and pursue environmental sustainability and the elimination of plastics. To pursue our mission, and to provide options for consumers, we are proud to be one of the first to introduce PFAS free plates and bowls. Pre-order our PFAS free products. With our PFAS free plates and bowls, you can feel at ease that you are helping the environment as well as protecting yourself and others from dangerous chemicals.