Keeping Plastics Out of Our Bodies & World

Certainly, most of us wouldn’t eat plastic intentionally. Yet studies suggest that we are, and regularly!

In a 2019 study by the University of Vienna, the first study of its kind, from the Medical University of the world’s population might have plastic passing through their bodies. They concluded that, on average, people are consuming about 5 grams of plastic every week — the weight of a credit card! Our actual total consumption could be much higher, since just a small number of dietary sources have been studied, and the researchers didn’t include packaged products and other exposure routes such as inhalation.

Adding to concern is a 2018 study by scientists from the Medical University of Vienna, the first study of its kind, which showed that plastics are getting into our guts. (The study tested for, and found, tiny plastic pieces in every participant’s stool. Eeps!)

These researchers estimated that each participant passed 800 to 1,000 pieces of microplastic every day. While larger studies are needed, they estimated that more than half of the world’s population might have plastic passing through their bodies.

Where’s the Plastic From?

So how are these plastics getting into our bodies? Studies have found them in seafood, salt, sugar, honey, drinking water, and beer — but most foods haven’t been tested. Plastics could also come from our food packaging, dishware, various kitchen and household items — and the environment at large.

That’s because we’re producing 400 million tons of plastic a year globally, and much of that goes into our homes and shared ecosystems — including at least eight million tons of plastic waste (mostly single-use) flowing into the world’s oceans annually. Plastic has been found in the world’s most remote areas — and accumulating in ocean spirals, such as the Great Pacific Garbage Patch.

And, because plastics are nearly always made of petroleum, they don’t biodegrade. Instead, they break down into smaller and smaller pieces and infiltrate, well, everything. They also can soak up and carry harmful toxic chemicals within them.

As a result, plastic pollution impacts the natural environments of most species on the planet, according to the nonprofit WWF (World Wildlife Fund for Nature, formerly World Wildlife Fund). Animals (including mammals, reptiles, birds, and fish) regularly get tangled in large plastic debris, leading to injury or death. Plus, microplastics have been found in nearly every fish and aquatic animal tested, even ones from deep oceans. These plastics have been found to block animals’ digestion, damage internal organs, inhibit brain activity, impair immune systems, harm breeding, and cause or contribute to their deaths.

See Plastics, over
Plastics, continued

Human Health Impacts?

So are the microplastics in our bodies impacting our health? Human studies are sparse. However, based on related human studies plus animal studies, experts are concerned that microplastics in our bodies could damage our immune systems, trigger inflammation, upset gut balance, disrupt endocrine hormones, increase cancers, decrease sperm counts, and bring in toxins such as mercury or pesticides.

Vienna researcher Dr. Schwabi says, “the smallest microplastic particles are capable of entering the bloodstream, lymphatic system, and [might] even reach the liver.”

“We’re running this big human experiment on how they will affect us,” warns Alice Bernard, a lawyer for the environmental advocacy group ClientEarth. And, if we keep increasing our plastic use and pollution, experts say, our exposure and risk will also just keep increasing.

What We Can Do

Certainly plastic has its appropriate uses and can offer advantages, including moldability, durability, water resistance, and reduced weight. However, it often isn’t needed, and swapping to better options can help keep it out of our bodies, homes, waterways, wildlife, and ecosystems.

Here are some things you can do to reduce your exposure and trim the unnecessary harm from plastics.

- Choose food products with less or no plastic packaging.
- Skip single-use plastics. Studies have found plastic particles in nearly all bottled water brands. And single-use items are a key source of waste. Plastic bottles, bags, and straws are among the most common plastics found in our ecosystems! All for just a brief moment of use.
- So get cloth shopping bags and a refillable stainless steel bottle or coffee mug. Skip plastic straws and coffee pods, reuse your produce bags — or get reusable versions of these. Bring washable dishware to potlucks. Gift these items to others! Also, find options to single use plastics at work, school, and events. And get multiple uses out of any plastic you have.
- Buy from the bulk aisle, ideally into your reusable containers. See my tips for reducing your waste with the bulk aisle at www.patriciadines.info/EcoGirl4a.html.
- Avoid “silken” teabags. Instead choose “plastic-free” paper teabags or reusable options. So-called “silken” teabags are actually made of nylon or polyethylene. When brewed, they can release billions of microplastic particles into a cup, according to a published study from McGill University in Montreal. This level far surpasses what’s found in other tested foods. The human health impacts are unknown. But water fleas exposed to them had “significant behavioral effects and developmental malformations,” says study co-author, Nathalie Tufenkji.
- Plastic can also be hidden in paper teabags, as a sealant or paper reinforcement. Learn more at www.treadingmyownpath.com/2018/04/05/plastic-teabags.

“Your article on apple trees is just what we needed for our four apple trees. Lots of good advice, including the proper disposal of infested apples. Thank you very much!”

~ Carol Goodwin Blick

Timely Toxic Tips

- The next Sebastopol Toxics Collections Day is April 7, from 4 to 8pm. To make an appointment, call 707/795-2025 or 877/747-1870 at least 24 hours before the event. You can also drop items at the household Toxics Facility.
- Support government and community-level action to reduce plastic waste and litter. That’s key for larger-scale change.

SOURCES: For this article with its sources, plus more information and tips, see www.healthyworld.org/plastics2.html.

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