

- 1. Mark your confusion.**
- 2. Show evidence of a close reading.**
- 3. Write a 1+ page reflection.**

Microplastics Are Everywhere. Here's How to Avoid Eating Them.

Source: Katie Okamoto, *New York Times*, December 13, 2024

Microplastics and nanoplastics are everywhere.

The teeny tiny pieces of plastic have been found in everything from drinking water to chicken nuggets, apples, and broccoli.

Recent studies have linked these pollutants to heart disease, lung disorders, and more worrying health issues.

But unfortunately, microplastics are now so pervasive that they're nearly impossible to avoid.

If you're concerned about the health effects linked to microplastics, the experts I spoke with said that you can lower your risk by taking care of your general health: getting plenty of sleep and exercise, eating a balanced diet, lowering stress, and seeking preventative care.

Still, it's probably a good idea to lower your exposure to microplastics even if you can't avoid them completely. Although you can cut back your exposure in as many ways as there are sources of plastic, the experts I spoke with recommended focusing on exposures from water, food, and air.

I talked to three doctors and a research scientist for tips on how to reduce the amount of tiny plastics and their chemicals that you (or your kids) might ingest. Here's what they recommend.

1. Cut back on bottled water

Some research indicates plastic bottled water may be a significant source of microplastics. While scientists are still studying just how significant, one study from 2019 of water and other commonly consumed food and drink found it to be the most concentrated source.

There is emerging evidence that on average, bottled water contains more microplastics than tap. (One study published in 2024 suggests that we have underestimated measured concentrations.)

Drinking bottled water in a pinch isn't the end of the world, but if you have concerns about it, you could always consider carrying a reusable steel or glass bottle or tumbler when out and about.

2. Get an NSF-certified water filter

Switching to tap water from plastic bottled water will likely significantly reduce your routine exposure to plastics. But while the average plastic water bottle contains more microplastics and nanoplastics than tap, research shows that tap water may also be a source of microplastics.

Several of our water filter picks are specifically NSF/American National Standards Institute–certified to reduce microplastics, which means they've been rigorously tested in an accredited lab. They're certified only to reduce since the filters cannot guarantee total elimination.

3. Don't use plastic to store food

Plastic food storage and packaging is so common that it's difficult to avoid entirely. But your safest bet is to avoid storing food or liquid in plastic when possible and to minimize exposing any plastic (even those that say they're BPA-free or microwave-safe) to high heat. Sunlight, acids, and physical erosion can also degrade plastic.

4. Don't reuse single-use plastics for food and drinks

It's great to reuse single-use plastic—just not for food. Unless you're using the plastic in the freezer, save it for something that isn't food storage or reheating, said Dr. Gillian Goddard, an endocrinologist and author at ParentData, a science-based online resource for parents. That means don't reuse plastic takeout containers, breastmilk bags, or drink bottles.

5. Don't microwave in plastic

Avoid microwaving or heating food or water in plastic—even if it says it's microwave-safe, said Tracey Woodruff, director of the Program on Reproductive Health and the Environment at University of California San Francisco. Instead, consider glass or ceramic. The

6. Wash plastic by hand

Dishwasher temperatures run very hot and can degrade plastic—even dishwasher-safe plastic—and lead to microplastic shedding. Try to wash your plastic food containers by hand.

7. Use wood or bamboo cutting boards

Some research suggests that plastic cutting boards can be a significant source of microplastics in your diet, since repeated cutting on their surface can dislodge particles that adhere to food. Wood cutting boards also have some other advantages: They're better for your knife blades and last longer than plastic when properly maintained.

8. Clean your air

The air we breathe is also a potential source of microplastics, in the form of dust. Reducing airborne dust in your home, then, may reduce your exposure to inhaled microplastics.

How worried should you be about microplastics?

Scientists are still studying the exact connections between these teeny tiny pieces of plastic and human health. But it's clear that exposure to plastic—whether it's those tiny particles, the chemicals they leach, or a combination—is being linked to a variety of worrying health issues.

Some of those connections still require more research, such as ties to colon cancer, respiratory disease, metabolic function, and disruption to endocrine systems, while others—like a recent study that found those with levels of plastics in their arteries were at a higher risk for heart attacks, strokes, and death—seem a little more clear.

It's important to remember that these links point to concerns about the impact of microplastics on public health, but they are not specific, predictable outcomes. “What I'm thinking about is population risk, not a risk to a specific individual,” said Goddard.

The tricky thing is that microplastics and nanoplastics are impossible to avoid, no matter how diligent you are: They're in the air we breathe, our drinking water, and our food. But scientists aren't sure what levels of microplastics and nanoplastics we're each taking in from those sources.

The oft-cited estimate that the average person eats a credit card's worth of plastic every week has been called into question. But our bodies are certainly taking in plastic, and that's more than nature intended.

Given the growing body of evidence, it's possible that we'll start to see more public health measures that address microplastic pollution. Until then, taking care of your overall health is the first line of defense, followed by taking reasonable steps to reduce microplastic exposure.

Possible Response Questions

- What are your thoughts about protecting yourself from microplastics? Explain.
- Did something in the article surprise you? Discuss.
- Pick a word/line/passage from the article and respond to it.
- Discuss a “move” made by the writer in this piece that you think is good/interesting. Explain.