

## WHY DO WE CARE?

Studies have shown that microplastics may enter your body and be taken up by tissues. There is a lot that we still don't know about them, so scientists are researching their effects on the body. However, these plastics may never go away—once they enter the environment, they only break down and accumulate over time.



## WHAT CAN YOU DO?

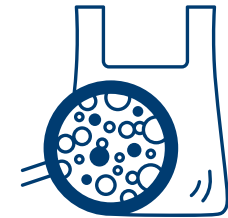
- Reduce single-use plastics such as bottles and bags
- Eat more fresh foods to avoid plastic packaging
- Opt for natural fabrics and clothing
- Prioritize wet dusting and vacuuming
- Recycle properly and avoid littering
- Advocate for policies that reduce single-use plastics
- Get involved in clean-up initiatives
- Stay up to date on research and policy with reliable sources!

### MORE RESOURCES

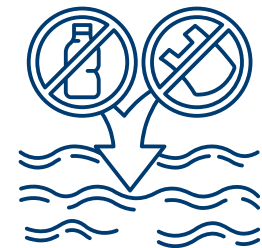
[coec@urmc.rochester.edu](mailto:coec@urmc.rochester.edu)

[nationaloceanservice.noaa.gov](http://nationaloceanservice.noaa.gov)

[greatlakes.org](http://greatlakes.org)



## Microplastics and Me

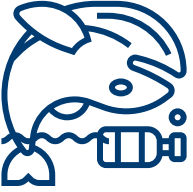


## HOW MUCH DO WE KNOW?

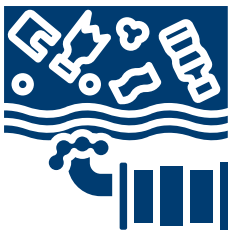
Ongoing research at the University of Rochester and Rochester Institute of Technology addresses human exposure to microplastics:



One group studies how microplastics affect organs through inhalation, while another examines their impact on amphibian immune systems. Teams also collect plastic debris to analyze regional and seasonal patterns.



In Western New York, a group of experts from various fields coordinates research efforts to focus on microplastic exposure and harm in Lake Ontario.



## WHERE DO MICROPLASTICS GO?

### Environment

- In the last 50 years, plastic buildup in water bodies, including the Great Lakes, has surged due to littering, improper disposal, and runoff.
- Over time, plastics are broken down by sunlight and natural forces and turn into microplastics, which are absorbed by aquatic life and plants, posing risks to the ecosystem.
- Microplastics enter the food chain when marine organisms mistake microplastics for food.

### Humans

- **Food:** Microplastics are present in many of the foods we eat, particularly shellfish and other seafoods.
- **Air:** Some airborne microplastics can be inhaled both indoors and outdoors, especially in urban or heavily polluted areas.
- **Water:** Microplastics are also in the water we drink, and some very small particles may enter our bodies through activities such as swimming or boating.

## WHAT ARE MICROPLASTICS?

Microplastics are small, non-decomposing plastic pieces originating from cosmetics, clothing, and the breakdown of larger items such as bags, bottles, or tires. This includes microbeads, which you may remember from products such as face scrubs and toothpaste before they were federally banned in 2015.



### Ways to Reduce Exposure

- Choose tap water and use a refillable water bottle. Single-use bottled water contains more microplastics than tap.
- Use air or water filters (such as HEPA filters or distillers).
- Clean your living space regularly by wet-dusting and vacuuming with a filter that traps microplastics.