What are Microplastics?

Microplastics are plastic synthetics made from fossil fuels or biomass that are less than 5 mm in diameter.

- Microplastics have been found in every ocean with the highest concentrations found in the deep-sea
- Plastic-based litter has since become the most abundant form of solid-waste pollution
- About 1 million tons of microplastics are released annually into the waterways
- The average consumer discards around 2.4 mg of microplastics per day

Impacts of Microplastics

Marine Species Health
- Many species cannot filter out the microplastics once ingested, eventually causing them to starve

Water Quality
- The small size allows more chemicals/heavy metals to attach and transfer to different bodies of water or organisms

Human Health
- Humans are exposed through fish consumption, drinking water and even in the air
- Both the microplastics and the chemicals attached pose potential risks

What can you do?

Educate
- Visit nccoast.org/marinedebris
- Visit oceanservice.noaa.gov/facts

Advocate
- Let businesses and politicians know you want to keep plastic out of the waters
- Get behind laws being passed or campaigns going on to show your support

Alternatives
- Cut single-use plastics out of your daily routine by using reusable containers and shopping bags, stainless steel drink containers, metal straws, etc.
Did you know?

94% of American tap water has been found to be contaminated with microplastics and 93% of bottled water brands have also been found to be contaminated with microplastics; on average there are about 10 microplastic particles in every liter of water consumed.

Did you know?

Big sources of microplastics include synthetic clothing which use microfibers made from plastics.

Up to 85% of microplastic pollution stems from this.

Removing Microplastics from Your Water

Faucet Filters: cheaper option
- Can attach straight to a faucet, under the sink or as whole-house filters and then all faucets are covered

Carbon Block Filters: cheaper option
- Attach to a sink faucet and use replaceable filters
  - tappwater.co/us/faucet-water-filter/

Granular Activated Carbon: price varies
- Installed as pairs
- Can either be for the whole house or under a sink

Reverse Osmosis Filters: best, more expensive
- Can also filter out GenX pollutants; these are usually designed to be whole-house filters

Removing Microplastics from Your Laundry

Washing Machine Accessories: cheaper option
- Used with every wash cycle; after every load the microplastics can be collected and properly disposed of
  - coraball.com/products/cora-ball
  - patagonia.com/product/guppy-friend-washing-bag

Washing Machine Filters: price varies
- Attach to the drainage pipe so all the water used during the cycle is filtered before exiting
- Either have replaceable filters or metal filters that will not need to be replaced, just cleaned

Lint LUV-R Filter: more expensive option
- Metal Filter
  - environmentalenhancements.com/Lint-LUV-R-order

Filtrol 160: more expensive option
- Replaceable filter bag
  - septicsafe.com/filtrol-160-lint-filter-with-1-filter-bag

How Much Microplastic Gets Bottled?

Microplastics & You

North Carolina Coastal Federation
Working Together for a Healthy Coast
www.nccoast.org