

Microplastics are in the Water

By May Martinez

09-05-2023

Plastics and water do not mix well. We know the bad effects of plastics on marine life, like in pictures of those poor sea turtles caught up in plastic pop can holders. But what happens when those plastics are extremely small?

Microplastics are very small pieces of plastic, polystyrene, microfibers, microbeads, and other petroleum-based products. They can range in size from 1 micrometer to 5 millimeters, about the size of a sesame seed. Microplastics form when plastics break down from friction, chemicals, UV light, and micro-organisms. This process is also called splintering. No one likes splinters!

We can find microplastics just about everywhere. They start off as part of plastic bags, bottles, clothing, and polystyrene. Then they enter waterways through stormwater runoff, freshwater pollution, precipitation, and even as dust in the air. The microplastics make their way down the streams and rivers and into the ocean, where they end up in all kinds of unhelpful places.

Animals such as fish see microplastics and think they are food. The plastic ends up in their digestive system and some stays in their tissues. When people go to eat fish, they also end up eating some of the microplastics. Microplastics are so small that they can also end up in both tap water and drinking water. People are continuously eating and drinking microplastics whether they realise it or not. Microplastics are known to bind with toxic chemicals and therefore increase their concentration. We still don't know the effects of microplastics on the human body as there have not been enough studies.

Microplastics have become a big problem for humans because there is a growing amount of plastic waste and there are few solutions for cleaning it up. There are some things that we can do to help. We can avoid or reduce the use of single use plastics, such as plastic straws and those containers that spinach comes in. We can bring reusable containers with us wherever we go, so we don't need to use plastic utensils or polystyrene plates. We can pick up plastic waste from the sides of streams or along the beach before it breaks down into more microplastics. We can tell our friends and family about this sneaky problem and help others to know ways that we can reduce our use of plastics.

Sources:

<https://extension.psu.edu/microplastics-in-our-waters-an-unquestionable-concern>

<https://oceanservice.noaa.gov/facts/microplastics.html>

<https://link.springer.com/article/10.1007/s11356-021-13184-2>

<https://cdn.who.int/media/docs/default-source/wash-documents/microplastics-in-dw-information-sheet190822.pdf>