More to Learn about Single-use Plastic

Prevalence of Single-Use Plastic

“Single-use plastics also include plastic packaging, for example of meats and fresh produce, which accounts for almost half of all plastic pollution. This type of plastic product is distinct from multi-use plastics, which can also pollute the ocean, but tend to amass less frequently due to their multi-use nature.” – National Geographic

One Bottle at a Time | National Geographic Society

Impacts of Plastic on Human Ingestion

“Now, a new study in the journal Environmental Science and Technology says it’s possible that humans may be consuming anywhere from 39,000 to 52,000 microplastic particles a year. With added estimates of how much microplastic might be inhaled, that number is more than 74,000.” – National Geographic

The average person eats thousands of plastic particles every year, study finds (nationalgeographic.com)

“Plastic ingestion by people could be equating to a credit card a week” - No Plastic in Nature: Assessing Plastic Ingestion from Nature to People prepared by Dalberg WWF

Plastic ingestion by people could be equating to a credit card a week / Featured news / Newsroom / The University of Newcastle, Australia

Impact of Plastic on Wildlife

“Scientists including Browne have observed signs of physical damage, such as inflammation, caused by particles jabbing and rubbing against organ walls. Researchers have also found signs ingested microplastics can leach hazardous chemicals, both those added to polymers during production and environmental pollutants like pesticides that are attracted to the surface of plastic, leading to health effects such as liver damage.”- Scientific American

From Fish to Humans, A Microplastic Invasion May Be Taking a Toll | Scientific American

“By infiltrating an animal’s diet microplastics can cause a decrease in physical condition, resulting in increased morbidity and mortality. This can also impact reproductive success, impacting population dynamics.” – Canadian Wildlife Health Cooperative

Wildlife ingestion of microplastics.pdf | (cwhc-rscf.ca)
Impacts of Plastic on Human Health

“Ingested microplastic particles can physically damage organs and leach hazardous chemicals—from the hormone-disrupting bisphenol A (BPA) to pesticides—that can compromise immune function and stymie growth and reproduction. Both microplastics and these chemicals may accumulate up the food chain, potentially impacting whole ecosystems, including the health of soils in which we grow our food.” -Scientific American

From Fish to Humans, A Microplastic Invasion May Be Taking a Toll | Scientific American

“Based on these type of studies, researchers have hypothesized that human exposure to microplastics could lead to oxidative stress, DNA damage and inflammation, among other health problems.” -Plastic Health Coalition

Health effects of Microplastics & Pathogens | Plastic Health Coalition

Is there a Better Choice -Paper Plastic, or Reusable?

An article in Columbia Climate School State of the Planet’s article titled Plastic, Paper or Cotton: which Shopping Bag is Best? Concluded:

“Ultimately, the single use of any bag is the worst possible choice. The key to reducing your environmental impact is to use whatever bags you have around the house as many times and in as many ways as possible.

[Steve Cohen, director of the Research Program on Sustainability Policy and Management at the Earth Institute] ...believes that the important issue isn’t so much the specific environmental impact of the packaging you use, however, but what it is doing to your behavior pattern. “What’s key is to get people conscious of packaging and to start thinking about closing the loop from production to consumption,” he said. “We’re trying to build a set of consumer behaviors that are environmentally conscious, so I wouldn’t just look narrowly at the specific environmental impact of the form of packaging. I would be thinking more about what it is teaching people about being conscious of how their goods are moving around and being packed and disposed of.”

For a readable summary of all the impacts of shopping bags check out:

Sustainable Shopping—Which Bag Is Best? | National Geographic Society