**LaFayette Advisory Conservation Commission**

**People & Plastic Pollution – Part II**

In the last newsletter we helped clarify the [three ways to best handle our waste plastic](https://www.townoflafayette.com/uploads/2/5/1/4/25140650/plastic_recycling.pdf). This article describes why it is in our self-interest to follow those ways.

**How are we exposed to plastic pollution?**

We all know that waste plastic pollutes our water and land, but do we realize it pollutes animals and us? It’s our biggest waste stream that doesn’t breakdown for centuries and during that process plastic first breaks down into tiny particles, called microplastics (a single plastic bag becomes 1.75 million microplastic particles). Scientific studies[[1]](#footnote-1) show that we ingest them, primarily from the consumption of animals that consume them and from food and beverages packaged in plastic:

* 39,000 to 52,000 particles per year
* An additional 90,000 particles per year for bottled water drinkers and 4,000 particles for tap water drinkers

And we inhale them too since they are in indoor and outdoor air, on average:

* 35,000 to 69,000 particles per year

**Are microplastics harmful to us?**

Scientists say we haven’t studied that question enough to have a definitive answer. Given that some of the chemicals used to produce plastic are known carcinogens or otherwise toxic to humans, the answer is probably, but scientists don’t know yet how much exposure results in adverse health effects. Such studies are currently being conducted.

**What can we do?**

In addition to following the three ways to best handle our waste plastic, consumers are in total control how much new plastic is generated by reducing our use of plastic:

* Refuse plastic straws & bags
* Use reusable containers instead of plastic wrap or baggies
* Drink tap water instead of bottled water
* Buy large drink bottles instead of small ones
* Refuse plastic cups/cutlery with your takeout
* Ask your favorite restaurant to use takeout containers other than plastic

We can reuse plastics rather than use new plastic and we can reduce our exposure to microplastics:

* Don’t use plastic drinking containers (bottled water, baby bottles), particularly polypropylene
* Reduce our consumption of seafood
* Don’t heat food in plastic containers

To learn more:

* [Microplastics are everywhere](https://www.nature.com/articles/d41586-021-01143-3)
* [Potential effects of microplastics](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7068600/)
* [Reduce plastic use to save oceans](https://apnews.com/article/science-health-business-environment-recycling-e40323953e5adffb32f73b60c9bb2202)

1. Cox, K.D. et al, Human Consumption of Microplastics, Environmental Science & Technology,2019, 53, 7068-7074. [↑](#footnote-ref-1)