VOLUNTARY ARTICLE: PLASTICS IN TESTICLES? THAT'S RIGHT, GUYS!

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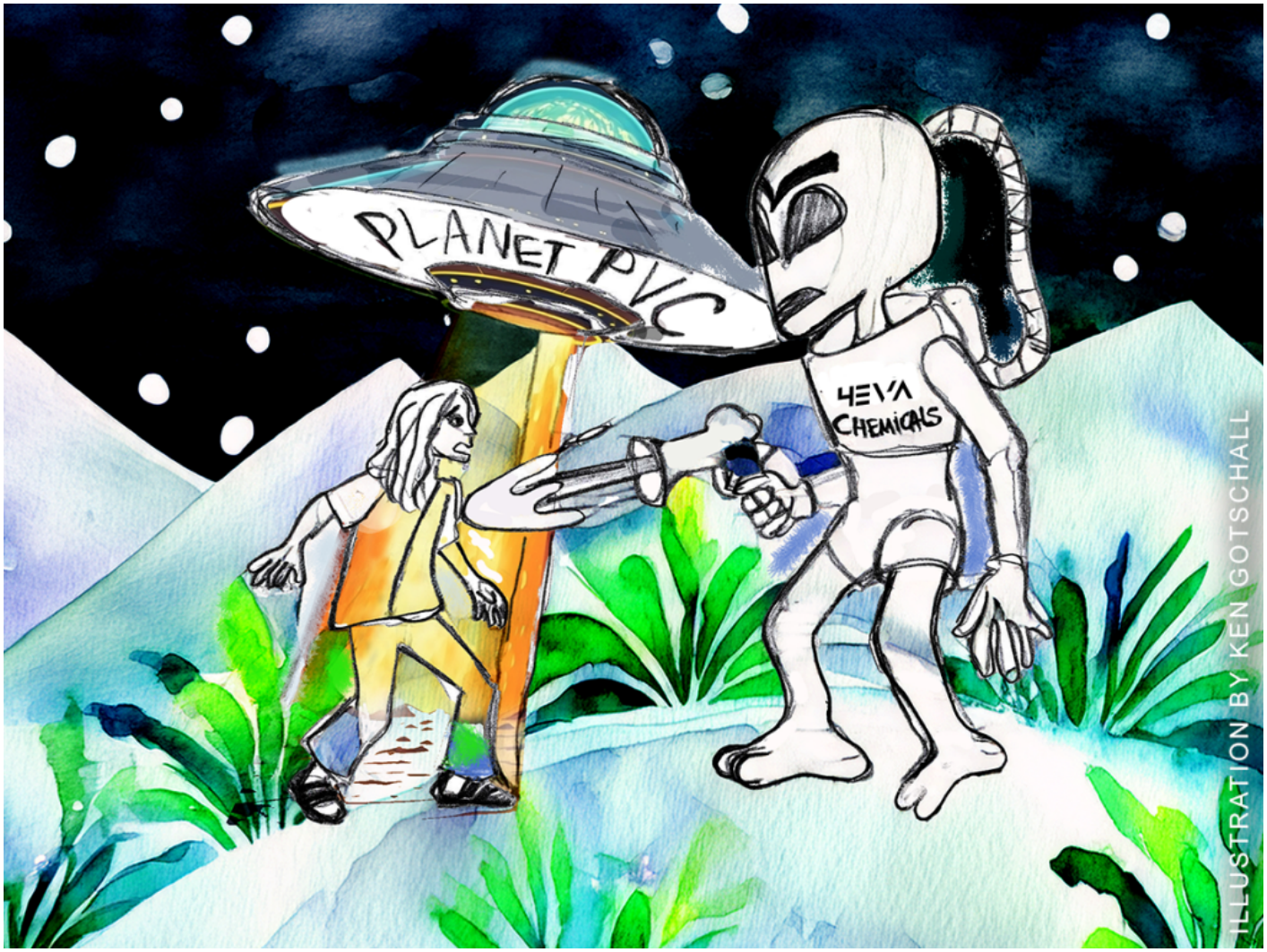
Just one year ago, NPR and several other media sources reported on a study conducted at the University of New Mexico and published in the May 15 issue of the peer-reviewed *Toxicological Sciences*. A team of researchers studying microplastics in both human and canine testicles did not expect the quantity that they found in humans—actually three times higher than in dogs. The study followed a smaller one in China, in 2023, that also found microplastics in testicles. The studies establish no firm causal connections with human health issues, such as the well-documented global decline in sperm count, but they make a powerful argument for further research, and a good dose of precaution.



You don’t have testicles? That doesn’t let you off the hook. In March 2024, *The New England Journal of Medicine* published the results of a three-year study that found a correlation between micro- and nanoplastics (MNPs) in heart tissues and heightened risk of disease. Just last month, *Nature Medicine* published yet another study on MNPs in decedent human brains, and the scientists found a possible correlation with dementia.

A MICROPLASTIC, BY THE WAY, IS A SHARD OF PLASTIC MEASURING NO MORE THAN FIVE MILLIMETERS IN LENGTH, AND A NANOPLASTIC IS ONE BILLIONTH THE SIZE OF A MICROPLASTIC.

Interested now? A microplastic, by the way, is a shard of plastic measuring no more than five millimeters in length, and a nanoplastic is one billionth the size of a microplastic. The latter is capable of passing through a cell wall. Besides the polymer at the base of plastic (a chain of molecules made from fossil carbons), the industry adds up to 16,000 chemicals to impart properties like durability, flexibility, texture and color. These include known toxins. The New Mexico study found an abundance of polyethylene (PE) and the carcinogenic polyvinyl chloride (PVC). Even a nanoplastic carries the chemicals. They never go away. And we would be remiss for not mentioning that *plastic particles like to migrate from packaging into food*.

We are members of the Coop who have been meeting regularly since July 2024 to form a Plastics Reduction Committee. At the January General Meeting (GM), we delivered a warmly received presentation of our reasons for wanting to work with the Coop community to reduce our use of plastics (especially single-use), provide alternatives for shoppers, and educate members about the crisis and what we can do. We were on the agenda for a vote to establish the committee at the May GM, but other pressing issues postponed the vote. We are not on the agenda for the June GM, but we are optimistic we will soon come up for a vote.

Meanwhile, we will continue meeting and learning. If you are interested in learning more, we can make the following recommendation (downloadable):

Landrigan et al. 2023. “The Mindaroo-Monaco Commission on Plastics and Human Health.” *Annals of Global Health* 89(1): 23, 1–215. https://annalsofglobalhealth.org/articles/10.5334/aogh.4056.

Questions? You may reach us at reduceplasticpsfc@gmail.com