Recycled Plastics: New Concerns

Recycling materials is an important part of managing our waste, but plastics recycling is not as simple as it seems when we toss our bottles or containers into the bin.

New research funded by the Food Packaging Forum Foundation of Zurich, Switzerland and conducted by the Department of Pharmacology and Toxicology in the Brody School of Medicine at East Carolina University reveals some disturbing information.

“Recycled and reused food contact plastics are ‘vectors for spreading chemicals of concern’ because they accumulate and release hundreds of dangerous toxins like styrene, benzene, bisphenol, heavy metals, formaldehyde and phthalates,” according to the new research, as quoted from The Guardian newspaper.

The U.S. barely regulates the chemical structures and makeup of plastics, and the EU only requires minimal testing of plastics. The study concludes that plastics are “very complex materials containing hundreds of different, synthetic compounds which are more often than not poorly characterized for their hazard properties.”

To quote once more from The Guardian, “The data indicates chemicals are added or created during the recycling process. While 461 kinds of volatile organic compounds were detected in virgin plastic, some 573 were found in recycled material.” This could be caused, according to the study, by addition of chemicals during recycling, contamination of the recycling stream, reactions among chemicals, new plastics taking up chemicals after first use.

So, what can we do?

We as consumers can avoid using plastics as much as possible; we can bring non-plastic carryout packages to restaurants and move food products to containers made of safer materials; and we can demand more industry accountability and transparency about the chemistries of plastics waste streams and what recycled plastics get used in what ways.

The study concludes, “A shift towards materials that can be safely reused due to their favorable, inert material properties could be a promising option to reduce the impacts of single-use food packaging on the environment and of migrating chemicals on human health.”

FUN FACT: 40% of the plastics market could be eliminated today by ridding ourselves of single-use, disposable plastics!
There are alternatives!

We can "choose to refuse" plastic items that were made to be tossed in mere minutes after just one use. Instead:

- **Purchase a reusable water bottle** and spare the environment hundreds of plastic bottles each year
- **Pack a reusable bag** when shopping.
- **Cook more often**, or take non-plastic takeout containers with you to restaurants
- **Buy in bulk.** Avoid individually packaged goods, like snack packs.
- **Avoid plastic wrap;** store leftovers in reusable containers such as glass jars.
- **Buy a metal or bamboo reusable straw and reusable cutlery** (wood, bamboo, or metal utensils) for sustainable eating on the go.
- **Talk to the owners of the restaurants you frequent.** Ask if they have nonplastic alternatives to plastic straws, stirrers, or bags.
- **Tell the companies that make your favorite products that you care about the packaging.** Ask them to switch to more durable, recyclable, compostable, renewable, and/or recycled-content packaging with less fossil fuel–derived plastic.


Can we save ourselves, the oceans, and our planet by recycling plastic?

According to the Plastic Soup Foundation, ([www.plasticsoupfoundation.org](http://www.plasticsoupfoundation.org)) the answer is a resounding **NO!**

*From Plastic Soup:*

"The problem with recycling plastic is that it doesn’t really happen. For example, plastic litter is not separated during collection in The Netherlands. It can’t be used to make the same products again; for example, food packaging that is recycled cannot be used again as food packaging. Until recently, some of the western world’s plastic waste was exported to China to be recycled. China, however, no longer wants our plastic rubbish. The flow of rubbish has shifted to other Asian countries, but they, too, are beginning to implement restrictions or are closing their borders to foreign plastic waste. Countries need to deal with their own plastic waste. In theory, all plastic can be used again. The suggestion, however, that the issue of plastic pollution can be solved through recycling is a myth. In reality, only 9% of all plastic in use worldwide is recycled, and the majority of this recycled plastic is of inferior quality. The process of recycling is, for the time being, downcycling, which results in an undiminished use of new or ‘virgin’ plastic."

*This does not even take into account the new research revealing how hazardous chemicals may be spread through use of recycled plastics.*

What is the connection between plastics and the climate crisis?

An article by Brooke Bauman on the Yale Climate Connections site, tells the story briefly with this headline:

*How plastics contribute to climate change*

*They generate heat-trapping gases at every stage of their life cycle.*

Read the Yale article here: [yaleclimateconnections.org](http://yaleclimateconnections.org)