## Microwave + Plastic = Microplastics

## WHY YOU SHOULDN'T MICROWAVE YOUR FOOD IN PLASTIC

- When food or beverages are microwaved in plastic containers, chemical additives from inside the plastic migrate into the food and tiny flecks of plastic known as micro- and nanoplastics are also shed into the food. Both of these can present health risks.
- Thousands of chemicals are added to plastics to give them color, texture, softness, or rigidity. Of the 10,500 chemicals known to researchers, 2,300 are considered "substances of concern" because they are known to cause cancer, disrupt neural development, and hijack hormonal signals throughout the human body.
- Even at room temperature, many of the chemicals in plastics migrate into food.
- Micro- and nanoplastics also shed from plastic packaging into food at room temperature.
- The process of chemical migration and the shedding of microplastic both speed up when plastic is heated.
- As early as 2003, investigators published articles demonstrating that the "use of commercial plastic packages for repeated microwaving is associated with the risk of increased migration of volatile substances into food."
- Researchers testing baby food containers from two mainstream US brands found that polypropylene (#5) labeled as "microwave safe" released 4.2 million and 1.2 billion particles per square centimeter of plastic each, after being heated in a microwave.
- Many of the chemicals that leach out of plastics into food or are consumed as microplastics are endocrine disruptors (EDCs) meaning that they "disrupt" the hormonal signals that regulate vital body processes.
- As with other environmental toxicants, endocrine disruptors pose greater health risks for children than adults. They are particularly dangerous for newborns, toddlers, pregnant people, and the developing fetus.









