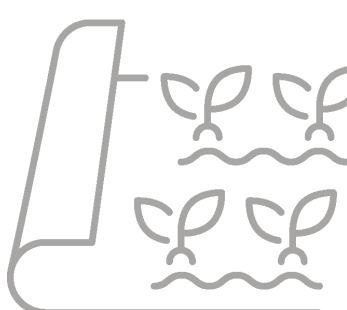


BACKGROUND

Ingestion is now recognized as a primary route of human microplastic exposure, motivating a clearer understanding of microplastics present in foods regularly consumed.

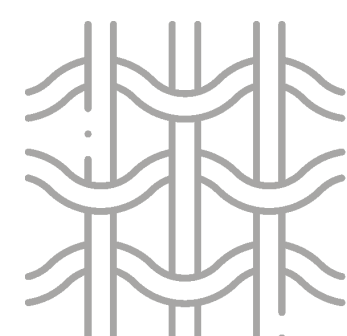
How does our food get contaminated?

Plastic contamination of food and beverages can be a consequence of the different production and processing stages. This includes:



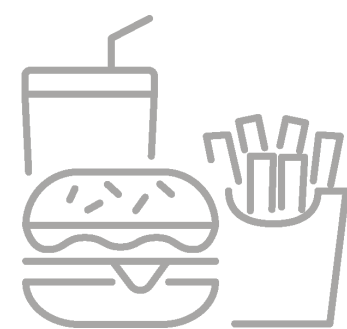
1. Fragmentation from plastic food processing equipment:

- Mulching films
- Tubing & belts
- Ultrafiltration membranes
- Plastic food packaging



2. Airborne fallout from: (Blue fibers are a commonly found contaminant)

- Uniforms
- PPE



3. Food additives:

- Contaminated water
- Processed oils
- Processed sugars
- Sea salts & herbs

METHODS

- We conducted a targeted review of studies reporting microplastics in foods intended for human consumption, limiting inclusion to studies that applied spectroscopic polymer identification to ensure analytical reliability.
- The review focused on microplastics present within the food matrix itself, though many studies also noted contributions from food packaging.

SYSTEMIC CHANGE

Change systemically is needed to make fresh, package-free foods affordable and accessible to everyone. Communities deserve real options beyond ultra-processed, heavily packaged products that contribute to poor health and plastic contamination in our food system.

PLASTICS COMMONLY FOUND IN FOOD



Polyethylene (PE)

Bags: produce bags, instant foods, and dry goods.

Films: such as those lining cartons and fast-food wrappers.



Polypropylene (PP)

Containers: such as yogurt and margarine tubs.

Bottles and caps: such as syrup bottles and other squeeze bottles.



Polystyrene (PS)

Disposables: plates, utensils, cups for hot and cold beverages (Styrofoam).

Foams: instant noodle containers and egg cartons.



Polyvinyl Chloride (PVC)

Cling wrap and shrink wrap.

Clamshells and meat trays.



Polyethylene Terephthalate (PET)

Beverage bottles: water, soft drinks, and juices.

Jars: salad dressing and nut butters.



Nylon/Polyamide (PA)

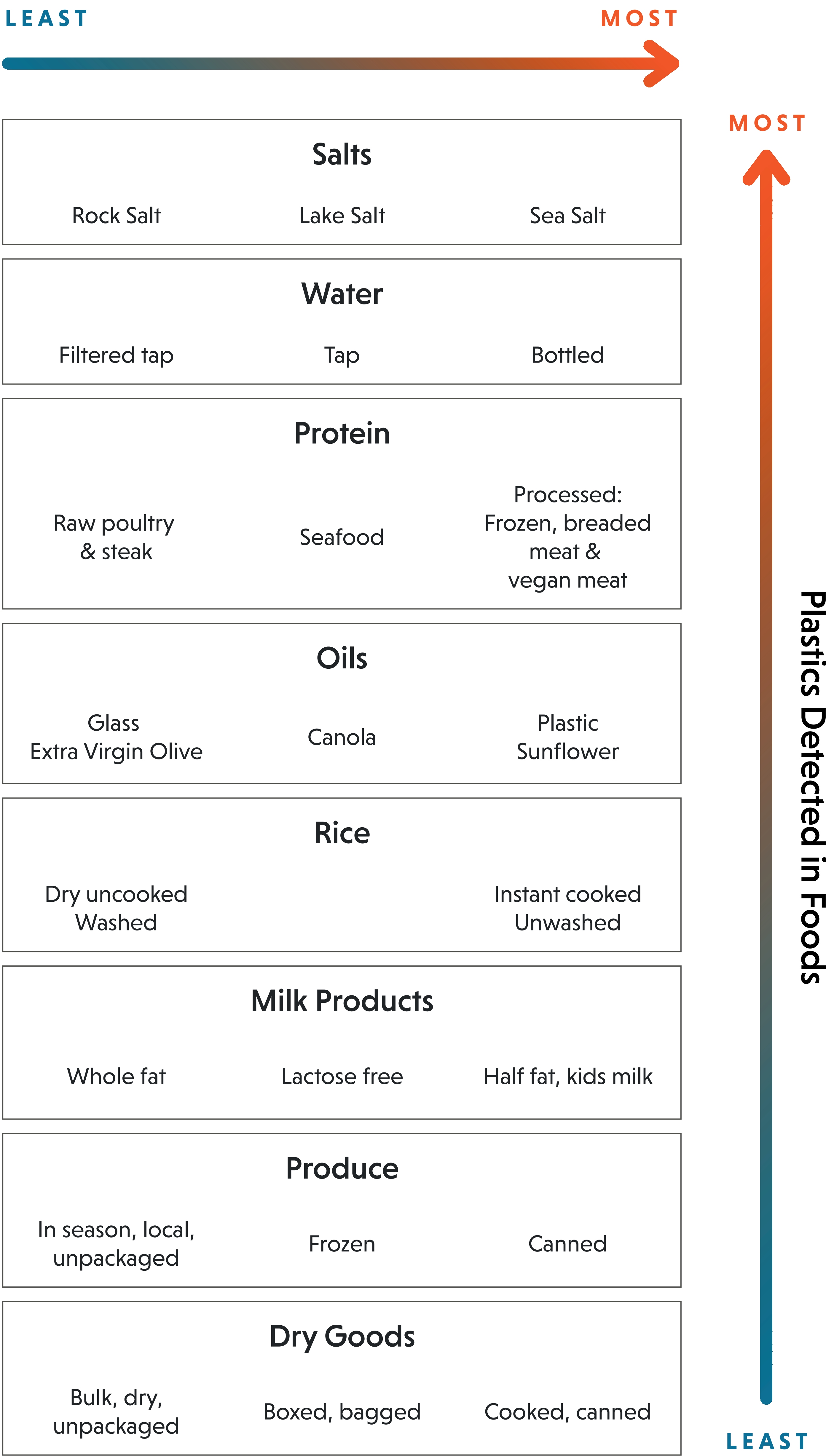
Teabags, seafood (likely from fishing gear), flexible films (cheese), frozen food packaging, and boil in bags.

REDUCE PLASTIC EXPOSURE

Small food preparation choices at home can help minimize plastic contamination in our foods. Some of these choices include avoiding heating/freezing food in plastic, storing food in glass or metal containers, and reducing the use of plastic cutting boards.

SHOPPING GUIDES

We developed a consumer-oriented guide encouraging choices that may reduce some dietary microplastic exposure, emphasizing fresh, locally sourced, and package-free foods where accessible.



*Levels vary by region, brand, & handling