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A toxic relationship: Ultra-processed foods & plastics

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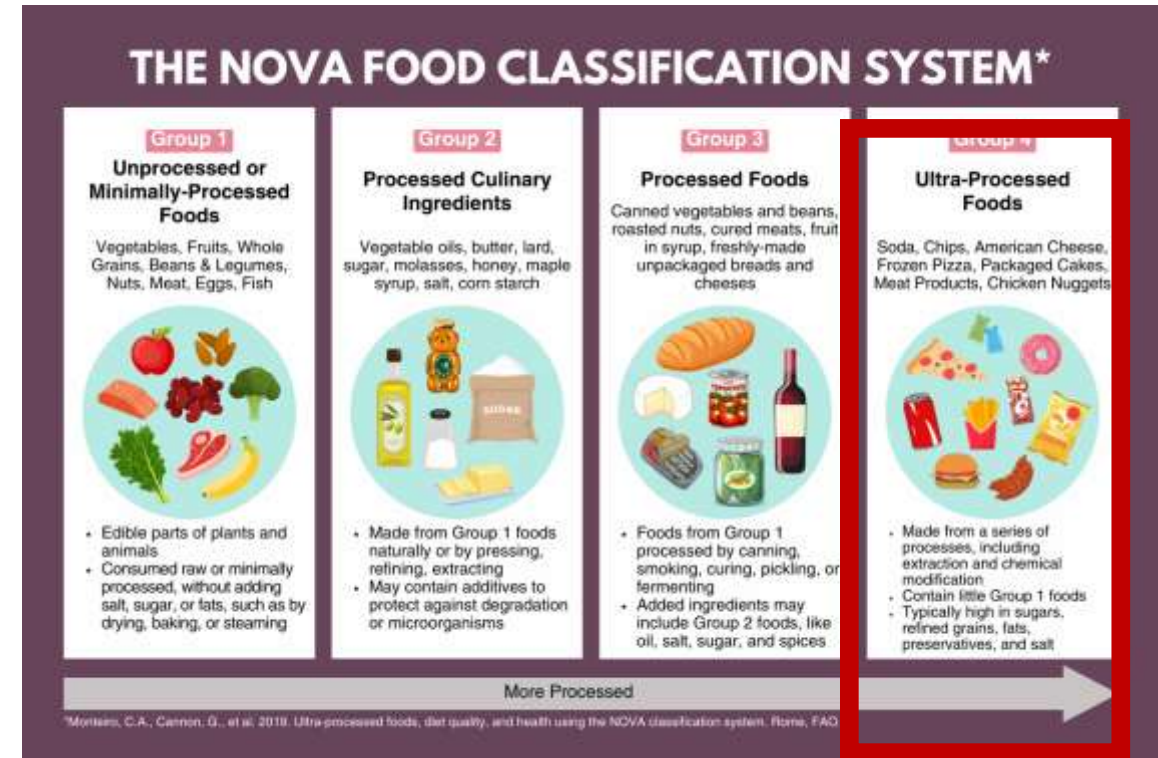


What are UPFs

Industrial formulations made from food-derived substances and cosmetic food additives with little, if any, whole food

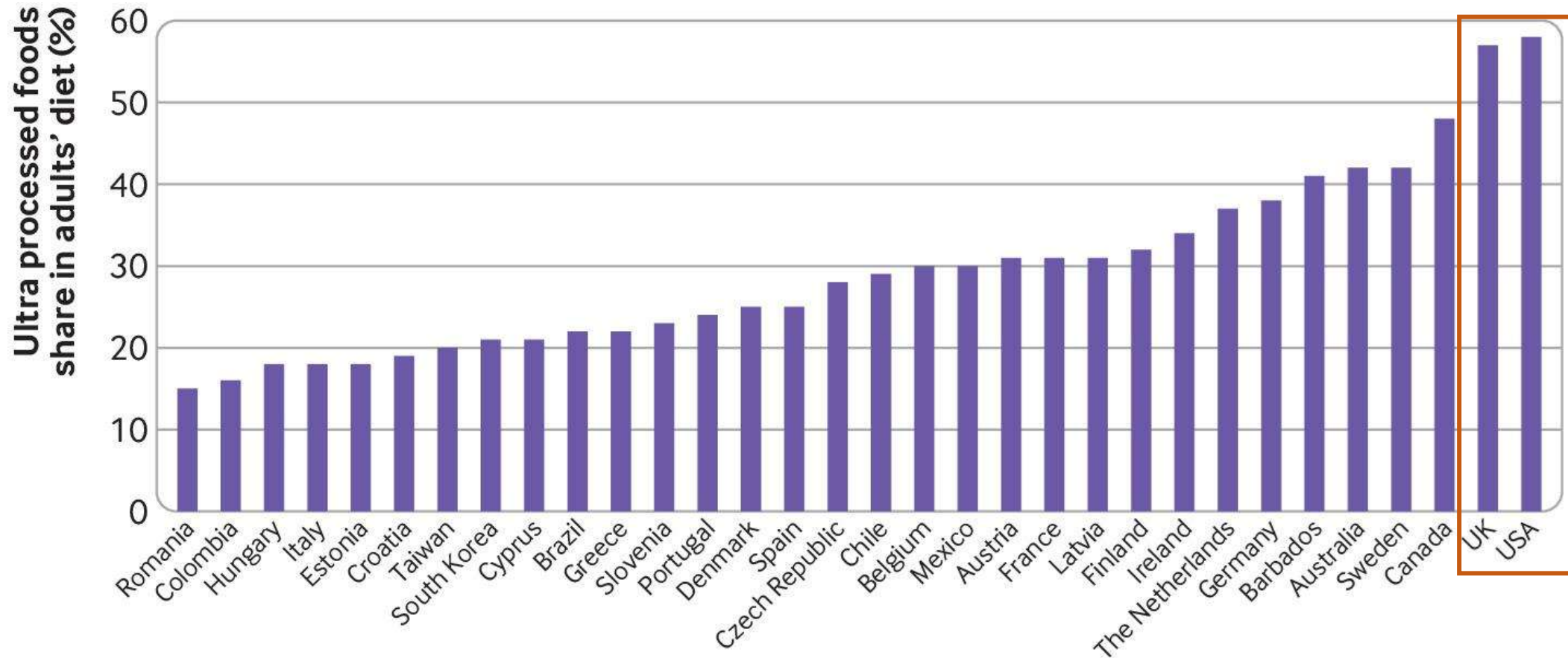
Common characteristics:

- High in sugar, salt, fat
- Highly refined food derived ingredients
- Synthetic additives *i.e.*
 - Colours,
 - Flavourings
 - Emulsifiers
 - Preservatives
 - Sweeteners
- Constantly available, affordable, convenient
- Often covered in plastic



The special relationship?

USA and UK are world leaders in UPF consumption



Much higher among some sub-groups i.e. women, children, Indigenous communities (up to 70%)

Touvier et al. (2023)

Rising UPF consumption is displacing traditional healthier diets

Consumption among US adults from 2001 to 2018 (kcal)

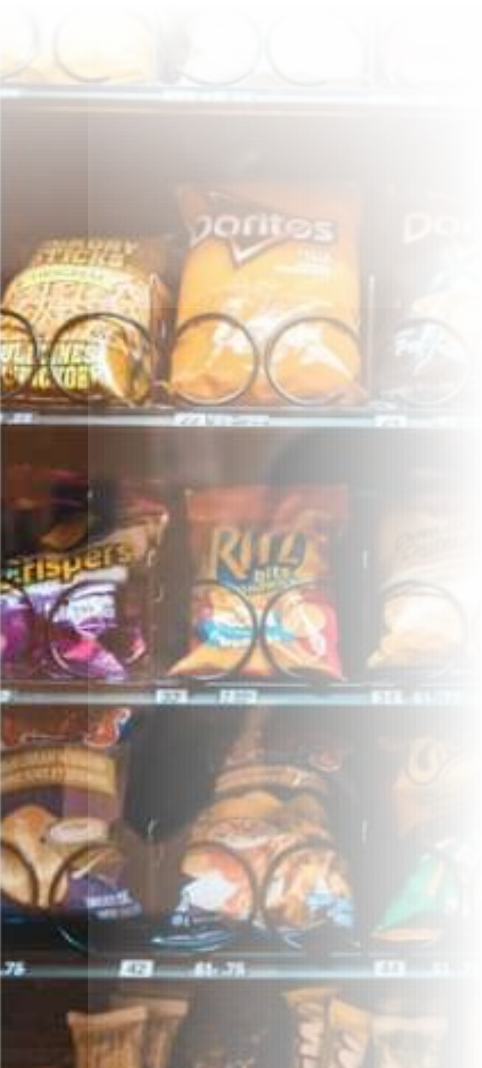
**Ultra-processed foods
increased significantly**

From 53% to 57%



**Minimally processed foods
decreased significantly**

From 33% to 27%



Health impacts

Strong body of evidence associating UPF consumption with:

- Premature all-cause mortality
- Cancer
- Mental health
- Respiratory conditions
- Cardiovascular ill health
- Gastrointestinal ill health
- Metabolic ill health



And just this week...

In the USA and UK:

14% of all-cause premature deaths (ages 30–69 years) attributable to UPF consumption

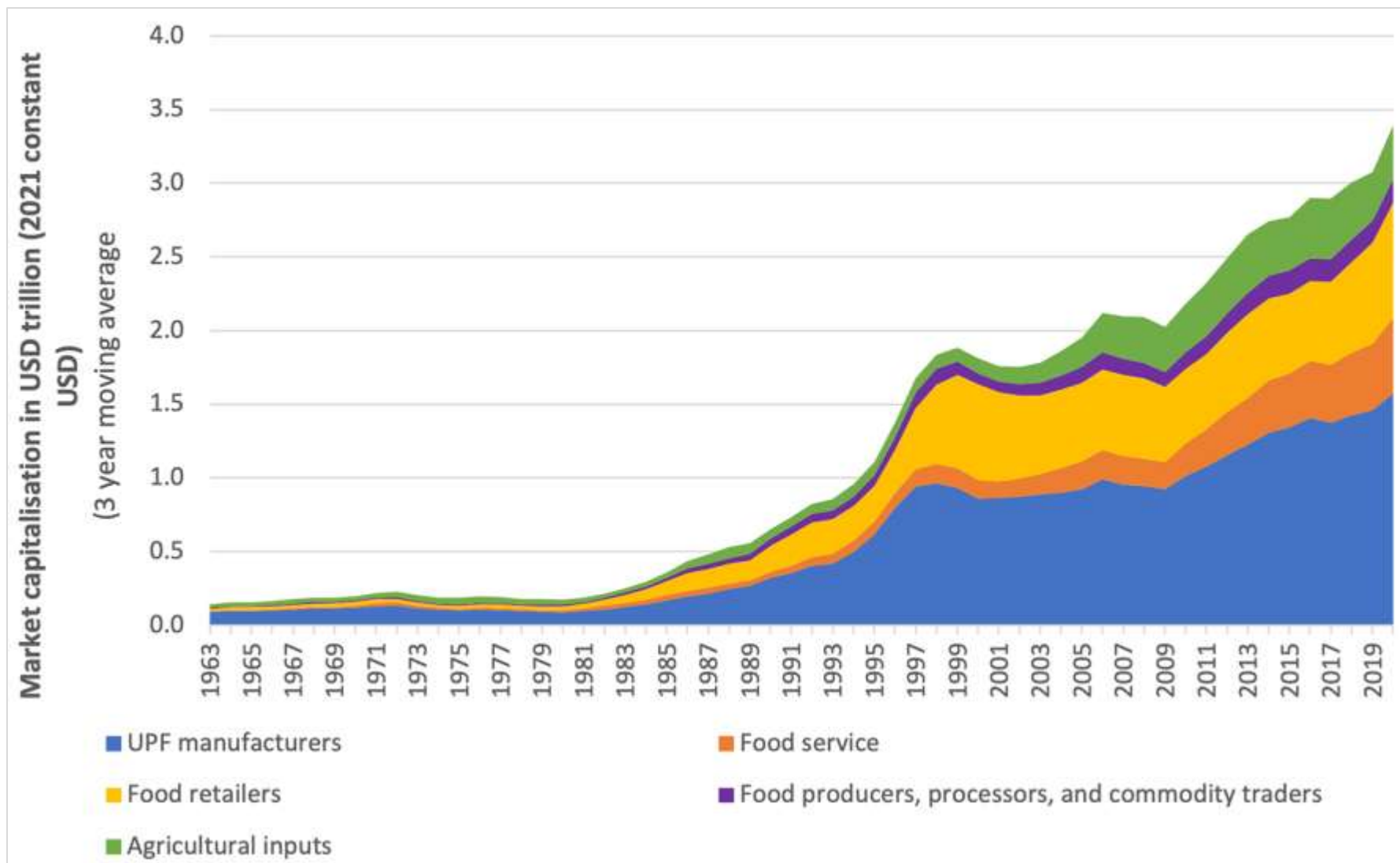
These are direct health impacts of consumption alone

They don't account for other lifecycle determinants of health i.e. fossil fuel extraction, emissions, intensive agriculture, pollution impacts etc.

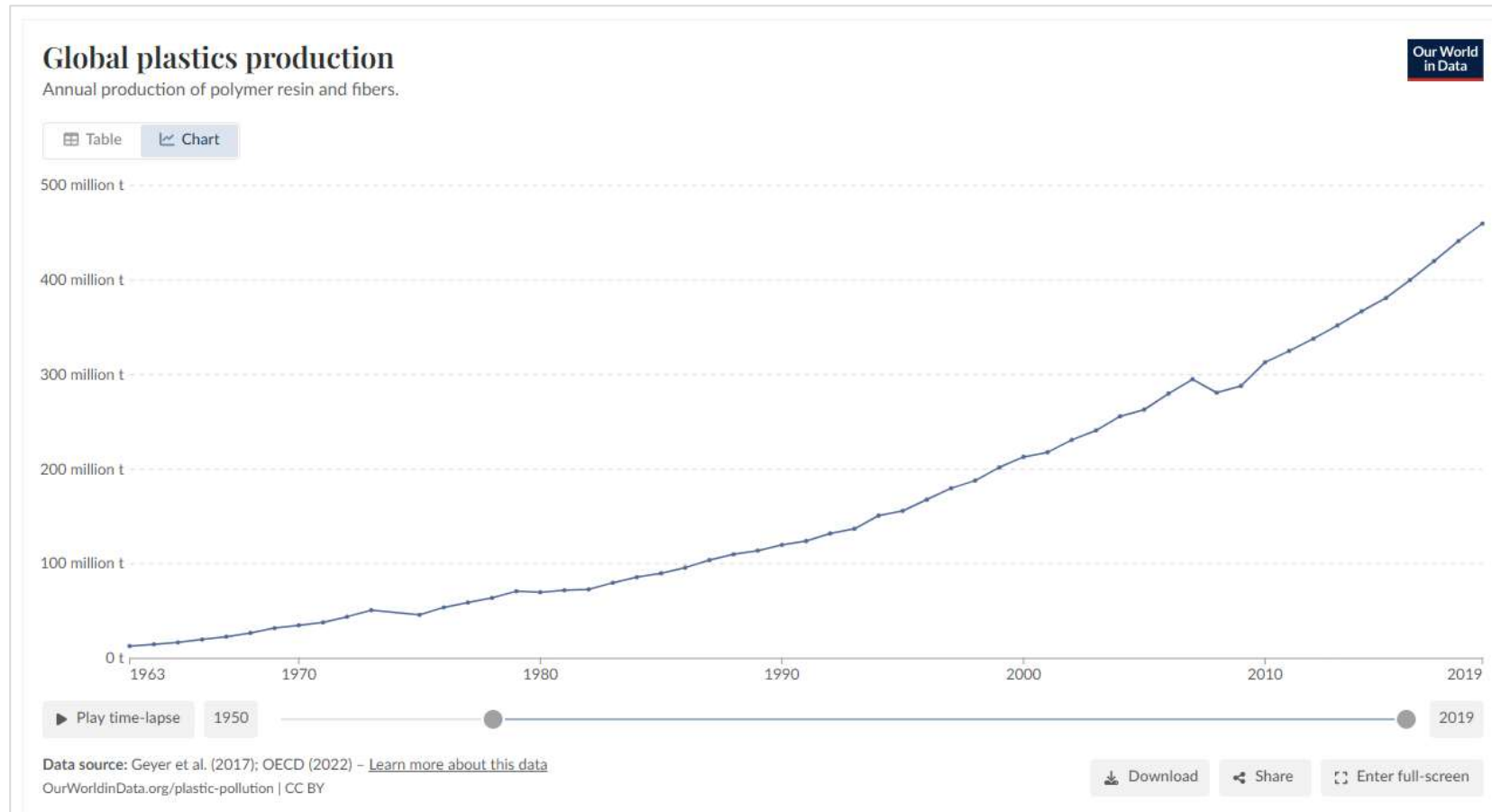


The hidden health costs of unhealthy diets = \$9 trillion globally (FAO, 2024)

UPFs: Designed to maximise profits



Plastics: Integral to the global expansion of UPFs

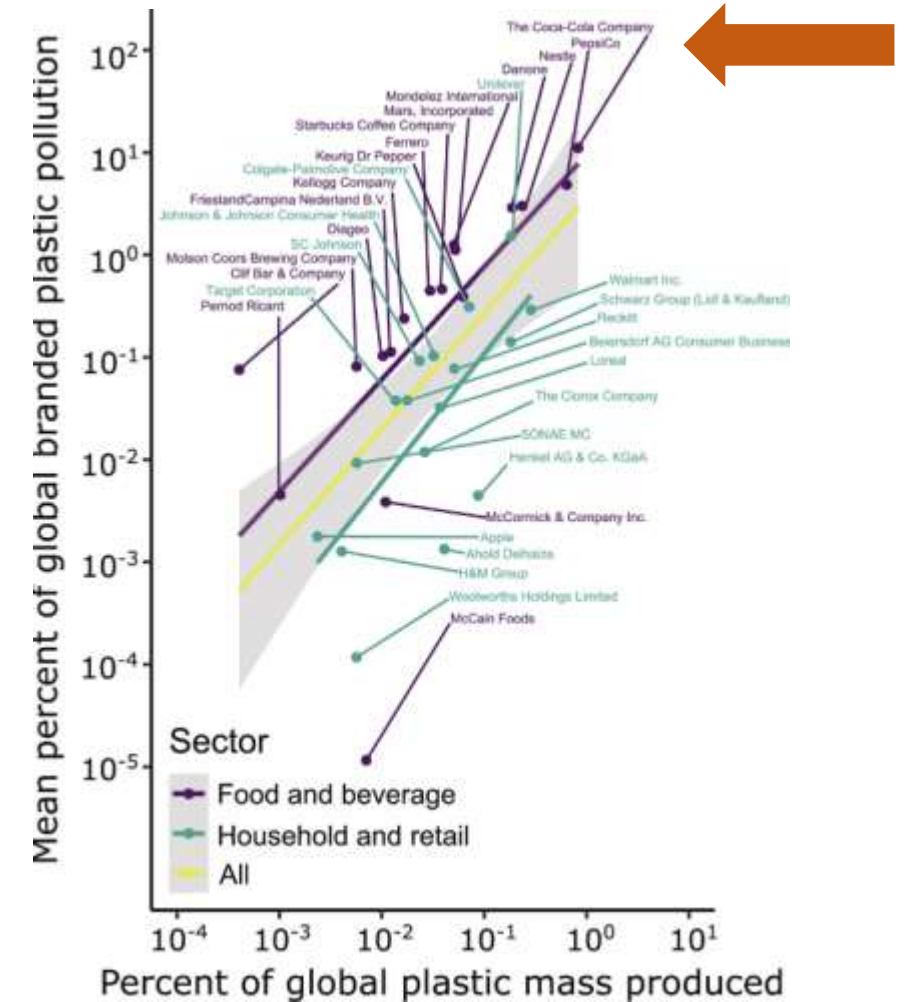


Global food packaging market = \$456 billion

Projected 60% increase in next six years



UPF producing corporations are the world's largest plastic polluters



The toxic relationship:

Are plastics contributing to the harms of UPFs?



Jane Muncke

Managing Director and Chief Scientific Officer
at the Food Packaging Forum, Switzerland

Recommendations



More systems thinking in agenda setting

- Unified action to realise co-benefits of tackling UPF diet-related illness, plastics and chemical pollution
- Consumers do not have the power to solve a problem of this scale alone – policymakers do



Interdisciplinary research collaboration

- Scrutinise UPF value chains on their 'sustainable' practices, including plastic use and disposal
- Recognise plastics and their related chemicals of concern as problems *both of and for* food systems
- Standardise indicators, data sharing and surveillance on products, plastics, and chemicals



Safety, sustainability, transparency and essentiality criteria for plastics

- Precautionary, hazard-based approach
- Address groups of chemicals of concern, not "safe levels" of hazardous chemicals
- New safety testing of intentionally and non-intentionally added plastic chemicals, accounting for chronic exposures to multiple chemicals
- New epidemiological studies based on innovative exposure assessment tools
- Enforce transparency, 'essential use' concept and criteria to support systematic decision-making



Commercial determinants of health

- Reconise intersecting interests and strategies of Big Food, Petrochemical and Plastic industries
- Address with complementary and coherent government-led statutory regulations
- Support willing private sector actors to innovate
- Guard science-policy interfaces against conflicts of interests