

# Microplastics and Food Safety

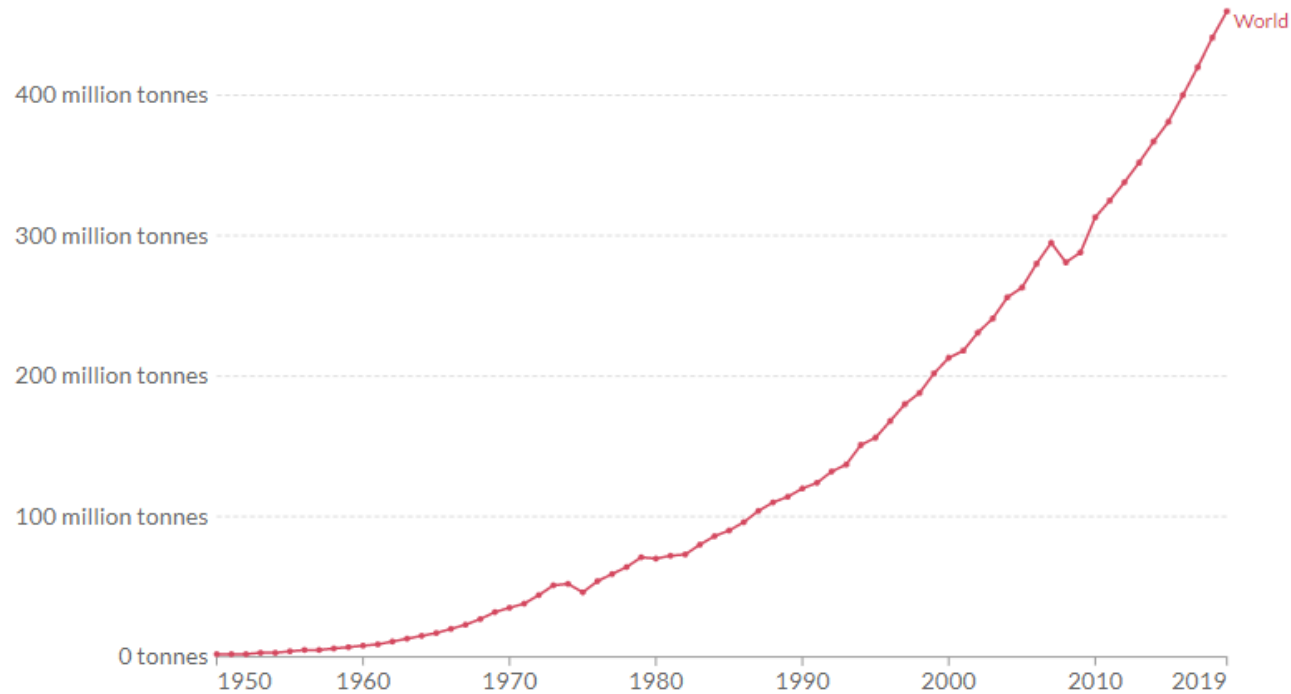
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# Plastic Production

## Global plastics production

Plastic production refers to the annual production of polymer resin and fibers.



Source: Our World in Data based on Geyer et al. (2017) and the OECD Global Plastics Outlook

OurWorldInData.org/plastic-pollution • CC BY

~500 million tonnes produced annually

9.5 billion cumulative tonnes

All plastic ever produced still exists!



pla

**~8 million tonnes enter the ocean from land-based sources every year**

**Main sources: food packaging and fishing gear**

# Matís – Food Packaging

*Lulam Wrap – Food packaging of the future funded by Matvælasjóður*

Develop eco-friendly, biodegradable and sustainable food packaging from Icelandic lupine and seaweed



Sedna Biopack



Sölufélag  
garðyrkjumanna

**Microplastics**

= particles <5mm diameter

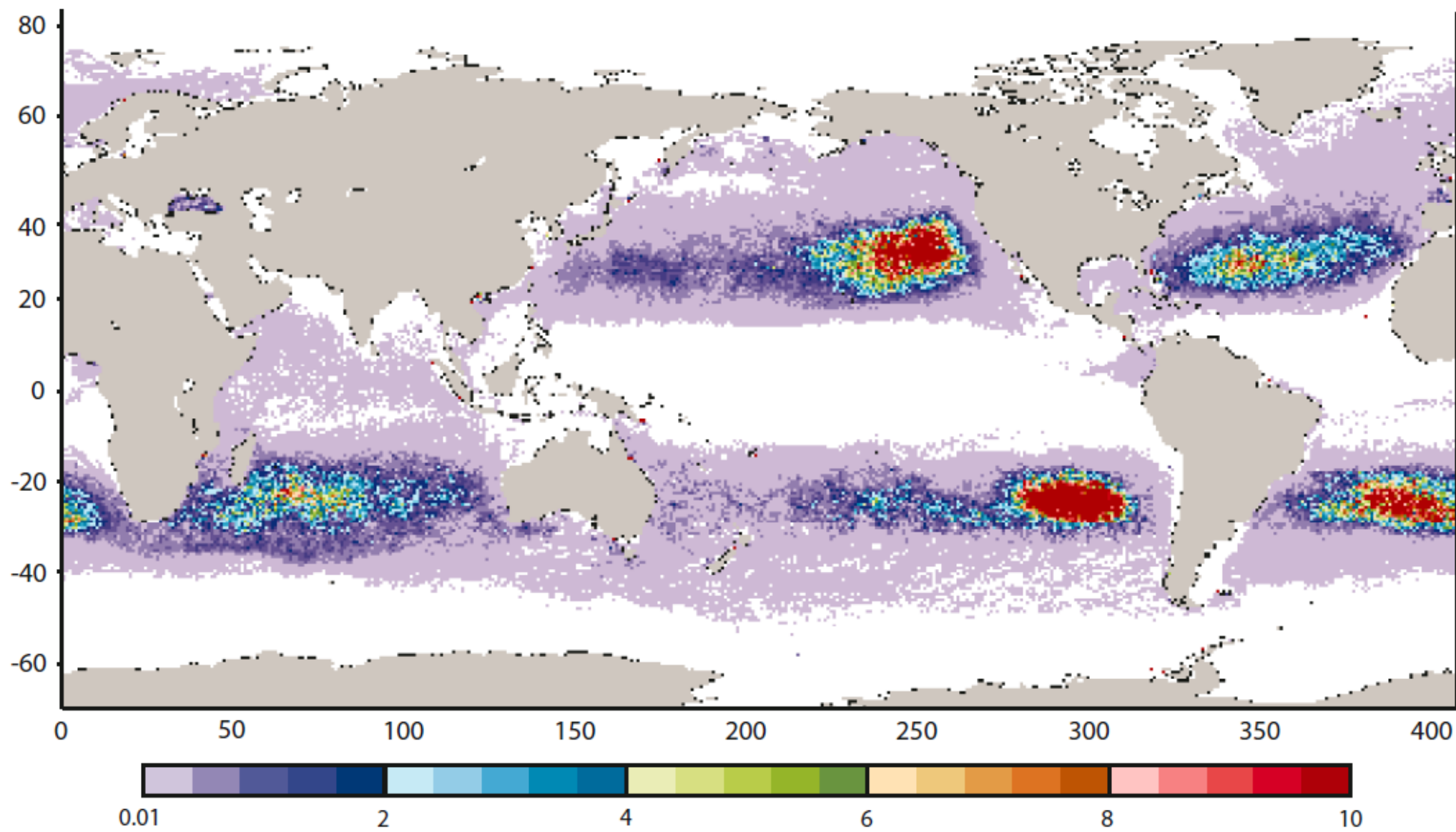
**Smaller**

= nanoplastics

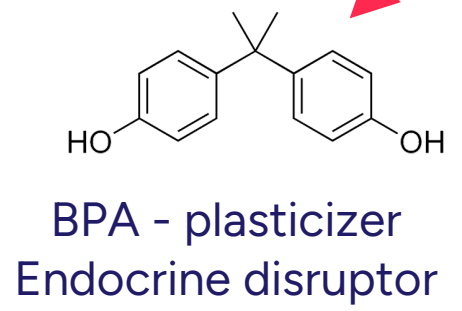
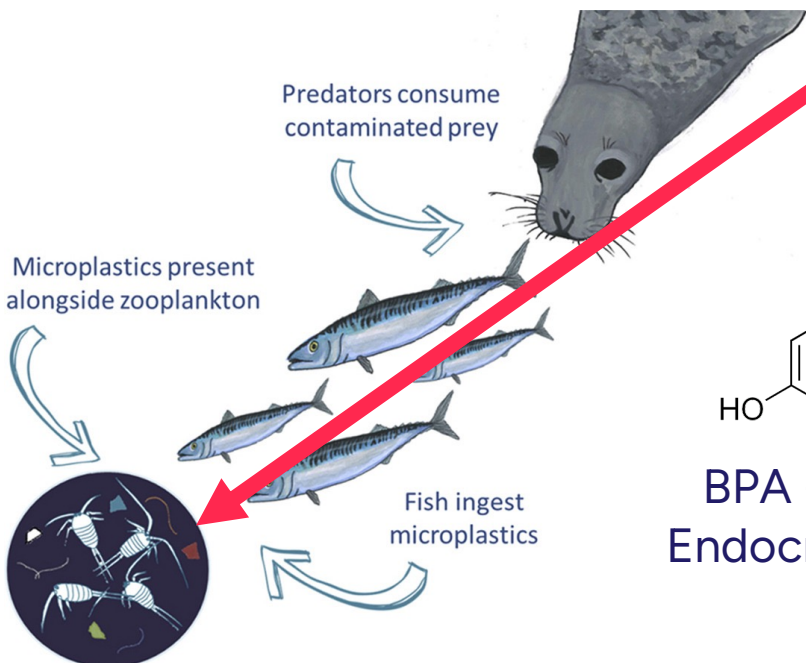
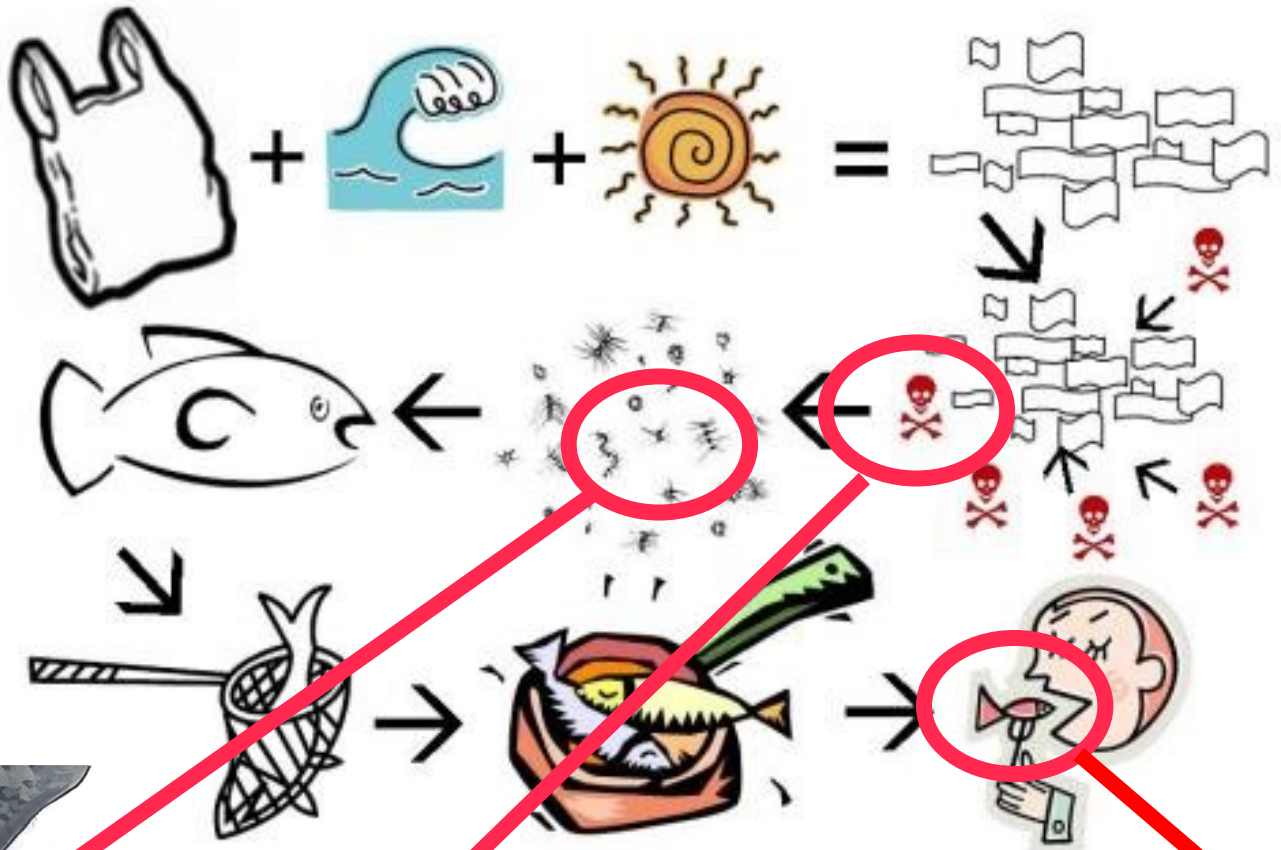
**Sources:**

- Plastic pre-production pellets and powders
- Cleaning products
- Personal care products
- Deterioration of larger plastic items (bags, packaging, fishing equipment, shipping equipment)
- Laundry (>1900 fibres per item per wash)





# What is the issue?



- Sleep
- Weight
- Mood
- Infertility

# Matís – Microplastics and Microplastics Additives



*NordMar Plastic* – Nordic network towards a harmonized approach to assess plastic pollution in the marine environment.

*Chemical additives* in weathered microplastic in the marine environment – occurrence and risk.

Funded by:



Nordic Council  
of Ministers





**Takk fyrir!**