European Commission

Scientific Opinion on

Microplastic Pollution

April 2019

Microplastics can be found in the **air, water** and **soil**, where they may:

- persist in the environment
- enter the food chain
- accumulate in living organisms

We do not yet know how damaging they may be for human health and environment.

LABORATORY EXPERIMENTS high concentrations	REAL CONDITIONS lower/variable concentrations
Mostly in marine species. **Negative impact** of microplastics on: • Cells, tissues and organs • Food consumption • Growth, reproduction and survival.	Great **uncertainty:** • Concentrations in aquatic habitats are not the same as in laboratories • No population studies on human health effects.

What are microplastics?

- Smaller than 5 mm
- With additives and other chemicals

Where do they mainly come from?

Primary microplastics
Artificially added to inks, cosmetics, etc

Secondary microplastics
Physical breakdown of bigger plastics, such as oceanic plastic pollution

PREVENT & REDUCE microplastic pollution

Recommendations

Target the **most polluting activities** with current or new legal actions

These actions should be **politically** and **socio-economically feasible**

Establish a **global scientific platform** to promote microplastic research and agreed standards

Impact

These recommendations will inform EU future policies
(i.e. ongoing debates and roundtables of G7 Members)

They will also inform existing regulations
(i.e. Water Framework Directive, Ambient Air Quality Directive)

Further reading

- Strategy for Plastics in a Circular Economy
- Single-Use Plastics Directive

This is a summary of a scientific opinion by the ***Group of Chief Scientific Advisors***, an Independent expert group providing high-quality and timely scientific advice to the European Commission, to inform European Union policies and legislation, and informed by SAPEA evidence review reports.

Read the full report here.
https://ec.europa.eu/science-advice

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