What does this mean for science communication and perception by the public?

Dr. Jane Muncke, AURORA researcher, Food Packaging Forum Foundation

13 January 2026

[‘A bombshell’: doubt cast on discovery of microplastics throughout human body | Plastics | The Guardian]

Sport Culture Lifestyle

The Guardian

Energy Pollution

‘A bombshell’: doubt cast on discovery of microplastics throughout human body

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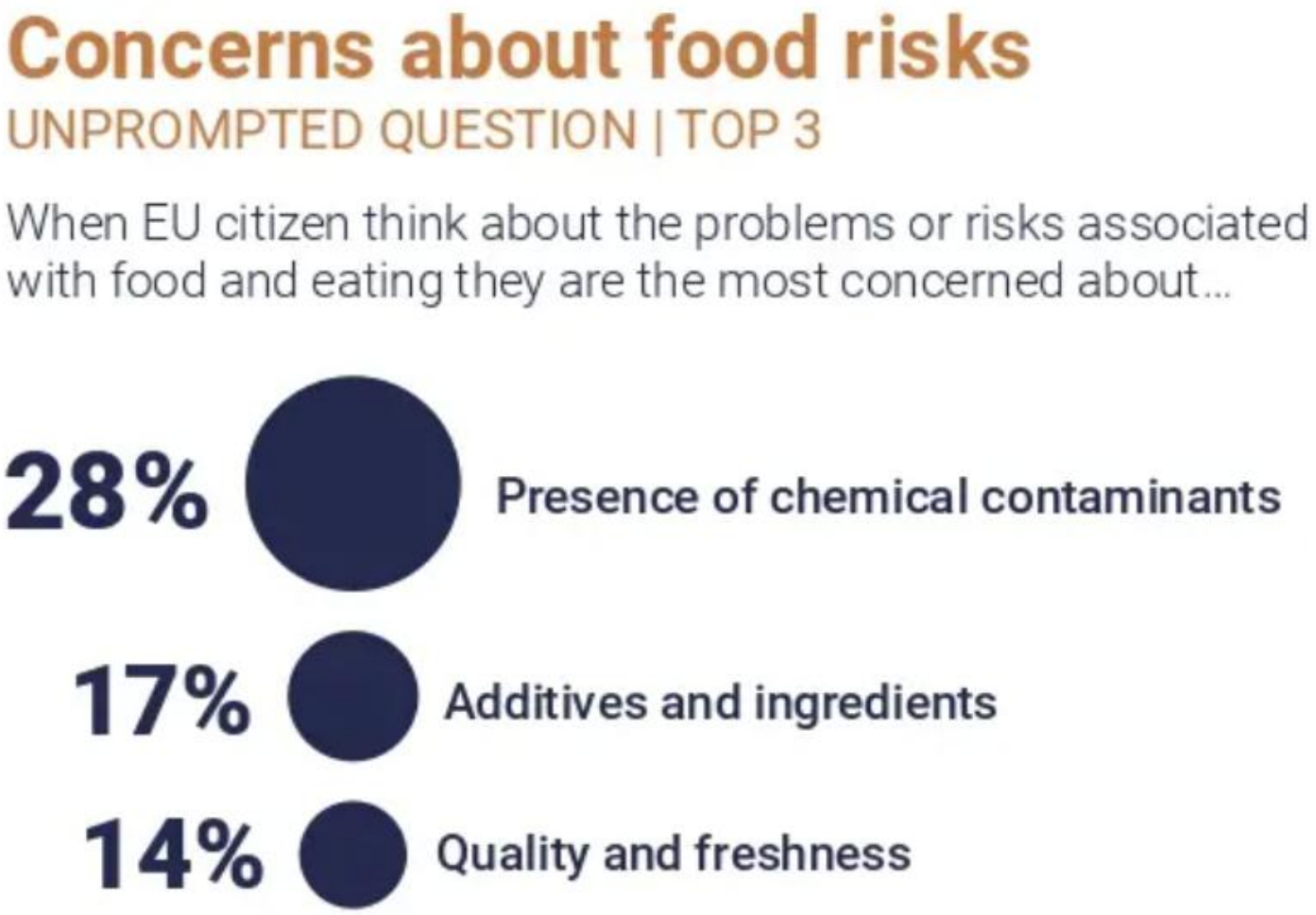
There is no doubt about the ubiquity of plastic pollution in the natural world, but some scientists are dubious about the health damage said to be caused by microplastics in the human body. Illustration: Guardian Design

Exclusive: Some scientists say many detections are most likely error, with one high-profile study called a ‘joke’

Eurobarometer 2025



Eurobarometer 2025

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Trust in sources of information on food risks

- 90% **General practitioners** and specialist doctors (+1 pp vs 2022)
- 84% **Scientists** working at a university or publicly-funded research organisation (+2 pp)
- 82% **Farmers** and primary producers (+8 pp)
- 82% **Consumer organisations** (=)
- 72% Environmental/Health **NGOs** (+2 pp)
- 70% **National authorities** (+4 pp)
- 69% **EU institutions** (+3 pp)
- 66% **Scientists** working at an industrial or privately funded research organisation (+3 pp)
- 60% **Supermarkets** or local grocer (+3 pp)
- 52% **Journalists** (+3 pp)
- 49% Food **industries** (+4 pp)
- 22% **Celebrities**, bloggers and influencers (+2 pp)

What are the facts? Eurobarometer 2025

- EU citizens are concerned about chemical contaminants in foodstuffs
  - microplastics in foods are of high concern for 33%
  - Increase by 4% since 2022
- 68% of EU citizens are aware of microplastics in foodstuffs
  - Increase by 8% since 2022
- Independent scientists are highly trustworthy source of information on food risks
  - 84% of EU citizens, increase since 2022

Citizens (globally) think that scientists should communicate about science with the general public.

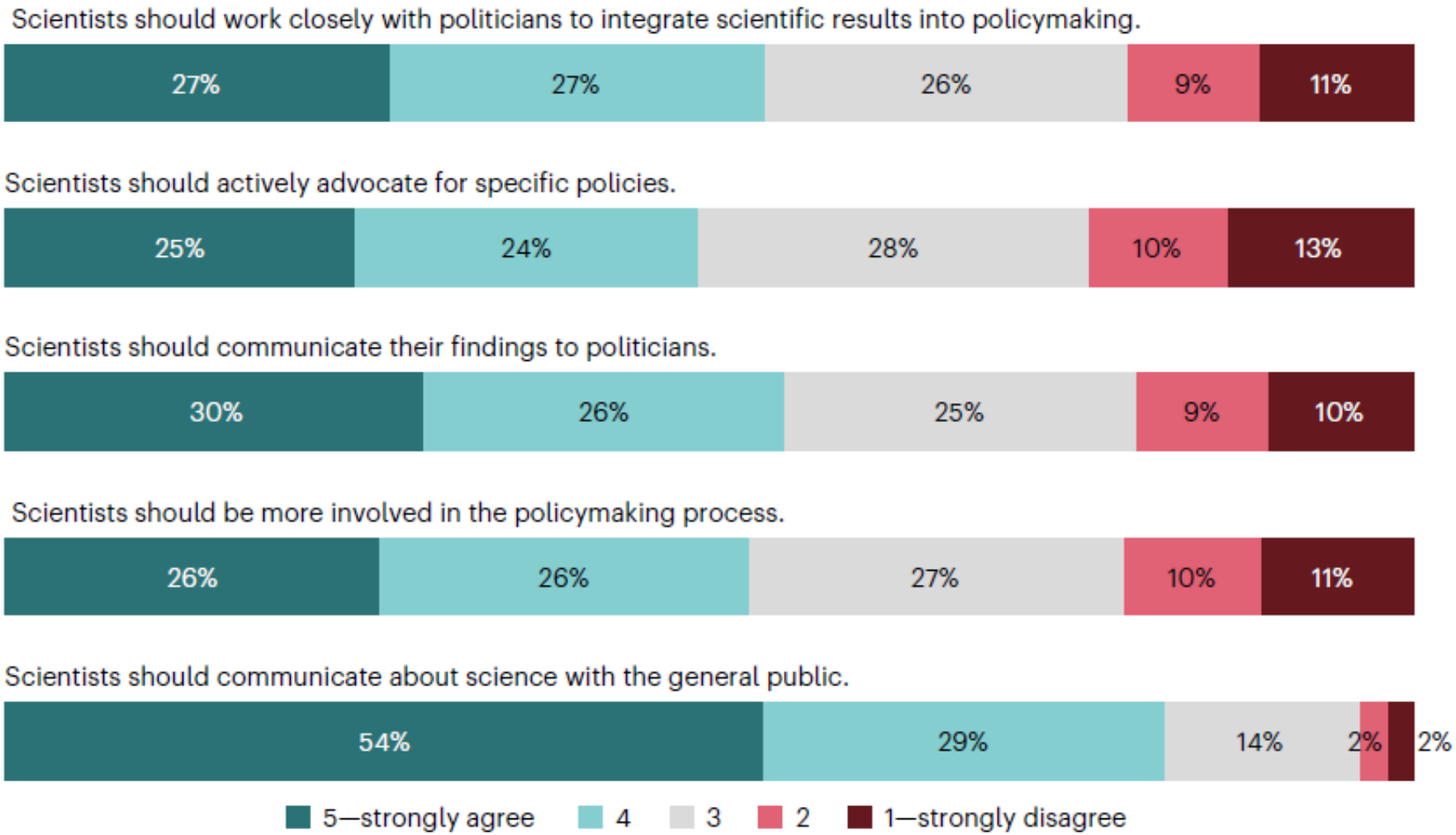


Fig. 4 | Normative perceptions of scientists in society and policymaking. Normative perceptions of scientists in society and policymaking using weighted response probabilities. Cologna et al. 2025 https://doi.org/10.1038/s41562-024-02090-5

Eurobarometer 2025

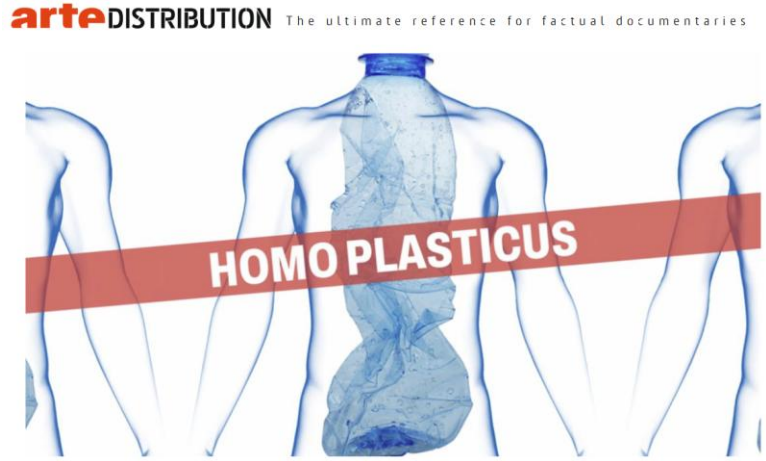
Main sources of information about food risks

Top 5

- 55% **Television** on a TV set or via the internet (-6 pp vs 2022)
- 42% **Exchanges** with family, friends, neighbours, or colleagues (-2 pp)
- 38% **Internet** search engine (+1 pp)
- 26% **Online social networks and blogs** (+4 pp)
- 25% **Newspapers** (online or in print) (-3 pp)

AURORA scientist on TV

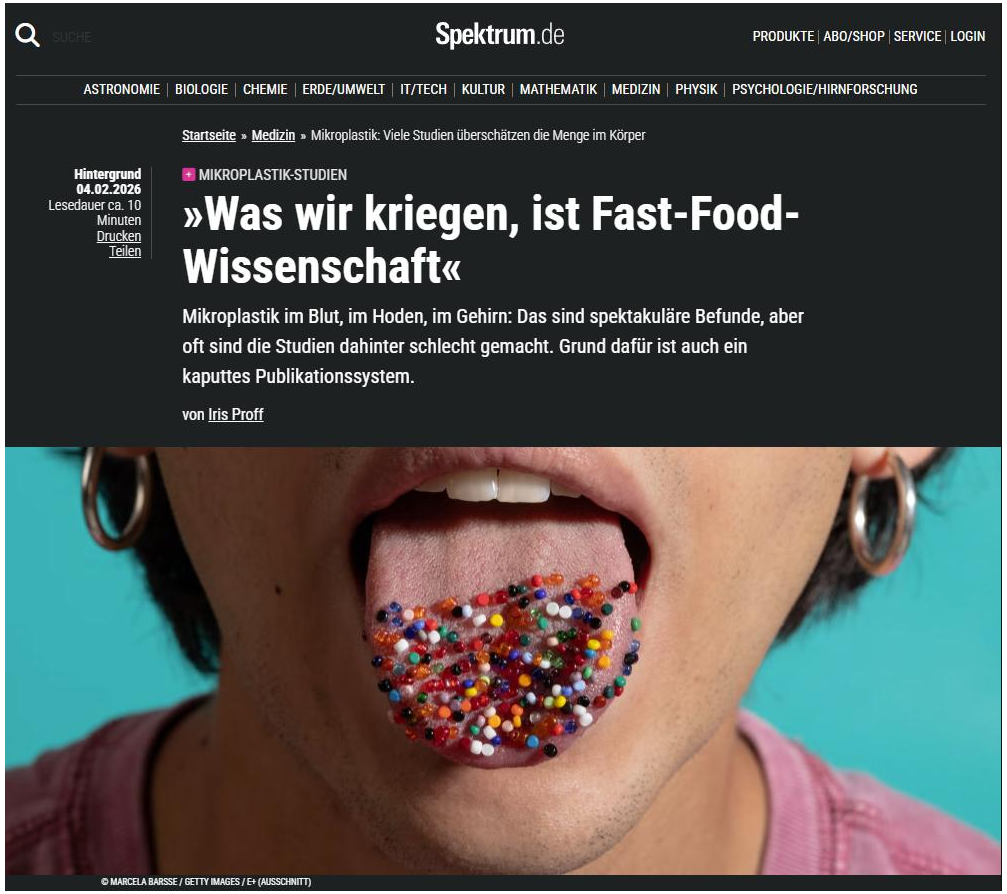
- Homo Plasticus Arte documentary published on November 15, 2025 on arte.tv
- Live on TV on Saturday November 22, 2025 and remains available to watch on demand
- Featuring Nelly Saenen from AURORA (and CUSP scientist Alba Hernandez from PlasticHeal)
- Public screening during the UN global plastics treaty negotiations in Geneva in August 2025 with panel discussion including Jane Muncke from AURORA

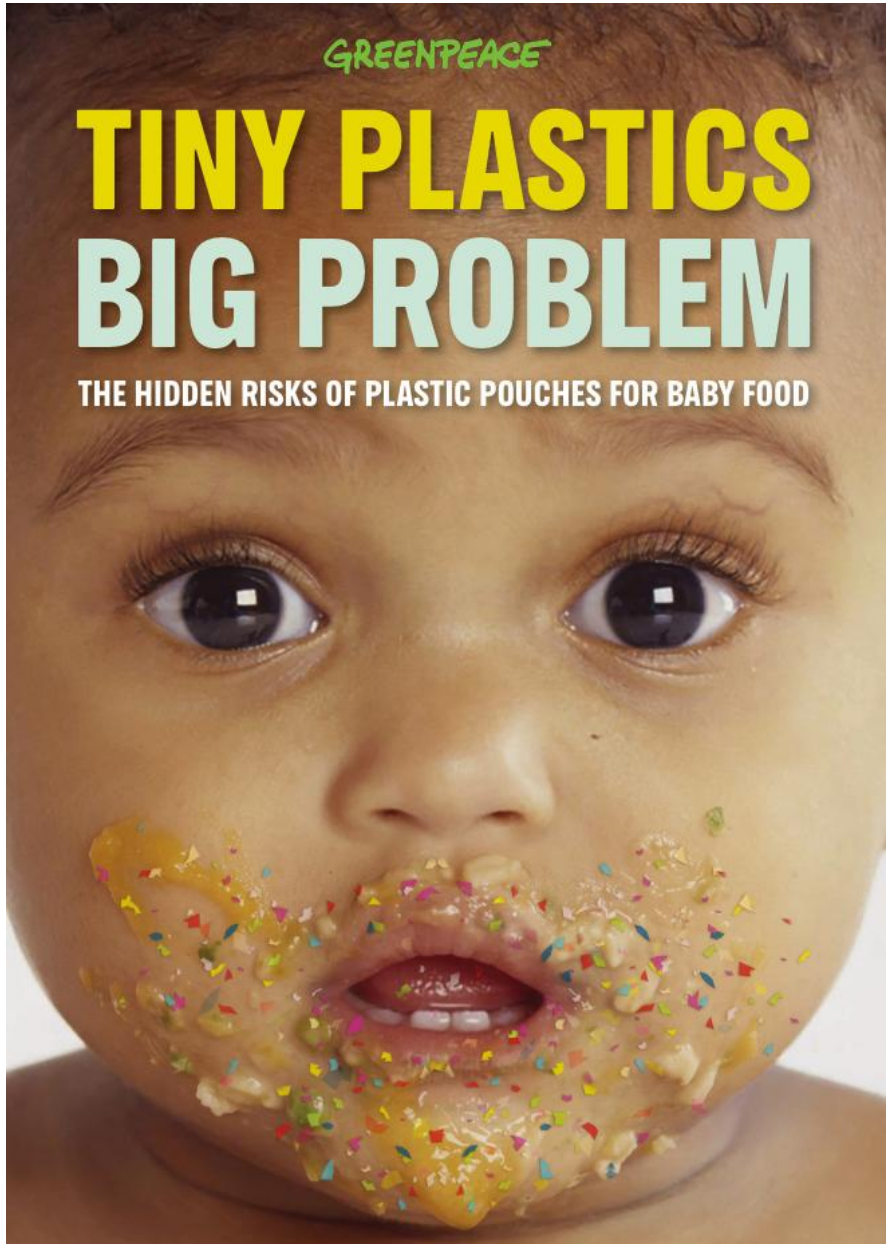


👉 **Watch the trailer**

Recent Media Coverage

- Barbara featured in German spektrum.de magazine, in light of challenges regarding MNP measurements and analytics and Barbara's publication on Py-GC/MS

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TINY PLASTICS
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Conclusions

- Different types of UNCERTAINTY prevail
- There is *technical (epistemological)* uncertainty:
  - What are the exact exposure levels in humans?
  - What are the most relevant exposure sources?
  - → Further research will fill these knowledge gaps

UNCERTAINTY

- But there is no *consensus* uncertainty among scientists on:
  - The normal and intended use of plastics generates micro- and nanoplastics (MNPs)
  - Humans are exposed to MNPs via inhalation, ingestion and via other exposure routes
  - Smaller MNPs can cross cell membranes and accumulate in tissues
  - MNPs trigger immune responses
  - Science on the potential health impacts of micro- and nanoplastics is emerging and there is reason for concern → mitigation of exposures is needed
  - Evidence for health risks of plastic chemicals is available and increasing—chemicals leach from plastics
- AURORA and CUSP have supported policy makers with policy briefs and the CUSP Roadmap for research needs

www.auroraresearch.eu

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