



Job advertisement no. 12735 - Attachment

Information about the project:

Microplastics and plastic pollution in general are of high concern to the public and policy makers (e.g., SAPEA, 2019). While these concerns have traditionally focused more on impacts on wildlife, social data increasingly demonstrate that they now extend to human health impacts (e.g., Davison et al., 2021). However, human health impacts of microplastics have not yet been sufficiently demonstrated (Vethaak & Legler, 2021; WHO, 2019; WHO, forthcoming). This poses a dilemma between existing concerns driving societal debate and demand for policy actions and lack of scientific evidence to date.

The present project proposes to investigate microplastics in the context of human health, food and drink, using social and behavioural science and science-technology-studies approaches to shed light on the perceptions of the problem and the decision-making processes. The post is linked to two other (natural science) prädocs in the newly funded extension of the Plenty platform (see <https://microplastics.univie.ac.at/about-us/>).

The specific focus and approach is open to discussion and should be matched with the successful candidate's interests, but could, for instance, take 1) a mental models approach to risk communication to understand perceived pathways from microplastic threat to potential human health impact in selected stakeholder groups (e.g., experts, policy makers, public). This will help us understand and explain current concern and highlight how we can communicate better. Topics for targeted communications could be, for example, the distinction between the presence of particles and their potential impact, but also differences in concern associated with different human exposure routes, e.g., via food or air. This part of the project will closely align with an existing collaboration with the European Food Safety Authority focusing on microplastics in food and drink, and it will build on the forthcoming WHO report on microplastics and human health (expected release in 2022).

2) Another potential angle could focus on what types and amount of evidence different stakeholders think are necessary to justify action. It is possible that the current societal debate is partly due to different expectations regarding the strength and amount of evidence expected (in addition to different mental models about the hazard and exposure routes, see above). Again, different stakeholders will be involved in this research that relates to the precautionary principle used by the European Commission and many national governments. This part of the project builds on the debate following our SAPEA report (e.g., Gouin et al., 2020; Leslie & Depledge, 2020; Wardman et al., 2019) and both the literature on communicating uncertainty and broader science communication.

References

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