

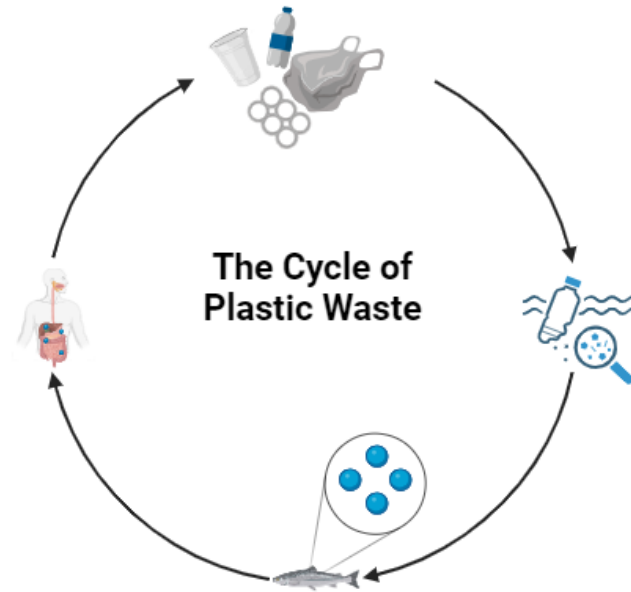
# Impact of Microplastics on the Environment and Human Health

## Fate of microplastics in the environment

- **Environmental pathways.** How do microplastics move through terrestrial and aquatic ecosystems?
- **Degradation dynamics.** What factors influence the breakdown of microplastics, including UV radiation, microbial interactions, and physical forces?
- **Ecosystem impacts:** How does microplastic pollution impact ecosystem structure and functions, biodiversity, and nutrient cycling?

## Antibiotic resistance and microplastics

- **Horizontal gene transfer.** How do microplastics facilitate the spread of antibiotic resistance genes in the environment?
- **Health and environmental risks.** What is the combined threat of antibiotic resistance and microplastic pollution on human and ecological health, particularly in aquatic systems?



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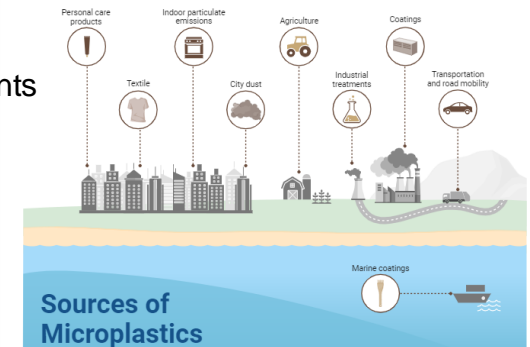
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## Keywords:

- Microplastics
- Environmental contaminants
- Bioremediation
- Nanomaterials
- Biofilm formation
- Antibiotic resistance
- Horizontal gene transfer



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