

Microplastics Research in Bloom

By the Mahalingaiah Lab



All About Microplastics

What are microplastics?

Tiny plastic pieces - think pencil eraser or smaller

Where do they come from?

They chip off of anything made of plastic or synthetic fibers like polyester

Where have scientists found microplastics in the body?^{1,2,3}

- | | |
|------------------------|------------------|
| 1. Brain | 5. Lungs |
| 2. Digestive system | 6. Skin |
| 3. Reproductive system | 7. Hormones |
| 4. Heart | 8. Immune System |

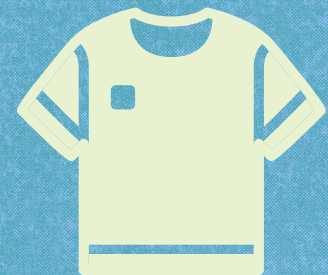


Three ways to reduce exposure to microplastics⁴

1. Replace single-use plastics with reusable materials (ex. glass, metal)



2. Choose clothes with natural fibers (ex. cotton) or buy second hand



3. Avoid microbeads (common microplastic) in makeup and cleaning products



References

1. Z. Xing, W. Fu, L. Li, S. Wu, Bibliometric analysis of microplastics research: Advances and future directions (2020-2024). *Continental Shelf Research* 285, 105371 (2025).
2. M. Liu, J. Liu, F. Xiong, K. Xu, Y. Pu, J. Huang, J. Zhang, Y. Pu, R. Sun, K. Cheng, Research advances of microplastics and potential health risks of microplastics on terrestrial higher mammals: a bibliometric analysis and literature review. *Environ Geochem Health* 45, 2803-2838 (2023).
3. N. Mittal, N. Tiwari, D. Singh, P. Tripathi, S. Sharma, Toxicological impacts of microplastics on human health: a bibliometric analysis. *Environ Sci Pollut Res* 31, 57417-57429 (2024).
4. E. Peebles, Beautiful shores, ugly truths: one environmental health researcher's journey to better understanding plastic pollution | Harvard T.H. Chan School of Public Health (2026). <https://hsph.harvard.edu/mahalingaiah-lab/news/beautiful-shores-ugly-truths-one-environmental-health-researchers-journey-to-better-understanding-plastic-pollution/>.

