Placeholder 'cause old one was too cringey

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Abstract

The abstract for this paper is not required for this assignment.

Keywords: microplastics, immunity, neuroinflammation

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Introduction

First named by (Thompson et al., 2004), microplastics are defined as particles with diameters from 1 μ m to 5 mm, while nanoplastics have diameters smaller than 1 μ m.

MP Transport and Crossing the Blood-Brain Barrier (BBB)

Lorem ipsum...

Routes of Entry

Micro- and nanoplastics (MPs/NPs) enter the body via several primary routes of entry. The most prevalent pathways are ingestion—mainly from contaminated food and drinking water, which are almost everywhere in modern times—and inhalation—often from airborne particles such as indoor dust and synthetic clothing fibers. While dermal absorption remains a possibility, it is generally considered a less significant route. Recent research discovered that nanoplastics are likely the most dangerous in terms of systemic effects, as their diminutive size facilitates rapid entrance into the bloodstream and distribution throughout the body (*Micro- and Nanoplastics Breach the Blood–Brain Barrier (BBB)*, n.d.) Figure 1

Microglial Activation and Neuroinflammation

Consequences and Future Directions

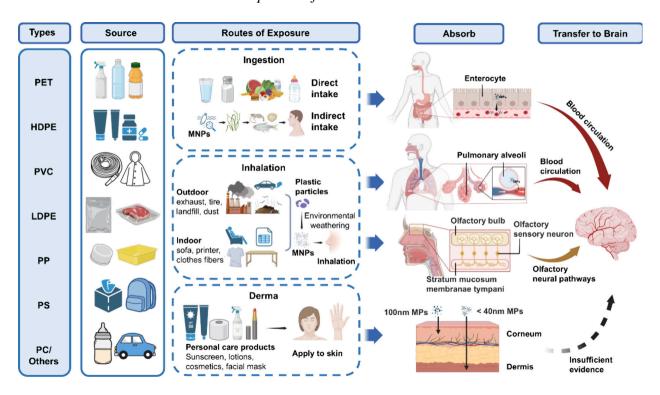
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Thompson, R. C., Olsen, Y., Mitchell, R. P., Davis, A., Rowland, S. J., John, A. W. G., McGonigle, D., & Russell, A. E. (2004). Lost at Sea: Where Is All the Plastic? *Science*, 304(5672), 838–838. https://doi.org/10.1126/science.1094559

Figure 1

Environmental sources and human exposure of MNPs.



Note. Reprinted from Ma, Q., Lei, J., Pang, Y., Shen, Y., & Zhang, T. (2025). Neurotoxicity of Micro- and Nanoplastics: A Comprehensive Review of Central Nervous System Impacts. Environment & Health. https://doi.org/10.1021/envhealth.5c00087.