

7,000 studies URL: [DOI: 10.1126/science.adl27](https://doi.org/10.1126/science.adl27)

Europe food contamination: <https://doi.org/10.1016/j.emcon.2025.100477>

Weight of a credit card – scientists are challenging this comparison, so best not to use it.

A groundbreaking study in 2022 first revealed microscopic plastics in the blood of healthy donors, confirming that particles can be absorbed into our circulation:

<https://doi.org/10.1016/j.envint.2022.107199>

Researchers report that particles small enough to enter the bloodstream are capable of crossing the placental barrier into the womb (<https://doi.org/10.1016/j.envint.2020.106274>) and even the blood–brain barrier into the brain <https://doi.org/10.1016/j.jhazmat.2024.136028> ;

Scientists have found plastic specks embedded in “nearly every [human] bodily organ” examined in recent studies, according to Harvard researchers.

<https://news.harvard.edu/gazette/story/2024/10/plastics-in-our-bodies-what-does-that-mean-for-our-health-harvard-thinking-podcast/>

In 2024, an international team of experts reviewed thousands of microplastic studies to summarize the state of knowledge . Their alarming conclusion put humanity on notice: microplastics are now so widespread and biologically active that they constitute a tangible threat to ecosystems and human well- being [DOI: 10.1126/science.adl27](https://doi.org/10.1126/science.adl27)

...in the breast milk of new mothers: [10.3390/jcm13144029](https://doi.org/10.3390/jcm13144029)

In 2025, a peer- reviewed study in Italy found microplastics for the first time in human ovarian follicular fluid – the fluid surrounding maturing eggs in the ovary . Out of 18 women undergoing IVF fertility procedures, 14 had measurable plastic particles in their ovarian fluid . The authors described this as “an important warning signal” of invasive contaminants in the female reproductive system.

[10.1016/j.ecoenv.2025.117868](https://doi.org/10.1016/j.ecoenv.2025.117868)

Microplastics were detected in all semen and urine samples, with participants typically exposed to 3–5 different types. The detection rates of PS, PP and PE were the highest. [10.1016/j.ebiom.2024.105369](https://doi.org/10.1016/j.ebiom.2024.105369)

One recent clinical observation is especially concerning: microplastic and nanoplastic levels have been found to accumulate in human placentae, and a 2024/25 study reported significantly higher concentrations in the placentas of preterm infants than in those from full-term births.

[10.21203/rs.3.rs-5903715/v1](https://doi.org/10.21203/rs.3.rs-5903715/v1)

In late 2024, the Rutgers team found that when pregnant rats were exposed to airborne microplastics, the same particles were later detected in their newborn pups' lungs, livers, kidneys, hearts and brains at birth. [10.1016/j.scitotenv.2024.175350](https://doi.org/10.1016/j.scitotenv.2024.175350)

In fact, a comparative analysis published in 2024/25 reported that microplastics are accumulating in human brains at much higher levels now than seen a decade ago, reflecting the explosion of plastics in our environment over that time. <https://doi.org/10.1038/s41591-024-03453-1>

### **Prevention and Solutions Under Discussion.**

We need to feed in the Minderoo-Monaco report here as it is the most comprehensive on the topic: [DOI: 10.5334/aogh.4083](https://doi.org/10.5334/aogh.4083)