SPOTLIGHT ON MICROPLASTICS

Human exposure to microplastics is manifold, including via the air we breathe, the food we eat, or the products we use. Many consumer products now incorporate "microplastics", tiny particles ranging in size from a few millimetres down to microscopic "nanoplastics" the size of bacteria. Microplastics are often added deliberately to both plastic and non-plastic products, like the small plastic fragments that enhance the function of exfoliating scrubs and toothpastes, or the plastic "microbeads" used to make sunscreen spread more evenly.

In addition, microplastics form when plastic materials break down in the environment [1] [2]. Moreover, because they accumulate in animals such as fish and aquatic invertebrates, they directly enter our food chain, posing a potential danger to human health.

Microplastics now constitute "a major potential threat to global aquatic ecosystems" [2] at an almost unimaginable scale.

- A study by researchers at the University of Newcastle, Australia, suggested that people may be ingesting 5 grams of microplastics each week—about the amount of plastic in a credit card [3].
- In 2013, scientists estimated that already more than five trillion plastics particles float in our oceans, most of them microplastics [4].
- Scientists at Ghent University, Belgium recently found that the average European shellfish consumer ingests 6,400 microplastics per year [5].
- A 2018 investigation of bottled drinking water, testing more than 250 samples from nine countries, found that 90% were contaminated by plastics—primarily polypropylene (54%), nylon (16%) and polyethylene or PET (6%) [6]. These results prompted the World Health Organization (WHO) to initiate a review of the risks of microplastics in drinking water [7]. Following this first review, the WHO highlighted the need for more research on the health effects of microplastics and has called for a "crackdown on plastic pollution" [8].

The Dutch organisation ZonMw recently launched a series of 15 research projects to study the potential impacts on human health [9]. Meanwhile, in January 2019, the European Chemicals Agency (ECHA) proposed a restriction on intentionally added microplastics, which it hopes will prevent the release of 500,000 tonnes of microplastics over the next 20 years [10].

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VISIT HEAL'S REPORT 'TURNING THE PLASTIC TIDE: THE CHEMICALS IN PLASTIC THAT PUT OUR HEALTH AT RISK' FOR MORE INFORMATION

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