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Not that much plastic in your body

A model study shows that adults take in 880 microplastic particles a day on average.

Even something simple as opening a plastic bottle releases microplastics — plastic particles between 1 and 5000 micrometres in size. We take in microplastics with our food and drink but also via the air. It is not yet clear what effect this has on

Over half the microplastics leave your body in your poo

our health. Nur Hazimah Mohamed Nor, a researcher at Aquatic Ecology and Water Management, investigated how much we take in exactly and how that accumulates.

According to a 2019 study by the University of Newcastle (Australia) commissioned by WWF Singapore, we ingest five grams a week, the equivalent of one bank card. Do we really swallow that much plastic? Mohamed Nor built a model to calculate how much microplastic you get inside you through breathing and via eight food categories with known concentrations of microplastics (fish, molluscs, crus-

taceans, tap water, bottled water, salt, beer and milk).

Her model shows that adults absorb 880 plastic particles per day on average, and children 510 particles. Children and adults expel similar quantities in their poo, namely 480 and 490 particles respectively per day. That children get rid of as many particles as adults could be due to their faster metabolism.

Grain of sand

The model calculated how many microplastics a person's body absorbs up to the age of 70. That is more than 50,000 particles, which sounds a lot but is only 0.04 micrograms, a fraction of a grain of sand. So the bank card per week story can be taken with a grain of salt. However, it should be noted that the foods in Mohamed Nor's model only account for one fifth of our daily diet. The concentration of microplastics in many foods, such as grains, rice, vegetables, fruit, meat and processed foods, is not yet known. ss