

Study reveals more than 100 tiny plastics in every meal

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Credit: Heriot-Watt University

We could be swallowing more than 100 tiny plastic particles with every main meal, a Heriot-Watt study has revealed.

The [plastic](#), which can come from soft furnishings and synthetic fabrics, gets into household [dust](#) which falls on plates and is consumed.

The university academics made the discovery after putting Petri dishes containing sticky dust traps on the table next to dinner plates in three homes at meal times.

Up to 14 pieces of plastic were found in the Petri dishes at the end of a 20-minute meal – the equivalent of 114 plastic fibres falling on the average dinner plate given their much larger size.

The scientists, from Heriot-Watt University concluded that the [average person](#) swallows up to 68,415 potentially dangerous plastic fibres a year simply through sitting down to eat.

The researchers set out to compare plastic fibres found in mussels with the amount in the average household meal.

They found fewer than two microplastics in each mussel, which could be linked to the marine environment, and concluded that the average person can expect to consume 100 plastic particles a year through eating the shellfish.

But they will ingest anything from 13,731 to 68,415 fibres in a year during meals because of household dust.

Dr. Ted Henry, senior author of the study and professor of environmental toxicology at Heriot-Watt University, said: "These results may be surprising to some people who may expect the plastic fibres in seafood to be higher than those in household dust.

"We do not know where these fibres come from, but it is likely to be inside the home and the wider environment."

The plastic fibres found in the home-cooked meals did not come from the food or the cooking environment, but household dust, the authors

believe.

Eating is the way in which humans can ingest this dust, as well as breathing it in from the air.

Julian Kirby, of Friends of the Earth, added: "Plastic microfibrils found in the dust in our homes and the air we breathe can come from car tyres, carpets and soft furnishings, as well as clothes such as fleece jackets.

"These are regularly shedding tiny bits of plastic into the [environment](#) as they are worn away.

"We urgently need the Government to adopt an action plan to end plastic pollution and research the possible impacts of environmental plastic on human health."

Provided by Heriot-Watt University

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