Source : www.livemint.com Date : 2022-03-26

MICROPLASTICS FOUND IN HUMAN BLOOD FOR THE FIRST TIME. HOW IT CAN AFFECT YOU

Relevant for: Developmental Issues | Topic: Health & Sanitation and related issues

Tiny particles of plastics, called microplastics, were detected in human blood for the first time, according to a study by a group of scientists in the Netherlands.

Published in the journal Environment International, the study found that 17 out of the 22 healthy people the researchers took samples from had quantifiable amounts of plastic particles in their blood.

The researchers adapted existing techniques to detect and analyze particles that were as small as 700 nanometers in size.

They targeted five common plastics, including polyethylene terephthalate, also known as PET and used in bottles, and polyethylene, which is used in food packaging. The team used steel needles and glass tubes to avoid contamination.

The results support the hypothesis that human exposure to plastic particles results in the absorption of particles into the bloodstream, but further study is needed to assess the impacts of exposure and whether it is a public health risk, the study said.

The World Health Organization (WHO) has also said that there's insufficient information to draw firm conclusions about how toxic they are for people and more research is needed.

However, Prof Dick Vethaak, an ecotoxicologist at Vrije Universiteit Amsterdam in the Netherlands, and lead author of the study, was quoted as saying by The Guardian, that the discovery is certainly reasonable to be concerned. "The particles are there and are transported throughout the body."

The researcher also said that such particles can cause chronic inflammation.

"Good ventilation of the house is important because microplastic concentrations appear to be higher indoors than outdoors. I also cover my food and drinks to reduce the deposition of plastic particles," he said.

Microplastics are ubiquitous in the environment and can be found in marine animals to drinking water.

Over 300 million tons of plastic are produced every year and at least 14 million tons end up in the ocean where they can be ingested by animals and risk entering the human food supply chain, according to the International Union for Conservation of Nature.

Some materials can take centuries to break down, and growing concerns about their pollutive impacts have spurred bans on single-use plastic bags.

But the pervasive presence of synthetic products in modern life – from water bottles to takeaway containers and clothing – underscore the challenges of regulating and limiting their use.

END