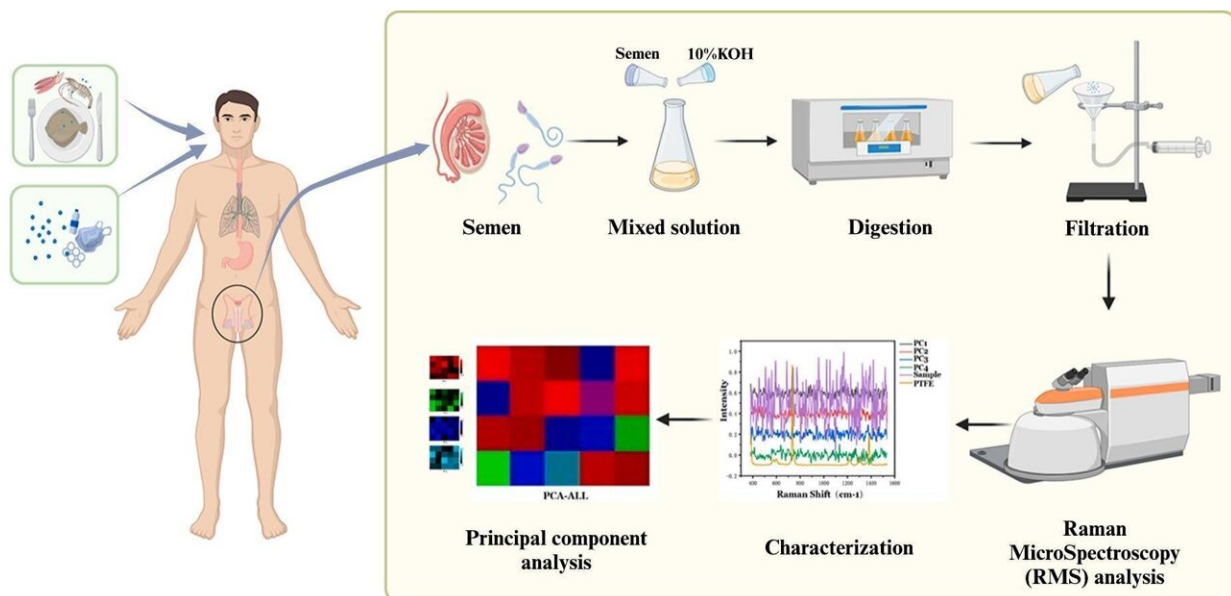


Microplastics found in every semen sample tested by research team

June 7 2024, by Bob Yirka



Graphical abstract. Credit: *Science of The Total Environment* (2024). DOI: 10.1016/j.scitotenv.2024.173522

A team of public health researchers affiliated with multiple institutions in China has found microplastics in the semen of every sample they tested. In their study, published in the journal *Science of the Total Environment*, the [group looked for microplastics in semen](#) samples

obtained from 36 healthy adult men.

Prior research has shown that microplastics are nearly everywhere, found on mountaintops, [remote islands](#), in the upper atmosphere and the depths of the world's oceans. They have also been found in every organ in the human body.

In a recent discovery, scientists found that the average person consumes plastic in amounts equal to about one credit card every week. The researchers note that plastics can enter the body in multiple ways, such as through drinking from [water bottles](#), breathing air particulates, or eating food heated in plastic containers. They further note that it is now practically impossible for people to avoid ingesting microplastics.

The [health impacts](#) remain unknown, but many scientists around the world are looking into it, suspecting microplastic ingestion may be behind many inflammatory diseases.

In this new effort, the research team wondered if ingested microplastics might be behind the global drop in fertility rates. To find out, they recruited 36 healthy adult males living in the city of Jinan, in the eastern part of China, who did not work in the plastics industry—each donated a sample of semen for testing.

Each of the samples was prepared by mixing it with a chemical solution then filtered for analysis by a team member using a microscope. The researchers found microplastics in every sample. They also found eight types of plastics, the most common of which was polystyrene, which is commonly used in packaging foam.

The team also found lower sperm motility in the [semen samples](#)

containing [polyvinyl chloride](#) plastic bits, a finding that may help explain the decline in fertility rates.

More information: Ning Li et al, Prevalence and implications of microplastic contaminants in general human seminal fluid: A Raman spectroscopic study, *Science of The Total Environment* (2024). [DOI: 10.1016/j.scitotenv.2024.173522](#)

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