Scientists make disturbing discovery after studying microplastics in pigs — here's what you need to know

https://www.thecooldown.com/green-tech/microplastics-health-effects-digestive-system-pigs/

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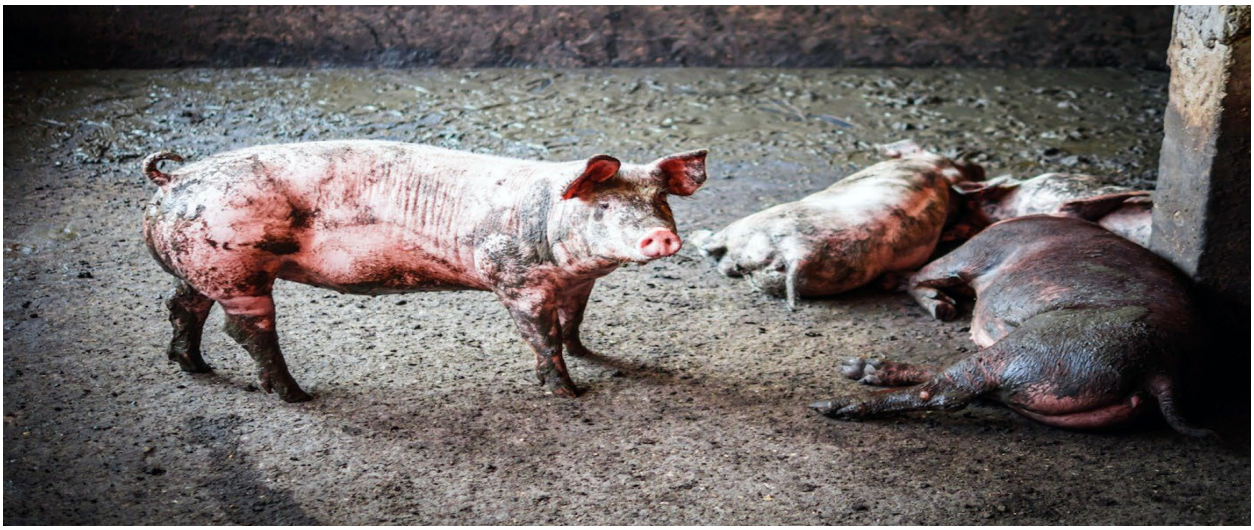
by Doric SamAugust 31, 2024



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Scientists have explored the effects microplastics can have on the nervous system connected to pigs' digestive systems — which have similarities to humans' digestive systems — and the results are unsettling.

What's happening?

Dr. Priyom Bose, who holds a doctorate in Plant Biology and Biotechnology from the University of Madras, India, discussed the study's findings in News-Medical. It determined that oral exposure to microplastics can trigger an inflammatory response in the enteric nervous system (ENS). The research was published in the journal Nutrients and shared by MDPI.

Bose explained that the ENS "regulates proper immune response, as well as enzyme and electrolyte secretion, within the jejunum," which is "the middle part of the small intestine where food digestion and nutrient absorption occur."

As Bose noted, the "association between the ENS and digestive tract in pigs is similar to that of humans."

Fifteen sexually immature pigs were studied after being orally administered a capsule applicator of microplastics once daily over 28 days. The animals were then euthanized following standard protocols, and tissue samples were collected for examination.

The study suggested that microplastics can affect the functioning of a nervous system connected to digestion, though the researchers say that additional study is needed, per Bose.

Why is this study important?

Scientists are particularly concerned about the potential health impacts of microplastics. While the full effects are still being researched, early signs suggest they could be linked to health issues such as cancer, heart disease, and fertility problems.

As Bose noted: "The presence of microplastics in humans has been confirmed in the placenta, breast milk, feces, lungs, blood, spleen, sputum, and bronchoalveolar fluid."

In addition to the impact on human health, microplastics don't break down naturally, so they persist in the environment and can be extremely difficult to clean up.

What can be done about this?

To help combat this issue and reduce your exposure to microplastics, you can explore plastic-free alternatives for everyday products and make small changes like choosing reusable bottles and containers, which can prevent plastic pollution, protect wildlife from being exposed to plastic, and save you money in the long run.