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Chemical in Water Bottles Linked to Child Obesity

Story by Robyn White • 6mo • 2 min read

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A stock photo shows a close up of plastic bottles. A new study has found new connections between BPA - a chemical found in these bottles - and obesity.
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A chemical found in water bottles has been linked to child obesity, according to a new study.

The synthetic chemical Bisphenol A, or BPA, was found in a variety of widely used products, such as plastic water bottles and eyewear.

But it is also a chemical known to disrupt the body's hormones. The chemical, which can make its way into other avenues, such as food and the soil, accumulates in the body's tissues and organs when ingested. It is known to affect weight and can affect certain cells.

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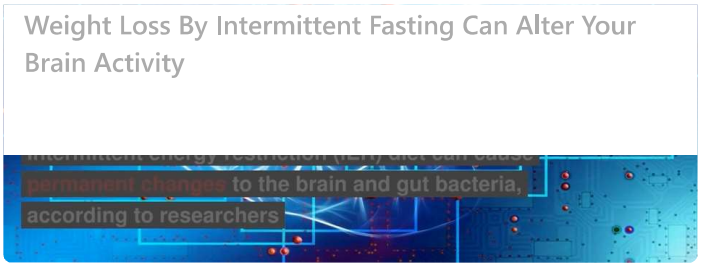

A new study published in *mSystems* found that this chemical could be playing a role in causing different bacteria groups in children of normal weight than those who were overweight.

"We found that the gut microbial community responds differently to BPA exposure depending on the BMI (body-mass index) of the individual," microbiologist Margarita Aguilera of the University of Granada in Spain, who worked on the study, said in a summary.

"[Those connections] underscore the intricate interplay between gut microbiota and potential human pathophysiology resulting from cumulative BPA exposure."

Previous studies have already suggested that BPA exposure could negatively affect human health, including the gut microbiome. However, studies have not looked at the connections between those who are overweight and those who are not.

To reach their findings, the Spanish researchers studied a group of over 100 children, half boys and half girls, to identify the microbes that play a role in BPA. Around 60 of them were overweight. Their feces were then tested so that the researchers could identify certain bacterial species.

They found overall that there were more unique bacteria groups in the children of a normal weight. This strongly suggests that the bacteria in those children may be able to fight off harmful chemicals like BPA.

"We want to raise awareness about the health risks associated with microplastics that enter our bodies, and those that circulate in the environment," Aguilera said in a statement. "It's crucial for individuals to be mindful of these concerns."

This study, and future studies into the effects of BPA, "could point to future interventions and policy changes that may reduce the risk of childhood obesity worldwide," Aguilera said.

In the future, the researchers hope to investigate how other synthetic chemicals affect the composition of the gut microbiome and how this manifests in the body.

The main goal of their research, however, is to "elucidate the mechanisms behind an invisible but widespread threat."

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