Do altered gut microbes affect risk of attention-deficit/hyperactivity disorder?

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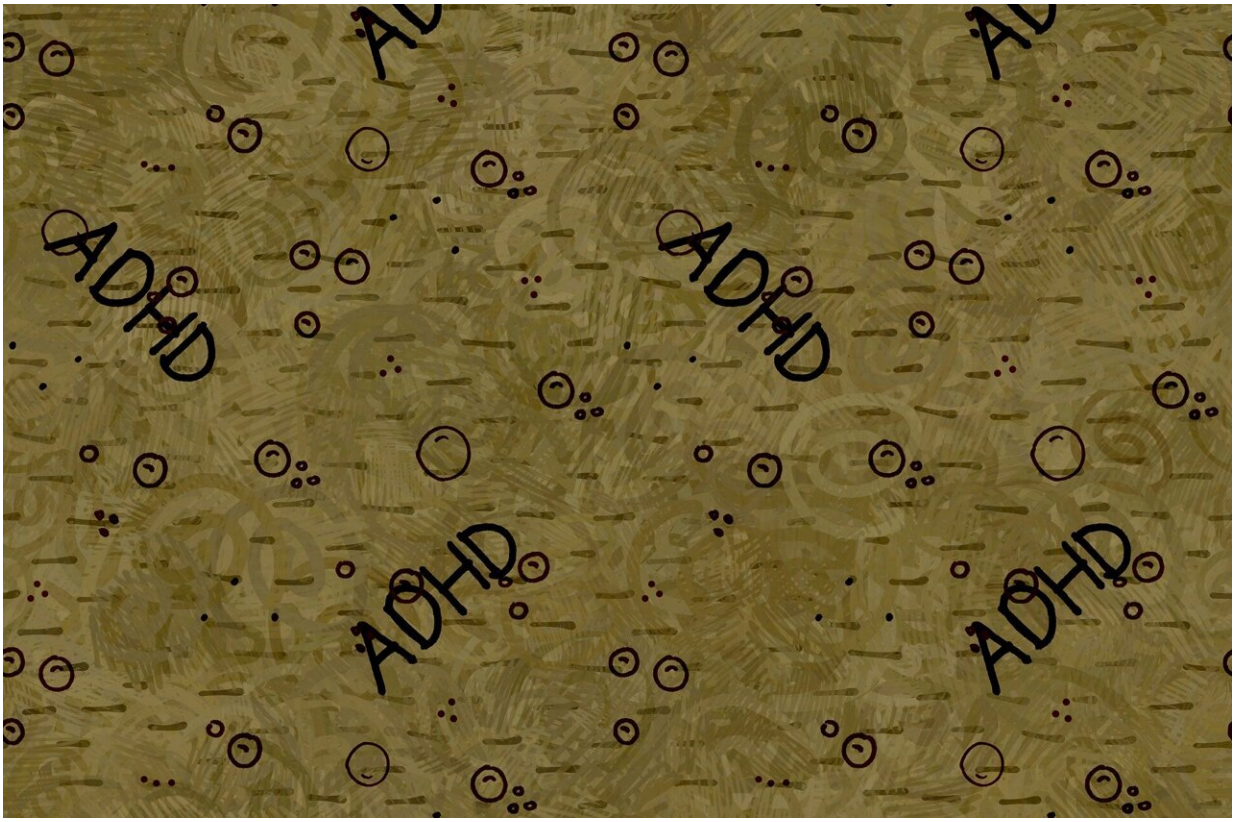

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New research published in the *Journal of Child Psychology and Psychiatry* suggests that the microbial composition of the gut may affect a child's susceptibility to attention-deficit/hyperactivity disorder

(ADHD).

The human gastrointestinal tract hosts a large population of microorganisms such as bacteria, viruses, and fungi. When investigators compared fecal samples from 35 children with ADHD and 35 healthy controls, samples from children with ADHD had higher levels of certain species of fungi and lower levels of other species.

In experiments with cells grown in the lab, one species in abundance in samples from children with ADHD—called Candida albicans—increased the permeability of cells that line the intestine. This could create a "leaky gut" that allows bacteria into the bloodstream, possibly resulting in inflammation throughout the body and brain.

"The human body is home to a complex and diverse microbial ecosystem, and findings from this study suggest that dysbiosis of the fungal mycobiome in ADHD can influence patient health," the authors wrote.

More information: Gut mycobiome dysbiosis and its impact on intestinal permeability in attention-deficit/hyperactivity disorder, *Journal of Child Psychology and Psychiatry* (2023). DOI: 10.1111/jcpp.13779

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