Antibiotic exposure before age two linked to childhood obesity

by American Pediatric Society



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Taking antibiotics within the first two years of life is linked to a higher body mass index (BMI) in childhood, according to a new study. The research was presented at the Pediatric Academic Societies (PAS) 2025 Meeting, held April 24–28 in Honolulu, USA.

Researchers found that children exposed to <u>antibiotics</u> in the first two years of life had a 0.067 higher BMI adjusted for age and sex, a 9% greater risk to be overweight, and a 20% greater risk to be obese than children who were unexposed.

Researchers found no correlation between BMI and <u>antibiotic use</u> before pregnancy, during pregnancy, or at birth.

Antibiotics prescribed to young children are prevalent, according to researchers. The majority of children are prescribed antibiotics within the first two years of life. Approximately one-fourth of children are exposed to antibiotics during pregnancy and one-third during vaginal birth.

"Antibiotic exposure in the first two years of life has a stronger association with childhood weight gain than exposure during pregnancy stages or other early ages," said Sofia Ainonen, MD, Ph.D., medical doctor at the University of Oulu in Finland and presenting author.

"Providers need to be cautious about prescribing antibiotics for young toddlers, especially unnecessary antibiotics for upper respiratory tract infections."

Childhood obesity is an increasing challenge worldwide, with over 159 million school-aged children diagnosed with obesity in 2022.

The study followed 33,095 vaginally born children in Finland to see if antibiotics before pregnancy, during the perinatal period, and after pregnancy was associated with higher BMI at age two and age 12.

More information: Abstract: Timing of early antibiotic exposure and the risk of overweight and obesity in children.

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