

INSIGHTS



Science for Kids

Science for Kids: Antibiotics at birth and later antibiotic courses: effects on gut microbiota

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Pediatric Research Science for Kids

“Antibiotics at birth and later antibiotic courses: Effects on gut microbiota”

<p>Prospective Controlled Cohort Study</p> <ul style="list-style-type: none"> - Follows a group over time - Each member of the group is selected from the same population - Different groups vary regarding the specific factor on which the study focuses - This type of longitudinal study seeks to evaluate long-term effects 	<p>Infant Gut Microbiome</p> <ul style="list-style-type: none"> - Before birth, the gut is sterile without exposure to microbes - At birth, the gut microbiome is colonized and comprised of diverse microbiota - Over infancy, the microbiome develops and changes - Disturbing the development of the infant gut microbiome may lead to immune disorders, e.g., asthma, atopic dermatitis, and food allergies
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Study Findings

“Perinatal antibiotic exposure had a marked impact on the gut microbiota at the age of one year.

The timing of the antibiotic exposure appears to be the critical factor for the changes observed in the gut microbiota.”

View our full slideshow with the QR code or at <https://tinivuri.com/microbiota8>

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COMPETING INTERESTS

The authors declare no competing interests.

ADDITIONAL INFORMATION

Supplementary information The online version contains supplementary material available at <https://doi.org/10.1038/s41390-021-01782-2>.

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