

Antibiotic use not linked to islet, celiac disease autoimmunity

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(HealthDay)—Use of antibiotics in early life is not associated with islet

or celiac disease (CD) autoimmunity in children at risk for type 1 diabetes (T1D) or CD, according to a study published online Oct. 9 in *JAMA Pediatrics*.

Kaisa M. Kemppainen, Ph.D., from the University of Florida in Gainesville, and colleagues examined the correlation between early-life antibiotic use and islet or CD autoimmunity in genetically at-risk children prospectively followed up for T1D or CD. Data were included for human leukocyte antigen-genotyped newborns enrolled in a prospective birth cohort: 8,495 children and 6,558 children who were tested for islet and tissue transglutaminase autoantibodies, respectively.

The researchers found that exposure to and frequency of use of any antibiotic assessed in the study in [early life](#) or before seroconversion was not associated with the risk of developing islet or CD autoimmunity. There was no correlation for cumulative use of any antibiotic during the first four years of life with the appearance of any autoantibody (hazard ratio, 0.98; 95 percent confidence interval, 0.95 to 1.01), multiple islet autoantibodies (hazard ratio, 0.99; 95 percent confidence interval, 0.95 to 1.03), or transglutaminase autoantibody (hazard ratio, 1; 95 percent confidence interval, 0.98 to 1.02).

"These results suggest that a risk of [islet](#) or tissue transglutaminase autoimmunity need not influence the recommendations for clinical use of antibiotics in [young children](#) at risk for T1D or CD," the authors write.

More information: [Abstract/Full Text \(subscription or payment may be required\)](#)

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