

For immediate release

Consumption of artificially sweetened beverages in pregnancy influences infant BMI

HAMILTON, ON (9 May 2016) A study of over 3,000 Canadian mothers and infants has shown that consumption of artificially sweetened beverages during pregnancy may place infants at an increased risk of obesity.

The [research](#), published today in *JAMA Pediatrics*, provides the first human evidence that exposure to artificial sweeteners *in utero* influences body mass index (BMI) in the first year of life and may contribute to the development of early childhood overweight.

“Some animal research has suggested that consuming artificial sweeteners during pregnancy can predispose offspring to develop obesity, but to our knowledge, this has never been studied in humans,” says lead author Dr. Meghan Azad, an assistant professor in pediatrics & child health, College of Medicine, Faculty of Health Sciences, University of Manitoba, and research scientist at the Children’s Hospital Research Institute of Manitoba.

The research is part of the Canadian Healthy Infant Longitudinal Development (CHILD) Study—a national birth cohort study collecting a wide range of health, lifestyle and environmental exposure information from more than 3,500 mothers and children from pregnancy to age five.

Funded by the Allergy, Genes and Environment (AllerGen NCE) Network and the Canadian Institutes of Health Research (CIHR), the CHILD Study follows families in four provinces (British Columbia, Alberta, Manitoba and Ontario) to determine how genetic and a wide range of environmental factors contribute to health outcomes, especially with regard to chronic diseases such as obesity, allergies and asthma, among others.

“Given the current epidemic of childhood obesity and the widespread consumption of artificial sweeteners, we wanted to find out if a mother’s prenatal intake may be associated with her baby’s BMI,” says Azad, an associate investigator of the CHILD Study. “CHILD provided us with an incredibly rich source of data to examine this important health issue.”

As part of the study, women completed dietary assessments in their second or third trimester of pregnancy and infant BMI was recorded during clinical assessments. Daily maternal consumption of artificially sweetened beverages was associated with a two-fold higher risk of infant overweight.

Childhood obesity is a major public health challenge in Canada and obesity rates have doubled since 1970 with nearly one in three children now classified as overweight or obese, the authors note.

“While more research is warranted to confirm our findings and investigate the underlying biological mechanisms, we hope that this research will help to inform evidence-based dietary recommendations for pregnant women,” adds Azad.

About the CHILD Study

Launched in 2008 by CIHR and AllerGen NCE, the [CHILD Study](#) is tracking thousands of Canadian families and their infants over early childhood to help determine the root causes of chronic diseases, such as asthma, allergies and obesity, among other conditions. With its National Coordinating Centre based at St. Joseph's Healthcare Hamilton, the CHILD Study relies upon the world-recognized expertise in birth cohorts, and in allergy and asthma treatment, care and training, of McMaster University and its Faculty of Health Sciences, together with their affiliated teaching hospitals, Hamilton Health Sciences and St. Joseph's Healthcare. The CHILD Study spans four provinces, involving over 140 multidisciplinary researchers, students and research staff.

Watch the [CHILD Study video](#)

About AllerGen NCE

[AllerGen NCE Inc.](#), the Allergy, Genes and Environment Network (est. 2004), is a national research network dedicated to improving the quality of life of people suffering from allergic and related immune diseases. Funded by Innovation, Science and Economic Development Canada through the federal Networks of Centres of Excellence (NCE) Program, the Network is hosted at McMaster University in Hamilton, ON. Visit allergen-nce.ca for more information.

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