

New study links prepregnancy obesity to infant growth

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Infants born to women with a prepregnancy body mass index (BMI) in the obese range (>40) were 8% larger during the first two years of life than were those born to women with a BMI in the healthy range (18.5-24.9), based on a new study of a multiethnic group of infants in the U.S. published in *Childhood Obesity*.

Bernard Fuemmeler, PhD, MPH and coauthors from Duke University Medical Center and Duke University, Durham, and North Carolina State University, Raleigh, NC, also reported differences in the pace of infant growth and the time to reach peak growth rate depending on the mothers' prepregnancy BMI. The researchers further showed a link between greater maternal weight gain during pregnancy and larger infant size in the article "Association Between Prepregnancy Body Mass Index and Gestational Weight Gain with Size, Tempo, and Velocity of Infant Growth: Analysis of the Newborn Epigenetic Study Cohort."

The article is part of a special issue on "Childhood Obesity Risk and Prevention: First 1000 Days of Life," led by Guest Editor Elsie M. Taveras, MD, MPH, Massachusetts General Hospital for Children and Harvard Medical School, and Harvard T.H. Chan School of Public Health, Boston, MA.

"This special issue devoted to obesity risks in the first 1000 days of life brings together some of the latest research on this key issue and exemplifies the complexities," says Childhood Obesity Editor-in-Chief Tom Baranowski, PhD, Baylor College of Medicine, Houston, TX. "Fuemmeler et al. demonstrate that both maternal prepregnancy obesity and gestational weight gain were associated with infant weight trajectories in the first 24 months of life. However, <u>Claesson *et al.*</u> and <u>Gregory *et al.*</u> report in this issue that gestational weight management programs had no effect on children's weight. Whether the maternal-tochild weight relationships are causal or both reflect some unmeasured third variable remains to be determined. If causal, future research



specifying the biological pathways of influence hopefully will lead to effective interventions. Stay tuned!"

More information: Bernard F. Fuemmeler et al, Association between Prepregnancy Body Mass Index and Gestational Weight Gain with Size, Tempo, and Velocity of Infant Growth: Analysis of the Newborn Epigenetic Study Cohort, *Childhood Obesity* (2016). <u>DOI:</u> <u>10.1089/chi.2015.0253</u>

Provided by Mary Ann Liebert, Inc

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