

Does a mother's pre-pregnancy weight determine her child's metabolism?

August 22 2017



Credit: CC0 Public Domain

The link between a mother's body mass index (BMI) before pregnancy and the metabolic traits of her children is likely mediated by shared genetics and familial lifestyle rather than effects on the fetus during

gestation, according to study published this week in *PLOS Medicine* by Debbie Lawlor of the University of Bristol, UK, and colleagues.

20 to 50 percent of women in Western populations now start pregnancy overweight or obese, and researchers have hypothesized that this may lead to metabolic disruptions in offspring. Lawlor's group used data on 5,337 mother-father-offspring trios collected in three European birth cohorts. Each dataset included maternal pre-pregnancy BMI, paternal BMI, offspring BMI, and information on 153 metabolic traits in the offspring, based on a [blood sample](#) taken at age 16, 17, or 31.

The researchers found associations between parental BMIs and offspring metabolic traits including VLDL-lipoproteins, VLDL-C, VLDL-triglycerides, VLDL-diameter, glycoprotein acetyls, triglycerides, HDL-lipoprotein, and HDL-C (all P

Citation: Does a mother's pre-pregnancy weight determine her child's metabolism? (2017, August 22) retrieved 27 April 2024 from <https://medicalxpress.com/news/2017-08-mother-pre-pregnancy-weight-child-metabolism.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--