

Lifecourse Epidemiology of Adiposity & Diabetes (LEAD) Center

colorado school of public health



Trainee Profile: Allison Butti Shapiro, PhD (2015)

Dr. Shapiro investigated the relationship between maternal diet and infant adiposity in the Healthy Start Study. She is now a postdoctoral fellow in the CU School of Medicine, Department of Psychiatry, learning neuroimaging.



Her Findings

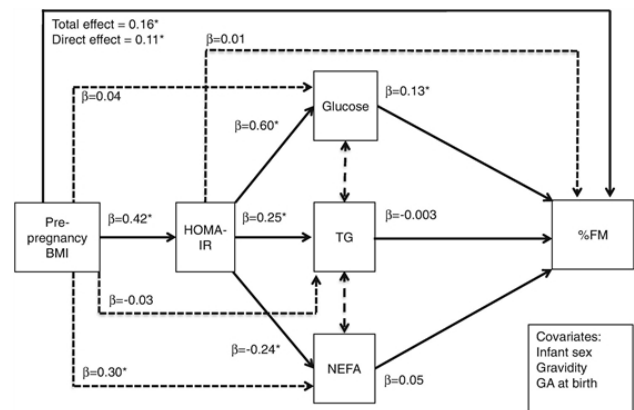
- There was a strong positive linear relationship between maternal glucose levels in both early and late pregnancy and maternal HbA1c in late pregnancy with offspring fat mass and fat mass %
- All findings were independent of pre-pregnancy BMI
- Maternal glucose levels, even within normal range, mediated 20% of the association between maternal and neonatal adiposity.



Published Research

Shapiro ALB, Schmiege SJ, Brinton JT, et al. Testing the fuel-mediated hypothesis: maternal insulin resistance and glucose mediate the association between maternal and neonatal adiposity, the Healthy Start study. *Diabetologia*. 2015;58(5):937-941.

Using a novel application of path analysis, these data implicate maternal insulin resistance (HOMA-IR) and glucose levels as important mediators of the association between maternal and infant adiposity.



Shapiro AL, Boyle KE, Dabelea D, et al. Nicotinamide Promotes Adipogenesis in Umbilical Cord-Derived Mesenchymal Stem Cells and Is Associated with Neonatal Adiposity: The Healthy Start BabyBUMP Project. *PLoS One*. 2016;11(7):e0159575.

Shapiro AL, Kaar JL, Crume TL, et al. Maternal diet quality in pregnancy and neonatal adiposity: the Healthy Start Study. *Int J Obes (Lond)*. 2016;40(7):1056-1062.

Shapiro AL, Ringham BM, Glueck DH, et al. Infant Adiposity is Independently Associated with a Maternal High Fat Diet but not Related to Niacin Intake: The Healthy Start Study. *Matern Child Health J*. 2017;10.1007/s10995-016-2258-8.

Contact us about training opportunities:

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