Moms' Obesity Linked to Kids' Asthma and Other Ills

By Ruth Kava — February 15, 2017

We've known for a long time that if a woman is obese during pregnancy she'll be more likely to experience problems such as gestational diabetes, preeclampsia, and to have unusually large babies. But we're now learning more about the health consequences for the offspring. A recent review of studies in *The Lancet/Diabetes Endocrinology* found links between maternal obesity and negative effects on a child's health.

As part of a series in that journal, Drs Keith M. Godfrey [3] and Rebecca M. Reynolds [3], from the University of Southampton and University Hospital Southampton, UK and University of Edinburgh, Scotland, respectively, noted the negative effects on offsprings' cardiometabolic health. They also reviewed studies examining possible links between maternal weight and allergic/asthmatic and neurobehavioral consequences.

Eleven recent international studies showed significant links between maternal pre-pregnancy obesity or excess weight gain/obesity during pregnancy and children's wheezing or asthma. Links to other allergic conditions were not significant.

In addition, the investigators reviewed eight studies of possible connections between maternal overweight/obesity and behavioral disorders in the offspring. Significant associations were found between maternal extreme obesity and excessive pregnancy weight gain and cerebral palsy. And autism spectrum disorder was also associated with these factors — the association ranged from moderate to strong in the different studies.

The authors suggested that such effects might be mediated by maternal factors known to be associated with obesity: excessive nutrients such as fatty acids and glucose; excessive hormones
such as insulin and leptin; excessive pro-inflammatory markers such as interleukins and tumor necrosis factor. They postulate that such factors might affect the offspring via an epigenetic route — e.g. DNA methylation.

It's important to remember that the reviewed studies were observational in nature, and thus causality can't be assumed. So whether or not the authors' hypotheses are borne out by future research remains to be seen.