

Maternal hyperglycemia ups offspring cardiometabolic risk

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(HealthDay)—Maternal hyperglycemia during pregnancy is associated

with increased risk of abnormal glucose tolerance, obesity, and increased blood pressure (BP) in offspring, independent of maternal obesity, according to a study published online March 9 in *Diabetes Care*.

Wing Hung Tam, from the Chinese University of Hong Kong, and colleagues sought to examine the effect of maternal hyperglycemia during pregnancy on cardiometabolic risk in offspring. Nine hundred seventy mothers who had joined the Hyperglycemia and Adverse Pregnancy Outcome study were reevaluated, together with their child born during the study period, seven years after delivery.

The researchers found that, compared with offspring born to mothers without [gestational diabetes mellitus](#) (GDM), those born to mothers diagnosed with GDM had elevated rates of abnormal glucose tolerance (4.7 versus 1.7 percent; $P = 0.04$), overweight or obesity, greater body mass index (BMI), higher BP, lower oral disposition index, and a trend toward reduced β -cell function. There was an increase in the risk of abnormal glucose tolerance in the offspring in association with each standard deviation increase in maternal fasting, one-hour, and two-hour glucose levels on [oral glucose tolerance](#) tests between 24 and 32 weeks of the index pregnancy (adjusted odds ratio, 1.85 to 2.00). These correlations were independent of pre-pregnancy BMI, childhood obesity, or being born large for gestational age.

"We observed that maternal hyperglycemia increased the risk of abnormal glucose tolerance, obesity, and hypertension among offspring in early childhood, independent of [maternal obesity](#), being large for [gestational age](#) at birth, and [childhood obesity](#)," the authors write.

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