

Does diabetes during pregnancy increase the risk of neurodevelopmental conditions in children?

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New research published in *Developmental Medicine & Child Neurology* has revealed a link between maternal diabetes during pregnancy and a range of neurodevelopmental conditions in children—including autism,

attention-deficit/hyperactivity disorder (ADHD), developmental delay, intellectual disability, cerebral palsy, and epilepsy.

The retrospective study included 877,233 children born between 2004 and 2008 in Taiwan whose mothers had type 1, type 2, or gestational diabetes during pregnancy. The effect of type 1 diabetes on neurodevelopmental disorders was the largest, followed by type 2 diabetes, and then [gestational diabetes](#).

Type 1 diabetes was associated with an increased risk of [developmental delay](#), intellectual disability, and epilepsy in children. Type 2 diabetes was associated with an increased risk of autism spectrum disorder, ADHD, developmental delay, intellectual disability, cerebral palsy, and epilepsy. Gestational diabetes was associated with an increased risk of autism spectrum disorder, ADHD, and developmental delay.

"Mechanistic studies are needed to explore how maternal conditions, such as diabetes, may shape brain development in the womb," said corresponding author Pao-Lin Kuo, MD, of National Cheng Kung University Hospital.

More information: Childhood neurodevelopmental disorders are associated with maternal diabetes: a population-based cohort study, *Developmental Medicine & Child Neurology* (2022). [DOI: 10.1111/dmcn.15488](#)

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