Certain Changes in Children's Physical Health Linked to Mental Illness as Adults

Consistently high body mass index and insulin levels in mid-childhood are associated with psychosis and depression.

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New findings published in the journal Psychiatry suggest that high blood sugar levels and an increase in body mass index (BMI) during childhood are risk factors for adult psychosis and depression, reports the University of Cambridge.

Researchers at the University of Cambridge sampled over 10,000 people in England. Scientists grouped individuals based on shared changes in their levels of insulin—a hormone that controls blood sugar—and BMI from age 1 to 24. Researchers then determined how the groups differed in their risk for depression and psychosis in adulthood.

Results showed that 75% of participants exhibited normal levels of insulin, 15% to 18% experienced insulin levels that increased gradually over adolescence and about 3% presented with high levels of the hormone. Compared with the group with normal insulin levels, the group with much higher levels tended to develop psychosis as adults.

Among those in the group with consistently high BMI during childhood and adolescence, researchers noted no greater risk of depression in adulthood. Scientists suggested that undetermined factors connected with puberty might increase BMI and trigger depression later in life.

Researchers warned that these physical health measures alone cannot foretell the probability that a child will develop these mental disorders in adulthood.

"These findings are an important reminder that all young people presenting with mental health problems should be offered a full and comprehensive assessment of their physical health in tandem with their mental health," said Benjamin Perry, a PhD research fellow in Cambridge's Department of Psychiatry and the study's first author.

Early intervention will be the best way to reduce mortality among people who suffer from

depression and psychosis, Perry explained.

Next, researchers plan to determine why consistently high blood sugar levels during childhood heighten an individual's psychosis risk in adulthood. Scientists also want to find out why an elevation in BMI near puberty ups the risk for depression as an adult.

"Doing so could pave the way for better preventive measures and the potential for new treatment targets," Perry said.

For related coverage, read "Can Chronic Illness Lead to Mental Health Problems for Kids?"

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