Is there a genetic link between Alzheimer's and higher childhood IQs?

Mutations of the amyloid precursor protein gene are known to be involved in the development of Alzheimer's disease. Now, new research points to a correlation between this gene and intellectual abilities in children, raising questions about the protein's role in cognition.

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A new study – led by Dr. Tetyana Zayats…from the K.G. Jebsen Centre for Neuropsychiatric Disorders in the Department of Biomedicine at the University of Bergen in Norway – has examined further links between APP and the development of cognitive functions in children.

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[Researchers] first looked at the IQ scores and genetic markers of 5,165 children. Following this, the researchers examined the DNA sequence variations of 17,008 adults with Alzheimer's disease versus 37,154 healthy adults. They also considered the genetic data of 112,151 adults assessed on cognitive functions.
Specifically, Dr. Zayats and her colleagues studied the activity-regulated cytoskeleton-associated protein (ARC), which is associated with neural plasticity – that is, the nervous system's ability to change and adapt in time.

The researchers found that the ARC gene complex variation was strongly associated with IQ in children. Additionally, it contains the gene that encodes APP, which relates to Alzheimer's.

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"Follow-up studies are needed to more precisely determine how variants in APP may exert their effects on cognitive function over a lifespan," [Researchers said] [The original study can be found here]

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: Alzheimer's gene plays role in childhood IQ