Children receive four times as many genetic mutations from dads than moms

Children inherit four times as many new mutations from their fathers than their mothers, according to research that suggests faults in the men's DNA are a driver for rare childhood diseases. Researchers studied 14,000 Icelanders and found that men passed on one new mutation for every eight months of age, compared with women who passed on a new mutation for every three years of age. The figures mean that a child born to 30-year-old parents would, on average, inherit 11 new mutations from the mother, but 45 from the father.

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Scientists know from <u>previous research</u> that children born to older fathers have a greater risk of developing certain disorders, including intellectual disabilities, autism and schizophrenia. New mutations are <u>a likely factor</u>, given that more genes are active in the brain than in any other organ in the body.

Children inherit new mutations when they build up in the father's sperm and the mother's eggs. Men pass on more mutations than women because they make sperm throughout their lives, using a process that is not perfect at copying DNA. And so, as the man ages, his sperm accumulate more and more mutations. Women pass on fewer mutations because they tend to be born with their full complement of eggs.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: Fathers pass on four times as many new genetic mutations as mothers – study