

Women who take folic acid during the first four to eight weeks of pregnancy may reduce their child's risk of the most serious form of autism, suggests a Norwegian study recently published in [the Journal of the American Medical Association](#).

Specifically, .21 percent of Norwegian children developed autistic disorder when their mother did *not* take folic acid during pregnancy compared to .10 percent who developed autistic disorder when their mother took folic acid. The risk reduction of autistic disorder from folic acid was almost 40 percent, which is statistically significant.

The findings were derived from a sample of more than 85,000 children (born between 2002-2008), whose mother participated in the Norwegian Mother and Child Cohort study. From all participants, 270 children were born with overall autism spectrum disorders (ASD). Of these, about 114 were born with autistic disorder, which is considered to be the most serious form of autism. The editorial's authors explain autistic disorder (and we quote): 'is likely to co-occur with intellectual disability and a range of medical, behavioral, and psychiatric complications' (end of quote).

All ASD cases were diagnosed by medical specialists. The research was conducted by the Norwegian Institute of Public Health in conjunction with colleagues in the U.S. and U.K.

Interestingly, the study found taking folic acid during early weeks of pregnancy did *not* result in a similar reduction in the risk of two *other* ASD diagnoses, Asperger's syndrome, or pervasive developmental disorder. In addition, the study's 14 authors found taking fish oil supplements during the first 4-8 weeks of pregnancy did *not* result in a reduced autistic disorder risk.

Although the authors explain the study's results are consistent with previous findings, the current research features a significantly larger population sample. The authors note the study does not explain *why* folic acid supplements may reduce the risk of autistic disorder.

The authors write (and we quote): 'Our main finding was the maternal use of folic acid supplements around the time of conception was associated with a lower risk of autistic disorder. This finding does not establish a casual relation between folic acid use and autistic disorder but provides a rationale for replicating the analysis in other study samples and further investigating genetic factors and other biological mechanisms that may explain the inverse association' (end of quote).

The [accompanying editorial](#) explains autism spectrum disorders occur in about one percent of children. The editorial's authors add the trends in autism's prevalence as well as clinical and behavioral treatment challenges mean (and we quote): 'understanding risk factors, determining potential causes and prevention, and evaluation treatment options are high priorities for researchers, parents, advocates, clinicians, and educators' (end of quote).

While the editorial's authors note folic acid intake remains a useful tool to prevent birth defects, they write (and we quote): 'the potential for a nutritional supplement to reduce the risk of autistic disorder is provocative and should be confirmed in other populations' (end of quote).

[MedlinePlus.gov's folic acid health topic page](#) explains folic acid is a B vitamin, which is recommended for pregnant women to prevent major birth defects in a baby's brain or spine. Folic acid is available as a dietary supplement or naturally from leafy green vegetables, fruits, dried beans, peas, and nuts. A search of prices from a national drug store chain suggests 250 folic acid pills cost about \$6 a bottle, or as little as two cents apiece.

Source: [nlm.nih.gov/medlineplus/podcast/transcript040813.html](http://nlm.nih.gov/medlineplus/podcast/transcript040813.html)