

Prenatal vitamins might lower risk of second child with autism

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(HealthDay)—Something as simple as taking prenatal vitamins during

the first month of pregnancy might lower the odds of having a second child with autism.

As researchers explain in a new report, once one [child](#) has been diagnosed with [autism](#), any subsequent children face a higher risk of having the developmental disorder.

But the study found that when moms in high-risk families took [prenatal vitamins](#) during the first month of pregnancy, their children had half the risk of developing an [autism spectrum disorder](#) (ASD). And in children who did develop autism, early prenatal [vitamin](#) use was linked to less severe autism symptoms, and higher thinking and memory skills.

"Mothers who used prenatal vitamins, especially in the first month of pregnancy, had a reduced risk of having another child with autism," said study author Rebecca Schmidt. She's an assistant professor of public health sciences at the MIND Institute of the University of California, Davis.

The researchers suspect that certain nutrients found in prenatal vitamins—such as [folic acid](#) and other B vitamins or iron—may play a part in the lowered risk. However, this study wasn't designed to prove a cause-and-effect relationship.

"We don't know for sure what nutrients make the difference. We do know that folic acid is really important for neural tube closure and that it plays a role in [oxidative stress](#) and mitochondrial function—a lot of important things," she said.

Schmidt said that folic acid or any other nutrient that might contribute to the reduced risk seen in this study isn't likely to be solely responsible for preventing autism. She said a lot of factors are suspected to contribute to autism, such as genetics and environment.

Still, "a prenatal vitamin might mitigate some of the risk that's already there," Schmidt added.

Dr. Andrew Adesman, chief of developmental and behavioral pediatrics at Cohen Children's Medical Center, in New Hyde Park, N.Y., noted that the risk of having a second child with autism is a very significant concern for parents who already have one child with the disorder.

"Whereas other studies have shown that prenatal vitamins reduce the overall likelihood of having a first child with ASD, this new study suggests that mothers who already have a child with ASD can reduce their risk of having another, similarly affected child," he said.

"Although there are already many good reasons for women to begin taking prenatal vitamins ... this study lends further support to their potential benefits for women already at increased risk for having another child with ASD," Adesman added.

"If the findings from this study are replicated by other researchers, then something as simple and inexpensive as taking prenatal vitamins prior to conception can significantly reduce the likelihood of a woman having a [second child](#) with ASD," he said.

Another autism expert agreed the finding has to be confirmed in further research.

"This is a small study that needs to be replicated in a larger sample before true risk-reduction calculations and public health policy decisions can be made," said Dr. Kristin Sohl. She is vice chair of the department of pediatrics at University of Missouri Health Care, part of the Autism Speaks' Autism Treatment Network.

"Women planning to get pregnant should have discussions with their

doctor about prenatal vitamins prior to getting pregnant, as we know that certain nutrients like folic acid are vital to optimal brain growth and development from the earliest days of a pregnancy," Sohl added.

Schmidt said that the women in the study used a variety of prenatal vitamins, but the researchers didn't look to see if one type was better than the others when it came to autism risk. While vitamin brands may vary, most will contain similar nutrients, she noted.

The study included more than 300 mothers who already had children with an autism spectrum disorder. The younger siblings were born between 2006 and 2015, and completed testing for autism within six months of their third birthday. Fifty-eight percent of the [younger siblings](#) were male.

Ninety-six percent of mothers reported taking prenatal vitamins during their pregnancy, but only 36 percent started taking vitamins in the recommended time frame—six months before getting pregnant, the researchers said.

In women who took a prenatal vitamin during the first month of pregnancy, the autism rate in their subsequent children was 14 percent compared to 33 percent for children of mothers who didn't use prenatal vitamins at that time.

"Women who are planning to have more kids, or if it's possible they might get pregnant, should talk to their doctor about getting a prescription for a prenatal vitamin," Schmidt recommended.

The findings were published online Feb. 27 in *JAMA Psychiatry*.

More information: Rebecca Schmidt, Ph.D., assistant professor of public health sciences, the MIND Institute and the University of

California, Davis; Andrew Adesman, M.D., chief, developmental & behavioral pediatrics, Cohen Children's Medical Center, New Hyde Park, N.Y.; Kristin Sohl, M.D., vice chair, department of pediatrics, University of Missouri Health Care, Autism Speaks' Autism Treatment Network; Feb. 27, 2019, *JAMA Psychiatry*, online.

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