Supplement Reduces Risk of Diabetes in Pregnancy

A nutritional supplement called myo-inositol may help protect women at risk for gestational diabetes, according to a small pilot study.

Previous studies have shown that inositol supplements may help restore fertility in polycystic ovary syndrome, but this is the first evidence that it may reduce the number of cases of gestational diabetes, lead author Dr. Rosario D'Anna told Reuters Health by email.

Women who are overweight or obese or have a family history of diabetes are at risk for gestational diabetes, which affects up to 10 percent of pregnancies in the U.S., according to the Centers for Disease Control and Prevention.

Mothers with the condition have trouble dealing with carbohydrates leading to high blood sugar.

"Undiagnosed and untreated gestational diabetes can cause large for gestational age babies, which may lead to delivery complications," said D'Anna, of the Department of Obstetrics at University Hospital in Messina, Italy.

The researchers selected 220 pregnant women with a family history of type 2 diabetes, in which people suffer from high blood sugar because they are unable to store that sugar in cells properly.

Half the women were given two grams of myo-inositol supplements twice a day along with the recommended amount of folic acid, a supplement recommended for all pregnant women. The other women were given only folic acid, from the end of the first trimester throughout pregnancy.

A bottle of 60 650-milligram myo-inositol supplements, available in the U.S. without a prescription, costs about $10. The compound is also found in fruits, nuts, grains, and meats, but not at very high levels.

Of the women who took myo-inositol, six percent developed gestational diabetes, compared to 15 percent of the women who only took folic acid, according to the study, published in the journal Diabetes Care.

None of the babies in the myo-inositol group met criteria for being overweight, but seven babies in the non-supplement group did, weighing more than eight pounds, 13 ounces.

Despite these positive findings, researchers don't know how the supplement works or if it is safe, Dr. Donald Coustan of the Division of Maternal-Fetal Medicine at Women and Infants Hospital of Rhode Island in Providence told Reuters Health.

"The results are promising, but we would need a larger trial and a broader group of women before we could recommend this supplement," Dr. Wanda Nicholson, who studies gestational diabetes at the University of North Carolina at Chapel Hill, told Reuters Health.

Although their blood sugar levels usually return to normal after pregnancy, women need to continue a high quality diet and exercise, said Nicholson.

"Up to 50 percent of women in general who are diagnosed with gestational diabetes can develop type 2 diabetes in the next five to 10 years," she said.

"There's really nothing currently recommended to prevent gestational diabetes" other than maintaining a healthy weight before getting pregnant, said Coustan, who was not involved in the study but wrote an accompanying commentary that the journal will not release until March 21.

The number of women with the condition has been increasing over the past ten years, he said.

“There’s great concern that we’re going be inundated with patients with gestational diabetes,” Coustan said.