MedicalXpress

Supplement Could Reduce Risk of Gestational Diabetes in Pregnant Women

June 18 2009

Women who enter pregnancy with a higher body weight face serious risks: higher rates of gestational diabetes, high blood pressure and the risk of a larger baby who could go on to have obesity, diabetes and heart disease in the future.

But a nutritional supplement, already shown to benefit fetal brain and vasculature development, could reduce those risks in both mother and child.

That's why a nutrition researcher at the University of Cincinnati is launching a local, two-year clinical trial to study the effects of the supplement in pregnant women.

Principal investigator Debra Krummel, PhD, UC department of nutritional sciences, believes the nutrient, omega-3 fatty acid docosahexaenoic acid (DHA), can lower blood sugar levels and improve insulin sensitivity in pregnant women.

Krummel says DHA has proven benefits, but most women do not get an adequate amount of it in their diet.

“It’s already been shown to be safe and good for the brain, but we’re studying whether it might have another benefit, which is improving insulin resistance,” she says.

National health officials are recognizing the risks associated with obesity

during pregnancy. This year, the Institute of Medicine and the National Research Council revised their gestational weight gain guidelines for the first time since 1990, lowering the recommended levels of weight gain for women entering pregnancy with a higher body weight.

But Krummel says those guidelines don't help women right now.

"We have to find a way to help these women once they're already pregnant, and that's what this supplement is about," she says. "If this supplement can improve insulin sensitivity and markers of inflammation in pregnant women, it's a huge clinical benefit. It's already good for the baby but if it can have this other benefit, it's huge."

For this trial, researchers are looking for 90 pregnant women 18-40 years old who are less than 26 weeks pregnant and in good health overall.

Trial participants are expected to visit the General Clinical Research Center at Cincinnati Children's Hospital Medical Center three times during their pregnancy.

On their first visit, women will be randomly assigned to a control group or an omega-3 group. The control group will not receive omega-3. Then, and on subsequent visits, researchers will take a blood sample and discuss dietary habits with the participants. After birth, samples will be taken from placentas.

In addition to receiving prenatal vitamins and dietary analysis, participants will be compensated for their time.

Source: University of Cincinnati (news : web)