Pregnancy Weight Gain, Big Babies Linked

Gaining 40 Pounds or More Doubles Risk of Having a Big Baby, Which Increases Health Risks, Study Shows

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Oct. 31, 2008 -- Gaining 40 pounds or more during pregnancy nearly doubles the risk of having a baby who weighs 9 pounds or more, in turn increasing the health risks to mother and baby, according to a new study.

Excessive pregnancy weight gain and big babies have often been linked, says Teresa Hillier, MD, senior investigator at the Kaiser Permanente Center for Health Research, Portland, Ore., and the study's lead author. Researchers have also known that women who develop diabetes during pregnancy, called gestational diabetes, are more likely to deliver heavier babies, Hillier tells WebMD.

But the new study is believed the first to conclude that women who gain excessive weight during pregnancy are even more likely to have heavier babies than women treated for gestational diabetes who don't gain excess weight.

"More than one in five women gain too much weight during pregnancy and only 5% have gestational diabetes," Hillier tells WebMD. The study, she says, points to the need for all women to follow recommendations about not gaining excessive amounts of weight.

Pregnancy Weight Gain & Big Babies: Study Details
Hillier and her colleagues followed 41,540 women who gave birth to singleton babies in Washington, Oregon, and Hawaii from 1995 through 2003. They used patient medical records and birth certificates to note the mother's weight gain and the baby's birth weight.

All mothers-to-be were screened for gestational diabetes.

The researchers analyzed the numbers of women who gained more than 40 pounds -- the maximum recommended weight gain -- and whether their babies weighed more than about 9 pounds at birth, which is considered a heavy baby.

Heavier babies are at risk of becoming heavy adults, Hillier says, and make it more likely the mother will have to deliver by cesarean section, among other increased health risks.

Pregnancy Weight Gain & Big Babies: Study Results
Overall, 12.5% of the babies -- or 5,182 -- were born weighing 8.8 pounds or more.

Overall, more than 20% of those who gained more than 40 pounds gave birth to heavy babies, and less than 12% of those who gained less than 40 pounds had heavy babies.
Other results suggest that excess weight gain -- whether or not a woman has gestational diabetes -- boosts the risk of having a heavy baby.

- While 16.5% of women with normal glucose who gained more than 40 pounds had a heavy baby, only 9.3% of those who had normal glucose levels who gained less than 40 pounds had a heavy baby.
- While 29.3% of women with gestational diabetes who gained more than 40 pounds had big babies, just 13.5% of those with gestational diabetes who gained 40 pounds or less did.

"Gestational diabetes puts the baby in an overfed state," Hillier says. "When a mother gains too much weight, even if she has normal glucose levels, the baby is overfed in a similar way."

Big babies are also more likely to get stuck during vaginal deliveries, she says, and to be injured.

**Pregnancy Weight Gain & Big Babies: Second Opinion**

The study results confirm what physicians and researchers have suspected for a long time, says Richard Frieder, MD, an obstetrician-gynecologist at Santa Monica -- UCLA Medical Center and Orthopaedic Hospital in California, who reviewed the study for WebMD.

"It confirms the suspicion that weight gain makes a difference, whether you are diabetic or not," he says.

Among his pregnant patients, he says, misconceptions about the ideal weight gain during pregnancy are plentiful. "Many women think they need to gain a large amount to have a healthy baby," he says. In general, he advises patients to aim for a gain of 25 to 35 pounds if they are normal weight before getting pregnant.

"Most of the weight gain should come in the second half of pregnancy," he adds.

Ideally, he tells women, aim for a gain of just five to seven pounds in the first 20 weeks, then about 20 to 30 in the remaining weeks.

**Pregnancy Weight Gain: Advice?**

Recommendations issued by the federal Institute of Medicine in 1990, which are now being re-examined, advise weight gain amounts based on pre-pregnancy weights:

- For women with a low body mass index or BMI, below 19.8, a gain of 28 to 40 pounds
- For women with a normal BMI of 19.8 to 26.0, a gain of 25 to 35 pounds
- For women with a high BMI, above 26, a gain of 15 to 25 pounds.

A report on the results of the re-examination of the recommendations is expected by June 2009.