Researcher creates weight-gain guidelines for women pregnant with twins

July 21 2009

Healthy, normal-weight women pregnant with twins should gain between 37 and 54 pounds, according to research from a Michigan State University professor who helped shape the recently released national guidelines on gestational weight gain.

Barbara Luke, a professor in the College of Human Medicine's Department of Obstetrics, Gynecology and Reproductive Biology and Department of Epidemiology, helped create the guidelines for the Institute of Medicine. Her research also found overweight women should gain between 31 and 50 pounds, while obese women should gain 25 to 42 pounds.

The parameters are based on a woman's prepregnancy body mass index.

"This amount and pattern of weight gain has been shown to be associated with the best growth before birth and the healthiest mothers throughout pregnancy," Luke said. "By setting weight gain goals based on a woman's prepregnancy BMI, it will be possible to maintain a trajectory of fetal growth for twins that results in more optimal birth weight with lower neonatal morbidity.

"With twin pregnancies continuing to rise every year, these new guidelines will be very beneficial."

The guidelines are important, Luke said, because while only 3 percent of live births involve twins, they do make up a disproportionate number of

premature, low-birth-weight and growth-retarded births. Twins are seven times more likely to die before their first birthday.

To develop the guidelines, Luke and her team analyzed data from more than 2,300 pregnancies with twins from four sites across the nation. Maternal weight gain and fetal growth then were measured at three different points to develop models of optimal weight gain.

Luke's research group took into account study site, maternal age, race and ethnicity, smoking and fertility treatments, among other factors.

"Dr. Luke and her colleagues should be congratulated on this significant contribution to the health of mothers and their twin infants," said Richard Leach, chairperson of the Department of Obstetrics, Gynecology and Reproductive Biology in MSU's College of Human Medicine.

"The inclusion of Dr. Luke's career work into the prestigious Institute of Medicine's guidelines speaks to her exceptional research."

The Institute of Medicine developed the new guidelines, which last were revised 19 years ago, in response to several emerging factors: a higher proportion of women from racial/ethnic subgroups; the increase in prepregnancy BMI among all population groups; and women becoming pregnant at older ages and, as a result, being more likely to have chronic conditions before pregnancy.

"The 1990 report had general weight gain guidelines for twin pregnancies," Luke said. "These newest guidelines are the first which are BMI-specific—they are the 25th to 75th percentile of BMI-specific weight gain associated with twin birth weights of 5 pounds 8 ounces or greater at full-term."

The mean gain was 46 pounds, 42 pounds, and 35 pounds, respectively, for normal weight, overweight, and obese women.

For more information on the guidelines, visit the www.nap.edu/catalog.php?record_id=12584 .

Source: Michigan State University (news : web)

Citation: Researcher creates weight-gain guidelines for women pregnant with twins (2009, July 21) retrieved 25 April 2024 from https://medicalxpress.com/news/2009-07-rsearcher-weight-gain-guidelines-women-pregnant.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.