COMMITTEE OPINION

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Committee on Obstetric Practice

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Weight Gain During Pregnancy

ABSTRACT: The updated guidelines by the Institute of Medicine regarding gestational weight gain provide clinicians with a basis for practice. Health care providers who care for pregnant women should determine a woman’s body mass index at the initial prenatal visit and counsel her regarding the benefits of appropriate weight gain, nutrition and exercise, and, especially, the need to limit excessive weight gain to achieve best pregnancy outcomes. Individualized care and clinical judgment are necessary in the management of the overweight or obese woman who is gaining (or wishes to gain) less weight than recommended but has an appropriately growing fetus.

The amount of weight gained during pregnancy can affect the immediate and future health of a woman and her infant. The population demographics of women who become pregnant have changed dramatically over the past decade: more women are overweight or obese at conception. Evidence supports associations between excessive gestational weight gain and increased birth weight and postpartum weight retention but also between inadequate weight gain and decreased birth weight (1). Gestational weight gain recommendations aim to optimize outcomes for the woman and the infant. In 2009, the Institute of Medicine (IOM) published revised gestational weight gain guidelines that are based on prepregnancy body mass index (BMI) ranges for underweight, normal weight, overweight, and obese women recommended by the World Health Organization and are independent of age, parity, smoking history, race, and ethnic background (Table 1) (2). Other changes include the removal of the previous recommendations for special populations and the addition of weight gain guidelines for women with twin gestations. For twin pregnancy, the IOM recommends a gestational weight gain of 16.8–24.5 kg (37–54 lb) for women of normal weight, 14.1–22.7 kg (31–50 lb) for overweight women, and 11.3–19.1 kg

<table>
<thead>
<tr>
<th>Prepregnancy Weight Category</th>
<th>Body Mass Index*</th>
<th>Recommended Range of Total Weight (lb)</th>
<th>Recommended Rates of Weight Gain in the Second and Third Trimesters (lb/ wk)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underweight</td>
<td>Less than 18.5</td>
<td>28–40</td>
<td>1 (1–1.3)</td>
</tr>
<tr>
<td>Normal Weight</td>
<td>18.5–24.9</td>
<td>25–35</td>
<td>1 (0.8–1)</td>
</tr>
<tr>
<td>Overweight</td>
<td>25–29.9</td>
<td>15–25</td>
<td>0.6 (0.5–0.7)</td>
</tr>
<tr>
<td>Obese (includes all classes)</td>
<td>30 and greater</td>
<td>11–20</td>
<td>0.5 (0.4–0.6)</td>
</tr>
</tbody>
</table>

*Body mass index is calculated as weight in kilograms divided by height in meters squared or as weight in pounds multiplied by 703 divided by height in inches.

†Calculations assume a 1.1–4.4 lb weight gain in the first trimester.

Obese Women and may be associated with increased rates of preterm births, small-for-gestational-age infants, and perinatal mortality when compared with women with a similar BMI who gain an average amount of weight during pregnancy (11). From the results of these and more recent studies, it appears that the relationships between maternal obesity class, gestational weight gain, and maternal and newborn outcomes are complex.

Among severely obese women with weight loss or restricted weight gain during pregnancy, the possible risk of having small-for-gestational-age infants contrasts with possible benefits, such as a decrease in rates of cesarean delivery, a risk of having large-for-gestational-age infants, and postpartum weight retention (10, 12, 13). For an obese pregnant woman who is gaining less weight than recommended but has an appropriately growing fetus, no evidence exists that encouraging increased weight gain to conform with the updated IOM guidelines will improve maternal or fetal outcomes. For more information, see the American College of Obstetricians and Gynecologists’ Committee Opinion No. 549, “Obesity in Pregnancy” (14).

Conclusions and Recommendations

The IOM gestational weight gain guidelines provide clinicians with a basis for practice. Health care providers who care for pregnant women should determine a woman’s BMI at the initial prenatal visit (an online BMI calculator is available at http://www.nhlbi.nih.gov/guidelines/bmi). It is important to discuss appropriate weight gain, diet, and exercise at the initial visit and periodically throughout the pregnancy. Individualized care and clinical judgment are necessary in the management of the overweight or obese woman who is gaining (or wishes to gain) less weight than recommended but has an appropriately growing fetus. Balancing the risks of fetal growth (in the large-for-gestational-age fetus and the small-for-gestational-age fetus), obstetric complications, and maternal weight retention is essential but will remain challenging until research provides evidence to further refine the recommendations for gestational weight gain, especially among women with high degrees of obesity.

References

gestational weight gain affect the risk of adverse maternal and infant outcomes in overweight women? Matern Child Health J 2011;15:860–5. [PubMed] [Full Text]


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