101 Underweight (Women)

Definition/Cut-off Value

Underweight for women is defined as follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>BMI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pregnant Women</td>
<td>Prepregnancy Body Mass Index (BMI) &lt; 18.5</td>
</tr>
<tr>
<td>Non-Breastfeeding Women</td>
<td>Prepregnancy or current Body Mass Index (BMI) &lt; 18.5</td>
</tr>
<tr>
<td>Breastfeeding Women less than 6 Months Postpartum</td>
<td>Prepregnancy or current Body Mass Index (BMI) &lt; 18.5</td>
</tr>
<tr>
<td>Breastfeeding Women 6 Months Postpartum or More</td>
<td>Current Body Mass Index (BMI) &lt; 18.5</td>
</tr>
</tbody>
</table>

Note: A BMI table is attached to assist in determining weight classification. Also, until research supports the use of different BMI cut-offs to determine weight status categories for adolescent pregnancies, the same BMI cut-offs will be used for all women, regardless of age, when determining WIC eligibility (1). (See Justification for a more detailed explanation.)

Participant Category and Priority Level

<table>
<thead>
<tr>
<th>Category</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pregnant Women</td>
<td>1</td>
</tr>
<tr>
<td>Breastfeeding Women</td>
<td>1</td>
</tr>
<tr>
<td>Non-Breastfeeding Women</td>
<td>6</td>
</tr>
</tbody>
</table>

Justification

Underweight women who become pregnant are at a higher risk for delivery of low birth weight (LBW) infants, retarded fetal growth, and perinatal mortality. Prepregnancy underweight is also associated with a higher incidence of various pregnancy complications, such as antepartum hemorrhage, premature rupture of membranes, anemia, endometriosis, and cesarean delivery (2).

The goal in prenatal nutritional counseling provided by WIC is to achieve recommended weight gain by emphasizing food choices of high nutritional quality; and for the underweight woman, by encouraging increased consumption and/or the inclusion of some calorically dense foods.

The 2009 Institute of Medicine (IOM) report: *Weight Gain During Pregnancy: Reexamining the Guidelines* (1) updated the pregnancy weight categories to conform to the categories developed by the World Health Organization and adopted by the National Heart, Lung and Blood Institute in 1998 (3). The reexamination of the guidelines consisted of a review of the determinants of a wide range of short- and long-term consequences of variation in weight gain during pregnancy for both the mother and her infant. The IOM
prenatal weight gain recommendations based on prepregnancy weight status categories are associated with improved maternal and child health outcomes (1).

Included in the 2009 IOM guidelines is the recommendation that the BMI weight categories used for adult women be used for pregnant adolescents as well. More research is needed to determine whether special categories are needed for adolescents.

It is recognized that both the IOM cut-offs for defining weight categories will classify some adolescents differently than the CDC BMI-for-age charts. For the purpose of WIC eligibility determination, the IOM cut-offs will be used for all women regardless of age. However, due to the lack of research on relevant BMI cut-offs for pregnant and postpartum adolescents, professionals should use all of the tools available to them to assess these applicants’ anthropometric status and tailor nutrition counseling accordingly.

Weight during the early postpartum period, when most WIC certifications occur, is very unstable. During the first 4-6 weeks fluid shifts and tissue changes cause fluctuations in weight. After 6 weeks, weight loss varies among women. Prepregnancy weight, amount of weight gain during pregnancy, race, age, parity and lactation all influence the rate of postpartum weight loss. By 6 months postpartum, body weight is more stable and should be close to the prepregnancy weight. In most cases therefore, prepregnancy weight is a better indicator of weight status than postpartum weight in the first 6 months after delivery. The one exception is the woman with a BMI of <18.5 during the immediate 6 months after delivery. Underweight at this stage may indicate inadequate weight gain during pregnancy, depression, an eating disorder or disease, any or all of which need to be addressed (4).

While being on the lean side of normal weight is generally considered healthy, being underweight can be indicative of poor nutritional status, inadequate food consumption, and/or an underlying medical condition. Underweight women who are breastfeeding may be further impacting their own nutritional status. Should she become pregnant again, an underweight woman is at a higher risk for delivery of low birth weight (LBW) infant(s), retarded fetal growth, and perinatal mortality. The role of the WIC Program is to assist underweight women in the achievement of a healthy dietary intake and body mass index.

References


Additional References


BMI Table for Determining Weight Classification for Women (1)

<table>
<thead>
<tr>
<th>Height (Inches)</th>
<th>Underweight</th>
<th>Normal Weight</th>
<th>Overweight</th>
<th>Obese</th>
</tr>
</thead>
<tbody>
<tr>
<td>58&quot;</td>
<td>&lt;89 lbs</td>
<td>89-118 lbs</td>
<td>119-142 lbs</td>
<td>&gt;142 lbs</td>
</tr>
<tr>
<td>59&quot;</td>
<td>&lt;92 lbs</td>
<td>92-123 lbs</td>
<td>124-147 lbs</td>
<td>&gt;147 lbs</td>
</tr>
<tr>
<td>60&quot;</td>
<td>&lt;95 lbs</td>
<td>95-127 lbs</td>
<td>128-152 lbs</td>
<td>&gt;152 lbs</td>
</tr>
<tr>
<td>61&quot;</td>
<td>&lt;98 lbs</td>
<td>98-131 lbs</td>
<td>132-157 lbs</td>
<td>&gt;157 lbs</td>
</tr>
<tr>
<td>62&quot;</td>
<td>&lt;101 lbs</td>
<td>101-135 lbs</td>
<td>136-163 lbs</td>
<td>&gt;163 lbs</td>
</tr>
<tr>
<td>63&quot;</td>
<td>&lt;105 lbs</td>
<td>105-140 lbs</td>
<td>141-168 lbs</td>
<td>&gt;168 lbs</td>
</tr>
<tr>
<td>64&quot;</td>
<td>&lt;108 lbs</td>
<td>108-144 lbs</td>
<td>145-173 lbs</td>
<td>&gt;173 lbs</td>
</tr>
<tr>
<td>65&quot;</td>
<td>&lt;111 lbs</td>
<td>111-149 lbs</td>
<td>150-179 lbs</td>
<td>&gt;179 lbs</td>
</tr>
<tr>
<td>66&quot;</td>
<td>&lt;115 lbs</td>
<td>115-154 lbs</td>
<td>155-185 lbs</td>
<td>&gt;185 lbs</td>
</tr>
<tr>
<td>67&quot;</td>
<td>&lt;118 lbs</td>
<td>118-158 lbs</td>
<td>159-190 lbs</td>
<td>&gt;190 lbs</td>
</tr>
<tr>
<td>68&quot;</td>
<td>&lt;122 lbs</td>
<td>122-163 lbs</td>
<td>164-196 lbs</td>
<td>&gt;196 lbs</td>
</tr>
<tr>
<td>69&quot;</td>
<td>&lt;125 lbs</td>
<td>125-168 lbs</td>
<td>169-202 lbs</td>
<td>&gt;202 lbs</td>
</tr>
<tr>
<td>70&quot;</td>
<td>&lt;129 lbs</td>
<td>129-173 lbs</td>
<td>174-208 lbs</td>
<td>&gt;208 lbs</td>
</tr>
<tr>
<td>71&quot;</td>
<td>&lt;133 lbs</td>
<td>133-178 lbs</td>
<td>179-214 lbs</td>
<td>&gt;214 lbs</td>
</tr>
<tr>
<td>72&quot;</td>
<td>&lt;137 lbs</td>
<td>137-183 lbs</td>
<td>184-220 lbs</td>
<td>&gt;220 lbs</td>
</tr>
</tbody>
</table>

Implications for Minnesota WIC Services

Clarification:

- Pregnant women with this risk code are considered high risk in the first trimester.
- In the 2nd and 3rd trimester, a pregnant woman is high-risk only if she has not shown adequate weight gain defined by prenatal weight gain grids.

The objectives and intervention strategies are:

- Help participant choose and consume foods of high nutritional quality.
- Help participant consume adequate calories to achieve the recommended weight gain of 28 to 40 pounds for women who are underweight at conception.
- Prevent any pregnancy/birth complications due to underweight status.

Assessment Specific to Risk Code 101:

The assessment should attempt to identify possible causes and/or contributing factors to the participant’s weight status as well as assessing the quality of her diet. This will require asking a few additional questions along with the questions shown in this link: Brief questions and probes for pregnant women. The CPA should use open-ended questions and tailor the questions to the individual participant. The following are factors to consider as you ask additional questions specific to this risk code.

- **Assessment of weight history:**
  - Is woman’s self-reported pre-pregnancy weight correct? Ask open-ended questions to clarify if possible.
  - Has she always been underweight? “Tell me about your weight pattern in the last few years?”
  - How much did she gain with previous pregnancies, if applicable?
  - What did her health care provider recommended for a weight gain goal?
  - How does she feel about gaining weight with this pregnancy?
  - Do her comments indicate any history of an eating disorder?

- **Assessment of diet:**
  - What does she already know about healthy eating during pregnancy?
  - Is she experiencing nausea and vomiting? Mild or severe?
  - How is her appetite? What times of day is she hungriest?
  - Does she follow a special diet?
  - Any pica?
  - Does she eat regular meals? Does she plan for healthy snacks?
    - Does her daily schedule of work/school interfere with eating regularly?
  - Does she have food insecurity?
    - Who prepares food where she lives?
    - Does she receive SNAP benefits? Does she go to area food shelves?
• Ask her “what do you do if you run out of money for food?”
  o Does she have access to cooking facilities and adequate refrigeration?
  o Ask about her typical intake from each food group.
    ▪ Ask about typical portion sizes.
    ▪ Ask about typical beverage intake each day.

• Assessment of any other issues that can influence weight:
  o Ask about any medical issues? Is she taking any medication that affects her appetite?
  o Ask about any dental issues?
  o Is she experiencing any gastrointestinal issues like heartburn, diarrhea or constipation?
  o Is stress or depression affecting her appetite? If so, does she have a doctor or therapist to help her with this?
  o What is her activity level? Any recent changes in activity level?
  o Is smoking, alcohol or drug use affecting appetite or food intake or her ability to purchase food?

Nutrition Counseling for Risk Code 101:

Nutrition education cards may be helpful to use with your verbal nutrition education Pregnancy Cards.

• Explain the recommended pattern of weight gain and that a consistent rate of weight gain is desirable.
• Explain that the recommended amount of weight gain is 28 to 40 pounds for women who were underweight at conception.
• Determine time line for follow-up weight check, this may be in 1, 2, or 3 months depending on the situation. Explain that you will want to recheck her weight at the next visit.
• Reinforce positive changes the participant has already made.
• Use ‘Explore-Offer-Explore method to assess if ready to make a dietary change. Explore/Offer/Explore Technique.
• Help her to identify foods to eat to improve her diet.
• With her permission, help participant set 1 to 2 specific, measureable goals. PCS Skills Examples:
  o Eat 3 servings of dairy foods daily.
  o Eat breakfast daily – she will try to bring fruit and yogurt with her to work and eat it mid-morning.
• Provide referrals as needed:
  o Refer to other food assistance programs
  o Refer to Public Health Nursing Programs if willing
  o Other referrals as needed
Guidance about Follow-up for Risk Code 101:

- Weigh participant at follow-up visit if possible and enter into information system. Document your assessment of her weight gain.
- Follow-up on any action steps related to risk code 101 that were determined at the previous visit.
- Follow up on any referrals made at the previous visit.
- Check if she has redeemed food benefits as expected. If not, this could be an opportunity for further nutrition education.
- If weight gain has been adequate by the 2nd or 3rd trimester and there are no other high risk factors, CPA can consider discontinuing high-risk care. To do this, remove check mark on risk code screen and document the reason that further follow-up for risk code 101 is not necessary.
- If weight gain is inadequate, or if she has an abnormally rapid weight gain, refine the goal or develop a new goal.