401 Failure to Meet Dietary Guidelines for Americans

Definition/Cut-off Value

Women and children two years of age and older who meet the income, categorical, and residency eligibility requirements may be presumed to be at nutrition risk for *failure to meet Dietary Guidelines for Americans [Dietary Guidelines]* (1). Based on an individual's estimated energy needs, the *failure to meet Dietary Guidelines* risk criterion is defined as consuming fewer than the recommended number of servings from one or more of the basic food groups (grains, fruits, vegetables, milk products, and meat or beans)

Note: The *Failure to meet Dietary Guidelines for Americans* risk criterion can only be used when a complete nutrition assessment has been completed **and** no other risk criteria have been identified. This includes assessing for risk #425, *Inappropriate Nutrition Practices for Children* or risk #427, *Inappropriate Nutrition Practices for Women*.

Participant Category and Priority Level

Category	Priority
Pregnant Women	4
Breastfeeding Women	4
Non-Breastfeeding Women	6
Children ≥ 2 years of age	5

Justification

The 1996 Institute of Medicine (IOM) report, *WIC Nutrition Risk Criteria: A Scientific Assessment,* raised questions on the quality of traditional dietary assessment methods (e.g., 24-hour recall and food frequency questionnaires) and recommended further research on the development and validation of diet assessment methodologies (2). In response to the 1996 IOM report, the Food and Nutrition Service (FNS) commissioned the IOM to review the use of various dietary assessment tools and to make recommendations for assessing inadequate diet or inappropriate dietary patterns, especially in the category of f*ailure to meet Dietary Guidelines* (see Clarification) (3).

The IOM Committee on Dietary Risk Assessment in the WIC Program approached this task by using the Food Guide Pyramid* recommended number of servings, based on energy needs, as cut-off points for each of the five basic food groups to determine if individuals were meeting the *Dietary Guidelines*. As a result of the review of the cut-off points for food groups and dietary assessment methods, the IOM published the 2002 report, *Dietary Risk Assessment in the WIC Program*. The IOM Committee's findings related to dietary risk, the summary evidence, and the Committee's concluding recommendation are provided below. (4)

IOM Committee Findings Related to Dietary Risk (4) (For more information, refer to the specific pages listed.)

- A dietary risk criterion that uses the WIC applicant's usual intake of the five basic Pyramid* food groups as the indicator and the recommended number of servings based on energy needs as the cut-off points is consistent with *failure to meet Dietary Guidelines.* (page 130)
- Nearly all U.S. women and children usually consume fewer than the recommended number of servings specified by the Food Guide Pyramid* and, therefore, would be at dietary risk based on the criterion *failure to meet Dietary Guidelines*. (page 130)
- Even research-quality dietary assessment methods are not sufficiently accurate or precise to distinguish an **individual's** eligibility status using criteria based on the Food Guide Pyramid* or on nutrient intake. (page 131)

Summary Evidence Supporting a Presumed Dietary Risk Criterion (4) (For more information, refer to the specific page listed.)

- Less than 1 percent of all women meet recommendations for all five Pyramid* groups. (page 127)
- Less than 1 percent of children ages 2 to 5 years meet recommendations for all five Pyramid* groups. (page 127)
- The percentage of women consuming fruit during 3 days of intake increases with increasing income level. (page 127)
- Members of low-income households are less likely to meet recommendations than are more affluent households. (page 127)
- Food-insecure mothers are less likely to meet recommendations for fruit and vegetable intake than are food-secure mothers. (page 127)
- The percentage of children meeting recommendations for fat and saturated fat as a percentage of food energy increases with increasing income level. (page 127)
- Low-income individuals and African Americans have lower mean Healthy Eating Index scores than do other income and racial/ethnic groups. (page 127)

**The Food Guide Pyramid was the Dietary Guidelines icon at the time the 2002 IOM Committee on Dietary Risk Assessment in the WIC Program conducted the review. The Dietary Guidelines icon has been changed to MyPlate. Although the icon has changed, the Findings and the Supporting Research are still applicable to this criterion. Please see Clarification for more information.*

Summary Evidence Suggesting that Dietary Assessment Methods are Not Sufficient to Determine a WIC Applicant's Dietary Risk (4) (For more information, refer to the specific page listed.)

- 24-hour diet recalls and food records are not good measures of an individual's usual intake unless a number of independent days are observed. (page 61)
- On average, 24-hour diet recalls and food records tend to underestimate usual intake–energy intake in particular. (page 61)
- Food Frequency Questionnaires and diet histories tend to overestimate mean energy intakes. (page 61)

IOM Committee Concluding Recommendation (4) (For more information, refer to the specific page listed.)

"In summary, evidence exists to conclude that nearly all low-income women in the childbearing years and children ages 2 to 5 years are at dietary risk, are vulnerable to nutrition insults, and may benefit from WIC's services. Further, due to the complex nature of dietary patterns, it is unlikely that a tool will be developed to fulfill its intended purpose with WIC, i.e., to classify individuals accurately with respect to their true dietary risks. Thus, any tools adopted would result in misclassification of the eligibility status of some, potentially many, individuals. By presuming that all who meet the Program's categorical and income eligibility requirements are at dietary risk, WIC retains its potential for preventing and correcting nutrition-related problems while avoiding serious misclassification errors that could lead to denial of services to eligible individuals." (page 135)

Implications for WIC Nutrition Services

As indicated in the 2002 IOM report, most Americans (including most WIC participants) fail to adhere to the *Dietary Guidelines*. Through participant-centered counseling, WIC staff can:

- Guide the participant in choosing healthy foods and age-appropriate physical activities as recommended in the *Dietary Guidelines*.
- Reinforce positive lifestyle behaviors that lead to positive health outcomes.
- Discuss nutrition-related topics of interest to the participant such as food shopping, meal preparation, feeding relationships, and family meals.
- Refer participants, as appropriate, to the Supplemental Nutrition Assistance Program (SNAP), community food banks and other available nutrition assistance programs.

References

1. United States Department of Agriculture and the United States Department of Health and Human Services. Dietary Guidelines for Americans, 7th Edition, 2010. Available at: www.usda.gov/cnpp.
2. Institute of Medicine (IOM); Committee on Scientific Evaluation of WIC Nutrition Risk Criteria. WIC nutrition risk criteria: A scientific assessment. Washington, DC: National Academy Press; 1996.
3. United States Department of Agriculture and the United States Department of Health and Human Services. Dietary Guidelines for Americans, 5th Edition, 2000. Available at: www.usda.gov/cnpp.
4. Institute of Medicine (IOM); Committee on Dietary Risk Assessment in the WIC Program. Dietary risk assessment in the WIC program. Washington, DC: National Academy Press; 2002. Available at: http://www.iom.edu/Reports/2002/Dietary-Risk-Assessment-in-the-WIC-Program.aspx.

Clarification

The recommendation and findings of the IOM Committee were developed using the *2000 Dietary Guidelines* as the standard for a healthy diet. Subsequent to the 2002 IOM report, the *Dietary Guidelines* have been updated with the release of the *2005 and 2010 Dietary Guidelines*. Although the subsequent editions of the *Dietary Guidelines* are different from the 2000 edition, there is no evidence to suggest that the 2002 IOM recommendation and findings are invalid or inaccurate. The fact remains that diet assessment methodologies may not reflect usual intakes and therefore are insufficient to determine an individual's eligibility status. In addition, future research will be necessary to determine if there is a change in the IOM finding that nearly all Americans fail to consume the number of servings from the basic food groups as recommended in the *Dietary Guidelines*.