

401 Failure to Meet Dietary Guidelines for Americans

Definition/Cut-off Value

Women and children two years of age and older who meet the eligibility requirements of income, categorical, and residency status may be presumed to be at nutrition risk based on *failure to meet Dietary Guidelines for Americans [Dietary Guidelines]* (1). For this criterion, *failure to meet Dietary Guidelines* 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) based on an individual's estimated energy needs.

This risk may be assigned only to individuals (2 years and older) for whom a complete nutrition assessment (to include an assessment for risk #425, Inappropriate Nutrition Practices for Children, or #427, Inappropriate Nutrition Practices for Women) has been performed and for whom no other risk(s) are identified.

Participant Category and Priority Level

Category	Priority
Pregnant Women	IV
Breastfeeding Women	IV
Non-Breastfeeding Women	VI
Children \geq 2 years of age	V

Justification

The 1996 Institute of Medicine (IOM) report, *WIC Nutrition Risk Criteria: A Scientific Assessment* (2) raised questions about the quality of traditional dietary assessment methods (e.g., 24-hour recall and food frequency questionnaires) and recommended further research in the development and validation of diet assessment methodologies. 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 *failure to meet Dietary Guidelines* (3). The review resulted in the publication of the 2002 IOM report, *Dietary Risk Assessment in the WIC Program* (4). The report contains a recommendation (paraphrased in the definition above) and five key findings. The findings of the IOM committee related to dietary risk and a summary of the evidence that supports its recommendation are provided below.

IOM Committee Findings Related to Dietary Risk and Supporting Research

Note: The findings related to dietary risk and a summary of the supporting research listed below can be found in the 2002 IOM report: *Dietary Risk Assessment in the WIC Program*, on the pages indicated.

Findings:

- 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)

Supporting Research:

- 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)
- 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 Remark

"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: to classify individuals accurately with respect to their true dietary risk. Thus, any tools adopted would result in misclassification of the eligibility status of some, potentially many, individuals. By presuming that all who meet the 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)

References

1. United States Department of Agriculture and the United States Department of Health and Human Services. Dietary Guidelines for Americans, 6th Edition, 2005. Available from: 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 from: 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.

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 Dietary Guidelines. Although the 2005 edition of the Dietary Guidelines is 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 are insufficiently accurate 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.