114
At Risk of Becoming Overweight

Definition/ cut-off value

Have one or more risk factors for being at-risk of becoming overweight. The risk factors are limited to:

- being ≥24 months of age and ≥85th and <95th percentile Body Mass Index (BMI)* or percentile weight-for-stature* (i.e., standing height**)**
- being <12 months of age and born to a woman who was obese (BMI ≥30) at the time of conception or at any point in the first trimester of the pregnancy (BMI must be based on self reported preconceptional weight and height or on a measured weight and height documented by a health care provider.)
- having a biological mother who is obese (BMI ≥30) at the time of certification (BMI must be based on self reported weight and height or on weight and height measurements taken by staff at the time of certification. If the mother is pregnant or has had a baby within the past 6 months, use her preconceptional weight to assess for obesity since her current weight will be influenced by pregnancy related weight gain.)
- having a biological father who is obese (BMI ≥30) at the time of certification (BMI must be based on self reported weight and height or on weight and height measurements taken by staff at the time of certification.)

* Based on National Center for Health Statistics / Centers for Disease Control and Prevention (2000) age/sex specific growth charts.
Note: The first bullet in this definition cannot be used for children 24-36 months with a recumbent length measurement.

Participant category and priority level

Category	**Priority**
Infants	I
Children	III

Justification

The rise in the prevalence of overweight in children and adolescents in the United States is one of the most important public health issues we face today. National surveys from the mid-1960s to the early 1990s document a significant increase in overweight among children from preschool age through adolescence. These trends parallel a concurrent increase in obesity among adults, suggesting that fundamental shifts are occurring in dietary and/or physical activity behaviors that are having an adverse effect on overall energy balance.

Specific reasons for the rapid rise in obesity in the United States are not well understood. Important contributors include a large and growing abundance of

calorically dense foods and an increased sedentary lifestyle for all ages. Evidence from recent scientific studies has shown that obesity tends to run in families, suggesting a genetic predisposition. However, a genetic predisposition does not inevitably result in the development of obesity. Environmental and other factors mediate the relationship.

In any individual, and in the same individual at different times of life, the relative influence of genetics, environment, and development may vary. In other words, individuals with an otherwise genetic predisposition to obesity still may be lean in an environment of food scarcity or high demand for physical activity; while individuals not genetically predisposed may become obese in an environment that encourages over-consumption (especially of calorically dense foods) and includes few inducements to physical activity.

Children 2 years of age or older with a BMI at the 85^{th}-94^{th} percentile are at risk of overweight while those with a BMI at or above the 95^{th} percentile are overweight. Adults with a BMI greater than or equal to 30 are obese while those with a BMI at or greater than 40 are classified as extremely obese.

Increasingly, attention is being focused on the need for comprehensive strategies that focus on preventing overweight/obesity and a sedentary lifestyle for all ages. Scientific evidence suggests that the presence of obesity in a parent greatly increases the risk of overweight in preschoolers, even when no other overt signs of increasing body mass are present.

The WIC Program has the opportunity to become an important player in public health efforts to curb the increasing spread of obesity by actively identifying and enrolling infants and children who may be “at-risk” of becoming overweight in childhood or adolescence, and assisting them and their families in making dietary and lifestyle changes needed to reduce their risks. Appropriate nutrition education emphasizing the importance of prevention (addressing both feeding/eating behaviors and physical activity), food prescriptions, and appropriate referrals provided through WIC would benefit not only the at-risk infants and children, but also their families.

References

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4. Mokdad AH, Serdula MK, Dietz WH, Bowaman BA, Marks JS, Kaplan JP. The spread of the obesity epidemic in the United States 1991-1998. JAMA 1999;1519-1522.

5. National Heart, Lung, and Blood Institute, National Institute of Diabetes and Digestive and Kidney Diseases. Clinical guidelines on the identification, evaluation, and treatment of overweight and obesity in adults the evidence report. Bethesda, Md.: National Intstitutes of Health, National Heart, Lung and Blood Institute, 1998 No.: 98-4083

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7. Whitaker R. At risk for becoming overweight. Report. Commissioned by the Risk Identification and Selection Collaborative. 1999.

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Clarification

For this criterion, the definition of parental obesity (BMI $\geq$30) applies to all parents, regardless of age (teen and adult). Although there are recommended obesity BMI cut-points specific for sex and age for 2 - 18 year olds (see reference #3), there is only a slight difference between these cut-points and the ones used to define obesity for an individual over 18 years of age. Based on the slight differences in cut-points and lack of research suggesting otherwise, RISC elected to use a single definition of parental obesity for ease in applying this criterion.

114-A

Abbreviated Body Mass Index (BMI) Table*

Height	Inches	Weight (lbs) *equal to* BMI 30
4' 10"	58	143
4' 11"	59	148
5' 0"	60	153
5' 1"	61	158
5' 2"	62	164
5' 3"	63	169
5' 4"	64	174
5' 5"	65	180
5' 6"	66	186
5' 7"	67	191
5' 8"	68	197
5' 9"	69	203
5' 10"	70	209
5' 11"	71	215
5' 12"	72	221
6' 1"	73	227
6' 2"	74	233
6' 3"	75	240

Source: Evidence Report of Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults, 1998. National Institutes of Health/National Heart, Lung, and Blood Institute (NHLBI). Note: A complete BMI table is available on the NHLBI website: www.nhlbi.gov/guidelines/obesity/ob_home.htm

*This table may be used to determine parental (male or female) obesity (BMI $\geq$30).