

Assessing Weight in Young Children

Careful and appropriate assessment of a child's weight status is critical. Parents and other adults also require education and guidance regarding their child's weight status, so that they do not evaluate their child's weight incorrectly. Erroneous assessment of a child as overweight or underweight as well as the labeling that may follow is detrimental to a child's health, well-being and self-esteem. *Less than 50 percent of Franklin County children described as overweight by adult caregivers were in fact overweight. (Franklin County Health Risk Assessment, 2000).*

- Weight-for-length and weight-for-height have traditionally been used to help with the assessment of weight and growth patterns. The Centers for Disease Control and Prevention (CDC) and other groups continue to recommend the use of these measures for infants, from birth to 2 years of age. For children and adolescents ages 2-20, however, experts are now recommending the use of the Body Mass Index (BMI) to assess weight status.
- The BMI is a ratio of height for weight and *correlates* highly with body fat. The relation between fatness and BMI differs with age and gender. For example, women are more likely to have a higher percent of body fat than men for the same BMI. BMI is calculated as weight in kilograms divided by height in meters squared (kg/m²).
- BMI is used differently for children than for adults. In children and teens, BMI is used to assess underweight, overweight, and risk for overweight. Children's body fatness changes as they grow, and girls and boys differ in their body fatness as they mature. This is why BMI for children, also referred to as BMI-for-age, is gender and age specific (Hammer et al, 1991; Petrobelli et al, 1998). BMI-for-age is plotted on gender specific growth charts. These charts are used for children and teenagers 2 – 20 years of age. For the 2000 CDC Growth Charts and additional information check CDC's National Center for Health Statistics website at: <http://www.cdc.gov/growthcharts/>
- BMI-for-Age is recommended to help in the assessment of weight through the spectrum of underweight through overweight. It takes into account children's and teenagers' rate of growth and development, and is a useful tool because it:
 - compares well to laboratory measures of body fat;
 - can be used to track body size throughout life.
- Each of the CDC BMI-for-age gender specific charts indicates specific percentiles. Use the following percentile cutoff points to identify underweight and overweight in children.

Underweight	BMI-for-age < 5th percentile
At risk of overweight	BMI-for-age 85th percentile to < 95th percentile
Overweight	BMI-for-age ≥ 95th percentile

BMI decreases during the preschool years, and then increases into adulthood. Percentile curves on growth charts may be used to show this pattern of growth.

Assessing Weight Status

Measure weight and length (lying down) or height (standing) carefully, using tools that are calibrated.

- Measure recumbent length from the crown of the head to the bottom of the feet while the child is lying down.
- Measure height / stature without shoes.
- Measure weight with minimal clothing and dry underwear.

For children under age two years:

- Plot weight-for-length, weight-for-age, and length-for-age on CDC Growth Charts.

For children 2 years and older (and able to stand on their own)

- Measure height and weight, calculate BMI and plot it on the CDC BMI-for-age chart.

For children between the ages of 2 to 3 years:

- You may choose to continue to measure recumbent length and plot it on the weight-for length charts or measure stature and plot it on the weight-for-stature chart.

Exceptions:

- *BMI-for-age* is not to be calculated using length measurements.
- Height / stature measurements are not to be used on length-for-age or weight-for-length charts.

Discussing Weight Status with Children and Their Parents

Weight is a very sensitive issue for even very young children and their parents. Research shows that children as young as age five, have already developed a body image.

- Discuss issues related to weight with compassion and sensitivity.
- When possible, talk about health rather than weight; however, if a child wishes to address weight, respect her needs and discuss it carefully, gently and in a manner that is age appropriate.
- Help parents with regard to how to address weight issues with their children.
- Be aware that overweight infants may not be at increased risk of being overweight in adulthood, and they do not have the medical risks associated with overweight in childhood (Whitaker et al., 1997).

References

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