



**3 NUTRITION SERVICES**

*Effective: 12/1/95*

**3.12 Nutrition Risk Determination: Anthropometric Procedures**

*Revised: 10/1/09*

**POLICY:** Weight and length or stature (height) measurements, within the allowable timeframes, are required for certifications of all infants, children, and women. Weighing and measuring equipment must meet the specifications in policy 3.50. Standardized measurement procedures must be used. See *Length and Stature Measuring Procedures* and *Weighing Procedures* in ROSIE Help (ROSIE and Central Office Resources, Reference and Guidance, Nutrition and Health, Assessment Procedures – Anthro and Hgb). See the *WIC Project Nutrition Policy Options* (template in ROSIE Help, ROSIE and Central Office Resources, etc.) for recommendations and allowable alternatives. The measurements must be recorded in ROSIE. ROSIE automatically plots and assigns the appropriate risk criteria.

**PROCEDURE:**

**A. WEIGHING AND MEASURING AT CERTIFICATION APPOINTMENTS**

1. Weigh and measure all WIC applicants, unless data no more than 60 days old is available from another health care provider. However, data for pregnant women must have been obtained during pregnancy and data postpartum women must have been obtained after delivery. If the values seem questionable, use professional judgment regarding whether or not to weigh and measure again.
2. Infants and children <24 months of age must be measured in the recumbent position (length) and weighed on a pediatric scale. Children  $\geq 24$  – 36 months of age who cannot stand should also be measured in a recumbent position. Children  $\geq 24$  months of age (who can stand) and women must be measured in the standing position (height or stature) and weighed on an adult scale.
3. The WIC Project must have written policies for procedures for which there are choices, e.g., clothing allowed for measuring when the facility is not conducive to following standardized procedures (e.g., too cold, lack of privacy); repeating measurements (required for new staff; optional thereafter); etc. See the *WIC Project Nutrition Policy Options* for recommended procedures and allowable alternatives.
4. Follow the standardized weighing and measuring procedures posted in ROSIE Help.

**B. PLOTTING**



1. Infants and Children.

- a) Weight and length/height measurements are automatically plotted on the appropriate Centers for Disease Control and Prevention, National Center for Health Statistics (CDC/NCHS) growth chart in ROSIE. These charts are based on sex and recumbent length or height measurement. Charts using recumbent length are: Birth - 24+ Months Length for Age and Weight for Length growth charts. Charts using height/stature measurements Child Stature for Age.
- b) ROSIE will automatically plot, adjust for gestational age (up to 37 months of age), calculate Body Mass Index (BMI), determine percentiles, and assign the appropriate risk criteria.

2. Pregnant Women

- a) Prenatal weight gains are automatically plotted on the appropriate prenatal weight gain grid (based on under-, normal, and over- pre-gravid weight) in ROSIE.
- b) ROSIE will automatically determine the pregravid BMI, current weeks gestation, weight at the current weeks gestation, and prenatal weight gain to date; plot the prenatal weight gain on the appropriate chart; and assign the appropriate risk criteria.

3. Postpartum Women

- a) When the last pregnancy weight is entered, ROSIE will determine the total pregnant weight gain and current BMI, and automatically assign appropriate risk criteria.

**C. CHILDREN WITH SPECIAL HEALTH CARE NEEDS**

A number of growth charts are available for further assessment of infants and children with special health care needs. **While beyond the role of WIC, information is listed here for reference purposes only.** If these are used, document this in the *WIC Project Nutrition Policy Options*.

- 1. Available growth charts for children with special health care needs include the following. Contact the State WIC Office for a copy, if desired:
  - a) IHDP Premature Growth Charts



- b) Down Syndrome Growth Charts for Girls and Boys
  - c) Achondroplasia Growth Charts for Males and Females
  - d) Prader-Willi Syndrome Growth Charts for Males and Females
  - e) Rubinstein-Taybi Syndrome Charts for Males and Females
  - f) Turner Syndrome Charts for Girls
  - g) Williams Syndrome Charts for Males and Females
  - h) Acromion-Radiale Length and Knee-Height Growth Charts for Girls and Boys
2. The use of special charts for children who have conditions with no genetic or chromosomal basis for an altered growth pattern (e.g., cerebral palsy) is not recommended.
3. Alternate methods to assess linear growth when neither stature nor recumbent length can be accurately measured (e.g., scoliosis, leg contractures) include: crown-rump length and sitting height, upper arm length, and lower leg length. The measurements can be plotted on the NCHS charts for stature-for-age. Even if measurements fall below the 5<sup>th</sup> percentile, they establish a growth pattern over time. For information, go to the CDC growth charts web site.

#### **D. ETHNIC GROWTH CHARTS**

Although growth charts for various ethnic groups exist, these must not be used. The Centers for Disease Control and Prevention (CDC) discourages their use because: 1) It is not appropriate to compare children born in the U.S. to those born in their native homeland because children born in the U.S. tend to be larger; and 2) As children live in the U.S. longer, their growth tends to accelerate towards the NCHS percentiles, again making use of the other charts inappropriate. It is more important to monitor growth patterns, rather than individual measurements, since these patterns should still parallel the percentiles on the NCHS growth charts.