October 2026
Replaces version: January 2026

Anthropometric Measurements

Policy

USDA Federal Regulations:

Requirements

246.7(e)(1) Determination of nutritional risk. (i) Required nutritional risk data. (A) At a minimum, height or length and weight measurements shall be performed and/or documented in the applicant's file at the time of certification. (B) Height or length and weight measurements and, with the exceptions specified in paragraph (e)(1)(v) of this section, hematological tests, shall be obtained for all participants, including those who are determined at nutritional risk based solely on the established nutritional risk status of another person, as provided in paragraphs (e)(1)(iv) and (e)(1)(v) of this section.

Timing requirements

246.7(e)(1)(ii) Timing of nutritional risk data. (A) Weight and height or length. Weight and height or length shall be measured not more than 60 days prior to certification for program participation.

Documentation requirements

246.7(i) Certification forms. All certification data for each person certified shall be recorded on a form (or forms) which are provided by the State agency. The information on the forms shall include-

(7) Height or length, weight, and hematological test results

ARPA Waiver:

Deferral of measurements during teleWIC

The approval to waive the physical presence requirement includes the deferral of anthropometric and bloodwork measurements (as required in 7 CFR 246.7(e)(1)) no later than 60 days. However, a nutrition risk assessment, which may be based on information available through online communication and/or referral data, must be completed at certification by the Competent Professional Authority (CPA). To the extent possible, State and/or local agencies must make concerted efforts to obtain referral data for anthropometric and blood iron level measurements in advance of or at the time of the appointment.

Authority

7 CFR Part 246.7(e)(1)(i)(A)*excerpt*
7 CFR Part 246.7(e)(1)(i)(B)
7 CFR Part 246.7(e)(1)(ii)
7 CFR Part 246.7(i)(7)
WIC ARPA Waivers to Support Nationwide Remote Certification

Procedures

Measurement requirements

Measurements must reflect the participant's current categorical status (i.e. a measurement taken during the end of pregnancy cannot be used to certify a woman as postpartum) and measurements must meet specific timeframes to be used for certifications.

Verbal birth measurements from a parent/guardian may be recorded. If the birth measurements are unknown, document "Unknown" on the Anthropometrics panel in the data system.

The height-measuring device on a balance beam scale will not be used. The head piece is rarely attached at a 90-degree angle.

Recumbent length will be used for

- Infants
- Children less than 2 years old and
- Children 2 years or older who are less than 31 ½ inches tall
    - If the child is 2 years old or older and is less than 31 ½ inches tall, mark the check box for recumbent measurement in the data system and record the recumbent length
        - The cut-off for the 2000 NCHS/CDC growth chart for ages >24 months is based on standing height measurements. Therefore, recumbent length measurements may not be used to determine risks. However, these charts may be used as an assessment tool for evaluating growth in children aged 24-36 months who are not able to be measured for the standing height required
        - The data system will plot the measurement in red identifying it as an inaccurate measurement

Standing height will be used for

- Women
    - Young women may continue to grow and increase in height until their 21st birthday. Therefore, measure the height of all young women at each visit until they reach this age. Then the WIC data system will automatically carry the height measurement forward to the next anthropometric record
- Children 2 years or older who are greater than 31 ½ inches tall

Steps to follow to measure recumbent length:

1. Remove the child's shoes, hat, coat and any heavy or bulky clothing, hair ornaments and braids on top of the head
2. Lay the child on a length board with the child's head against the headboard

3. Have the child's parent/guardian use both hands to hold the child's head against the headboard with the child's eyes focused straight up
4. Extend the child's legs so that both soles are positioned flat against the board
5. Hold both feet with one hand and straighten both knees with the other
6. Recheck positioning
7. Slide the footboard firmly towards the feet. Both soles must rest flat against the footboard
8. Read and record the measurements to the nearest 1/8-inch

Steps to follow to measure standing height:

1. Ask participants to remove shoes, hats, coats, and other bulky clothing, hair ornaments or braids on top of head
2. Ask participants to stand erect with feet parallel and heels together. The participant's heels, buttocks, and shoulders should touch the wall or measuring surface, and eyes should be focused straight ahead
3. Slide the broca plane down to rest on the head, compressing the hair
4. Read and record the measurement to the nearest 1/8-inch

Steps to follow to weigh infants 12 months and younger:

1. Use an infant scale or an infant cradle made for use with an adult scale
2. Place cradle on scale if needed and balance scale to zero
3. Have the parent/guardian remove the infant's excess clothing and assure the infant has a dry diaper.
4. Place the infant in cradle.
5. Read and record weight to the nearest ounce

Steps to follow to weighing children and women:

1. Balance the scale at zero
2. Ask the participant to remove shoes and excess clothing and check pockets for heavy objects such as keys or a cellphone. The participant's hands must be empty
3. Ask the participant to step on the center of the scale platform with arms hanging at sides
4. Read and record weight to the nearest ounce

Guidance for difficult or inaccurate anthropometric measurements

There are times when it is difficult to obtain an accurate measurement. Examples include:

- Non-compliant children,
- Ornate hair ornaments that cannot be removed,
- Casts,
- Missing limbs,
- Inability to stand,
- Contractures,
- Frequent movement, and

- Faulty equipment.

When any of these situations exist

1. Obtain a measurement using the best technique possible under the circumstances.
2. Record the reason for potentially inaccurate measurements in the data system.
    - This information will help with future interpretation of measurements and growth patterns.

If it is not possible to weigh an applicant (e.g. weight exceeds the capacity of the scale), skip the anthropometric panel during the assessment and make every effort to obtain referral data.

Estimating pre-pregnancy weight

Weight gain during pregnancy is one of the primary determinants of a healthy outcome. The data system requires a valid entry in the field, pre-pregnancy weight because it uses pre-pregnancy weight to calculate the pre-pregnancy BMI. Pre-pregnancy BMI is used to determine the recommended weight gain range recommendations for a pregnant woman.

The same BMI cut-offs to determine weight status and weight gain recommendations for adults are used for pregnant adolescents.

If the participant reports her pre-pregnancy weight is unknown, follow the steps below:

1. Ask her questions to help get an estimate. Things like
    - When was the last time you were weighed?
    - What did you weigh then?
    - Do you think you had gained or lost weight or stayed about the same since then?
    - Has there been a change in how your clothes fit since then?
2. If she is still unable to give you an estimate, visually assess the woman's weight status category to decide if she was most likely underweight, normal weight, overweight or obese before conception
3. Calculate the number of weeks' gestation she is
4. Refer to a prenatal weight gain chart for the weight status category you determined her to be in prior to pregnancy (e.g. overweight) and determine the midpoint for the expected weight gain based on the weeks' gestation she is
5. Subtract the expected weight gain from the woman's current weight and record this figure as her pre-pregnancy weight

Referral data

Measurements from other credible sources such as a healthcare provider, Health Information Exchange (HIE), Child Health program or Head Start can be used. The WIC data system only retrieves data from the state HIE database, it does not provide or share any WIC participant data to other systems. Sometimes only one measurement is available from HIE (e.g. weight but not length), when that happens:

- If in-person, make a concerted effort to obtain both the length/height and weight

measurements in addition to the HIE data.

- If appointment is being done via teleWIC, accept the measurement.

WIC staff can take anthropometric measurements from other sources:

Verbally from staff at the source, (e.g. over the phone from a nurse at the doctor's office or from staff at the Head Start program),

- They may be mailed or provided electronically such as faxed, texted, or emailed to the WIC clinic by the source or by the parent/guardian/participant,
- The parent/guardian/participant can bring in documentation from the source (e.g. a Health History Card, clinic visit summary or data from a patient portal) or
- They can be obtained via HIE if permission is given to WIC from the participant to get health data from HIE on the Focus Identity screen in Focus.

For teleWIC appointments, anthropometric data taken within 60 days on either side of the certification date is allowable. To the extent possible, local agencies must make concerted efforts to obtain referral data for anthropometric measurements in advance of or at the time of the appointment.

- When anthropometric referral data is obtained prior to the appointment, the CPA will
  - create a new anthropometric record
  - document the results (make sure to adjust the measurement date to coincide with the date the measurement was taken).
- If data is not available prior to the appointment, the CPA will skip the anthropometric panel when completing the assessment.
  - Every effort must be made to obtain referral data
    - through use of release of information forms,
    - requesting participant/parent/guardian obtain and submitting measurements in person or electronically, or
    - scheduling the participant a time to come in to get weighed and measured at the WIC clinic within the next 60 days.
  - Once received, this information will be documented by creating a new anthropometric record and adjusting the measurement date to coincide with the date the measurement was taken.
    - A new risk determination should be completed at this time to capture any anthropometric related risks that may now be supported by the data.
    - Use professional judgment on whether the participant should be followed up with so a better tailored care plan, food package and nutrition education (including breastfeeding promotion and support) may be provided.
  - If anthropometric data is not received within 60 days, staff will continue to try to collect it, but the participant will not be terminated provided that the CPA has identified a nutrition risk for eligibility.

Using growth charts

The data system will plot the pediatric growth charts automatically.
The data system will plot prenatal weight gain charts automatically.

The data system plots anthropometric measurements based on:

- The 2006 WHO growth standards for birth to < 24 months for the appropriate age and sex and
- The 2000 NCHS/CDC growth charts for > 24 months for the appropriate age and sex

This includes all premature infants who have attained a gestational age of at least 40 weeks. The data system will not plot or evaluate growth measurements for infants born prematurely (prior to 37 weeks' gestation) and those who were low birth weight (less than 5.5 lb.) who have not reached the equivalent age of 40 weeks' gestation.

- Measurements will be adjusted for gestational age until the age of 2 years for:
    - Premature infants (<36 6/7 weeks' gestation) who have reached equivalent age of 40 weeks' gestation, and
    - Children born at <36 6/7 weeks' gestation.
- The data system will automatically adjust for gestational age either when:
        - A ≥21-day difference is identified between the baby's actual date of birth and the expected date of birth that is completed on their enrollment panel or
        - If on the baby's birth measurement anthropometric panel record, the diagnosed weeks' gestation is filled in as being 36 6/7 weeks or less.

How to further evaluate weight gain during pregnancy

IF BMI is...	Inadequate gain in 2nd and 3rd trimesters is...	High maternal weight gain in 2nd and 3rd trimesters is …
<18.5	<1 pound per week	>1.3 pounds per week
18.5 to 24.9	<0.8 pounds per week	>1.0 pound per week
25.0 to 29.9	<0.5 pounds per week	>0.7 pounds per week
≥30.0	<0.4 pounds per week	>0.6 pounds per week

The guidelines for twin pregnancies are as follows:

Normal weight women	should gain 37-54 pounds
Overweight women	should gain 31-50 pounds
Obese women	should gain 25-42 pounds
For all women,	a gain of 1.5 pounds per week in the second and third trimesters

For triplet pregnancies, the overall gain should be around 50 pounds with a steady rate of gain of approximately 1.5 pounds per week throughout the pregnancy.

Best Practices

Health history cards

Health History Cards are intended to facilitate the sharing of health data between a participant's health care provider and their local WIC agency and to reduce duplication of services.

- The cards have blanks for the participant's height/length, weight, and blood test results
- They can be ordered from the ISU Distribution Center
- They may be used in three ways:
    - Your agency may provide a supply of cards to health care providers in your service area, as part of your outreach efforts.
        - Health care providers can then use the cards to share data with your agency.
    - If a participant has a regular appointment with her health care provider before the next certification, give the participant a card to take to the appointment.
    - When medical information is obtained at the WIC appointment, this may be entered on the card for the participant to share with the health care provider at their next appointment.

Obtain anthropometric data before or during the appointment

For the benefit of both participants and WIC program administration, all anthropometric data and documentation necessary to complete the nutrition assessment should be available prior to or on the day of the certification or health update appointment. This will allow for all components of the appointment to be completed without additional follow-up contacts or delays.

Tips for accuracy

If necessary, use a footstool to read the measurement tape at eye level.

Unusual measurements (for every participant type) should be repeated to remove any doubt of

error. Suggested best practices include the following:

- Record in nutrition care plan that measurement has been repeated for future reference
- Record any contributing observations in the nutrition care plan (e.g., recent illness, tall parents, family disruptions such as divorce, description by parents as a "poor eater," medications that may affect appetite or fluid retention)
- Do an in-depth assessment and make appropriate referrals

Tips for weighing uncooperative children

If a child is uncooperative or cannot stand up,

- Weigh the child's caregiver holding the child, and then weigh the caregiver alone
  - Subtract the second value from the first to determine the child's weight or
- If your scale has a tare capability you can weigh the child's caregiver and tare out their weight before weighing them again while they are holding the child.

Use of pediatric growth charts

A single plot of height-for-age and weight-for-age allows you to compare the child's height and weight to children of the same age and sex.

A length-for-weight chart or a BMI-for-age chart provides information about the child's proportions.

Continued use of the growth chart provides a visual portrayal of the child's growth pattern.

- These charts can be viewed and printed.
- A series of measurements is needed to accurately evaluate a child's growth.
- When discussing growth charts with caregivers, ask them if it would be helpful to go over the growth chart.
  - Reinforce that children growing steadily along any percentile line are typically growing normally Focus on behaviors, not outcomes.

Interpret each of the growth charts after considering the information provided by the other growth charts for that child's age. If you observe any of the following growth patterns, consider the corresponding factors.

Pattern	Factors to Consider
Length/age <2.3rd percentile Weight/age <2.3rd percentile Weight/length <2.3rd percentile BMI-for-age 5th percentile or below	Parents' size Recent illness Appetite Recent growth spurt

	Child's growth pattern
Stature/age >95th percentile Weight/age >95th percentile Weight/length >97.7th percentile BMI-for-age between 85th-94th percentiles BMI-for-age 95th percentile or above	Parents' size Expected growth spurt Family stress Usual growth pattern
Movement over two growth channels for any measurement Note: Growth channels are indicated by the 2nd, 5th, 10th, 25th, 50th, 75th, 90th, 95th, and 98th percentile lines on the Birth to <24 months' charts. The 85th percentile appears on the 2-5 Years chart	Changes in environment Family history of obesity Family history of short stature Recent or chronic illness
Flat growth curve for any measurement	Changes in environment Recent illness Family history of short stature

The growth of premature (born ≤36 6/7 weeks) or low birth weight (less than 5.5lbs) infants who have not reached the equivalent age of 40 weeks' gestation may be assessed using a growth chart for low birth weight or very low birth weight infants consistent with the protocols of the local medical community where the WIC clinic operates.

- The WIC State Agency is not providing electronic or hard copies of this chart.

Use of prenatal weight gain charts

A series of measurements is needed to accurately evaluate prenatal weight gain.

- At subsequent appointments, if weight is updated, the system will plot weight gain at the point corresponding to the number of weeks' gestation.

Compare weight gain at any point in pregnancy to the lines corresponding to the recommended weight gain range for the participant.

- Measurements far from the lines may indicate that weight gain is too fast or too slow.