

Inadequate Growth

**Definition/
cut-off value**

An inadequate rate of weight gain as defined below.

- A. Infants from birth to 1 month of age:
- C excessive weight loss after birth
- C not back to birth weight by 2 weeks of age

- B. Infants from birth to 6 months of age:

Based on 2 weights taken at least 1 month apart, the infant’s actual weight gain is less than the calculated expected minimal weight gain based on the table below. See Attached 135-A for metric equivalents and for examples.

Age	Average Weight Gain			
Birth - 1 mo	18 gm/day	4 ½ oz/wk	19 oz/mo	1 lb 3 oz/mo
1-2 mos	25 gm/day	6 1/4 oz/wk	27 oz/mo	1 lb 11 oz/mo
2-3 mos	18 gm/day	4 ½ oz/wk	19 oz/mo	1 lb 3 oz/mo
3-4 mos	16 gm/day	4 oz/wk	17 oz/mo	1 lb 1 oz/mo
4-5 mos	14 gm/day	3 ½ oz/wk	15 oz/mo	
5-6 mos	12 gm/day	3 oz/wk	13 oz/mo	

- C. Infants & Children from 6 months to 59 months of age:

Option I: Based on 2 weights taken at least 3 months apart, the infant’s or child’s actual weight gain is less than the calculated expected weight gain based on the table below. See Attachment 135-A for metric equivalents and for examples.

Age	Average Weight Gain			
6-12 mos	9 g/day	2 1/4 oz/wk	9 ½ oz/mo	3 lbs 10 oz/6 mos
12-59 mos	2 ½ g/day	0.6 oz/wk	2.7 oz/mo	1 lb/6 mos

OR

Option II: A low rate of weight gain over a six (6) month period (+ or ! 2 weeks) as defined by the following chart. See Attachment 135-B for guidance on using measurements not taken within a 5-6 month interval.

Column 1	Column 2
Age in months at end of 6 month interval	Weight gain per 6 month interval in pounds
6	#7
9	#5
12	#3
18-60	#1

Participant category and priority level**Category****Priority**

Infants

I

Children

III

Justification

Weight for age is a sensitive indicator of acute nutritional inadequacy. The rate of gain during infancy, especially early infancy, is rapid and abnormalities in rate of weight gain may often be detected in just a few months. There is little question that decrease in the rate of weight gain during infancy is the earliest indication of nutritional failure. In contrast, children beyond infancy grow rather slowly, and many months of observation may be required to demonstrate that the rate of weight gain is unusually slow. During the first eighteen months of life, the rate of change in weight fluctuates and then declines rapidly. Because of this deceleration it may be difficult to differentiate normal growth slowing from an abnormal rate. After 18 months weight gain becomes more linear so assessment becomes easier.

Infants and children with abnormally slow growth can benefit from nutrition and health interventions to improve weight and height gain. The diagnosis of slow growth must consider possible causes of growth changes including undereating and disease conditions. Undereating, for any number of reasons, and disease conditions are the main causes of abnormally slow growth. Factors associated with undereating by an infant or child include inadequate sources of nutrient dense foods; lack of social support for the caregiver; an adverse social and psychological environment; a disorganized family; depressed parents or caregivers; and the caregiver's lack of education, health and nutrition knowledge, mental and physical abilities, and responsibility for child care. There is good evidence that through nutrition education, supplemental foods, and referrals to other health and social services, participation in the WIC Program will benefit infants and children with slow growth. In keeping with the preventive nature of the WIC Program, a cut-off point approximating the 10th percentile rate of change in weight for age was chosen.

**Clarifications/
Guidelines**

Local agency staff will not be required to assess and perform calculations unless no other risk conditions apply.

Weight-for-age and height/length-for-age must always be plotted on the growth charts. When a decrease in expected rate of growth along the child's previously defined growth curve is observed, referral to a physician and documentation must be included in the participant's chart.

If you see a growth pattern where weight is consistently below the 5th percentile for age or there is a decrease in expected rate of growth along the child's previously defined growth curve irrespective of its relationship to the

**Clarifications/
Guidelines (cont)**

5th percentile, referral to a physician and documentation must be included in the participant's chart.

Note: Children may show a decrease in growth, especially weight loss, due to an illness or food jags. The CA should use professional judgment in these cases. Determine the nature of the illness, assess the diet history, and then decide the appropriateness of applying this risk code.

References

1. Baumgartner, RN, Roche, AF, Himes, JH: Incremental Growth Tables: Supplementary to Previously Published Charts; American Journal of Clinical Nutrition; 1986; 43: 711-722.
 2. Guo, S, Roche, AF, Fomon, SF, Nelson, SE, Chumlea, WC, Rogers, RR, Baumgartner, RN, Zeigler, EE and Siervogel, RM: Reference data on gains in weight and length during the first two years of life; J Pediatr.; 1991; 119:355-62.
 3. Institute of Medicine: WIC Nutrition Risk Criteria: A Scientific Assessment; 1996; pp. 123-124.
 4. Forman, Samuel J.: Nutrition of Normal Infants; Mosby;1993;pp
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