## **How to Measure MUAC**

Mid-upper arm circumference (MUAC) is the circumference of the mid-upper arm. It is measured on a straight left arm (in right-handed people) midway between the tip of the shoulder and the tip of the elbow.

	MUAC cut-offs for classification of nutritional status		
Group	Severe acute malnutrition (SAM)	Moderate acute malnutrition (MAM)	Normal nutritional status
Children 6–59 months	< 115 mm	≥ 115 to < 125 mm	≥ 125 mm
Children 5–9 years	< 135 mm	≥ 135 to < 145 mm	≥ 145 mm
Children 10–14 years	< 160 mm	≥ 160 to < 185 mm	≥ 185 mm
Adolescents 15–17 and adults	< 185 mm	≥ 185 to < 220 mm	≥ 220 mm
Pregnant/≤ 6 months postpartum women	< 190 mm	≥ 190 to < 230 mm	≥ 230 mm

**Errors** include placing the tape above or below the mid-point, pulling the tape too tight or leaving it too loose, reading the tape incorrectly.



Click here for a video on use of MUAC in the field.



1. Bend the left arm at a 90° angle.



5. Straighten the arm and wrap the tape around the arm at the midpoint.

6. Place the tape through the window and correct the tape tension.



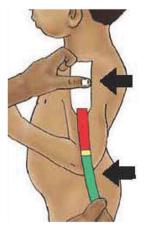
2. Find the top of the shoulder and the tip of the elbow.



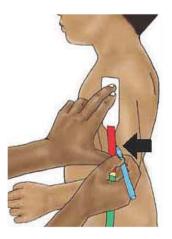
Too loose



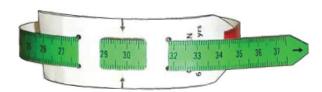
Too tight



3. Keep the tape at eye level and place it at the top of the shoulder. Put your right thumb on the tape where it meets the tip of the elbow (endpoint).



4. Find the middle of the upper arm by carefully folding the endpoint to the top edge of the tape. Place your left thumb on the point where the tape folds (midpoint). Mark the midpoint with a finger or pen.



- 7. Read the measurement in centimeters (cm) in the window where the arrows point inward.
- 8. Record the measurement to the nearest 0.1 cm and record the color.