

MEASURING AND MONITORING YOUR CHILD'S NUTRITIONAL STATUS

USING THE MID-UPPER ARM CIRCUMFERENCE Z-SCORE TOOL

GOOD NUTRITION IS ESSENTIAL TO YOUR CHILD'S GROWTH AND HEALTH IN THREE KEY WAYS:



Helps your child's body grow and develop



Supports your child's immune health



Keeps your child's brain growing and healthy

Did you know, 1 in 3 people around the world are malnourished? Of those children, under 5 years of age¹:

- **148 million** are too short for their age (stunting)
- **45 million** are below a healthy weight for their height (wasting)
- **37 million** are above a healthy weight for their height (overweight)

PROVIDING THE RIGHT AMOUNT AND TYPE OF NUTRITION CAN BE CHALLENGING

Changes in a child's nutrition status can happen at any time, whether in the hospital or at home. Changes might occur when your child:



Is growing rapidly



Has a brief illness



Has developed a long-lasting medical condition

What's important is to understand that your child's nutritional status has changed, and you can work together with your healthcare provider to improve it.

33% of children with special healthcare needs who are seen in outpatient settings don't get enough nutrition to support their growth needs.²

MEASURING AND MONITORING MUAC IS A WAY TO TRACK YOUR CHILD'S NUTRITIONAL STATUS

WHAT IS MUAC?

A measurement of the middle of your child's upper arm.

Tracking changes in this measurement over time can be helpful in determining if your child's growth is on track.

HOW IS MUAC MEASURED?

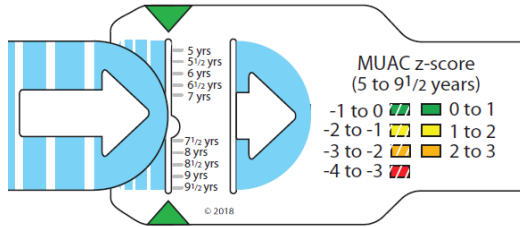


A body measurement taken with a special measuring tape that wraps around the middle of the upper arm of a child (2 months -18 years of age).

Generally, MUAC is measured by your child's healthcare provider during an appointment. If you use telehealth services, your provider may guide you to measure your child's MUAC during the visit.

YOU CAN MEASURE MUAC IN THREE SIMPLE STEPS

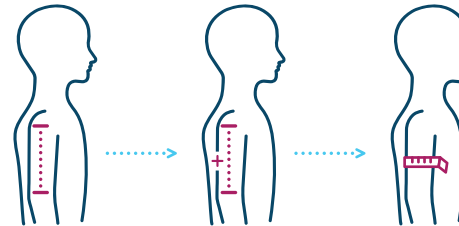
1 Make a loop by sliding one end of the tape into the slot between the green arrows.



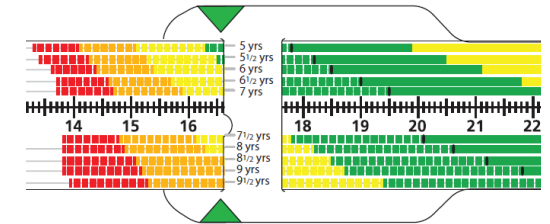
2 Find the middle of the upper arm between the tip of your child's shoulder and elbow. The ruler on the tape can help you find the mid-point. Mark the spot on the back of the arm then place the tape around the arm at this spot.

TO ENSURE PROPER MEASUREMENT:

Make sure the arm is fully extended and hanging down by the side before measuring. Pull the tape so it's snug (not too tight or too loose).



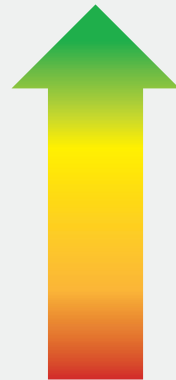
3 Read the measurement between the green arrows. Look for the colored line that matches your child's age and measurement.



WHAT DO THE COLORS & LINES MEAN?

Colors range from **GREEN** to **RED** and show your child's nutritional status compared to the nutritional status of other children who are the same age:

Your healthcare provider may use MUAC, age, gender, and overall health to assess your child's nutritional status and create a nutrition plan that's best for your child.



	WITHIN NORMAL RANGE
	MAY HAVE MILD OVERNUTRITION
	MAY HAVE MODERATE OVERNUTRITION
	WITHIN NORMAL RANGE
	MAY HAVE MILD UNDERNUTRITION
	MAY HAVE MODERATE UNDERNUTRITION
	MAY HAVE SEVERE UNDERNUTRITION

SUPPORT YOUR CHILD'S NUTRITION & GROWTH BY WORKING WITH YOUR HEALTHCARE PROVIDER TO:

- Determine if the MUAC tool would be an appropriate and helpful way to measure your child's nutrition status.
- Learn how to properly use the MUAC tool during telehealth visits.
- Determine how often to measure your child's MUAC.
- Develop a nutrition plan that meets your child's growth needs.

Visit [anihi.org](https://www.anihi.org) to view additional MUAC resources



1. World Health Organization. Joint child malnutrition estimates. World Health Organization Website. Accessed September 20, 2023. [https://www.who.int/data/gho/data/themes/topics/joint-child-malnutrition-estimates-unicef-who-wb#:~:text=In%202020%2C%20149.2%20million%20children,for%20their%20height%20\(overweight\).](https://www.who.int/data/gho/data/themes/topics/joint-child-malnutrition-estimates-unicef-who-wb#:~:text=In%202020%2C%20149.2%20million%20children,for%20their%20height%20(overweight).) | 2. Diamanti A, et al. *Clin Nutr.* 2019;38(4):1877-1882.