

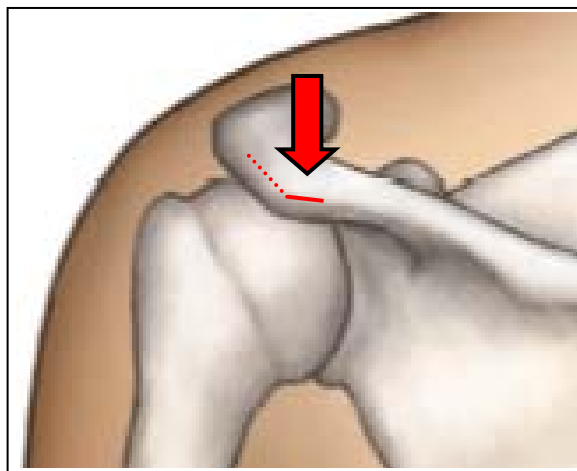
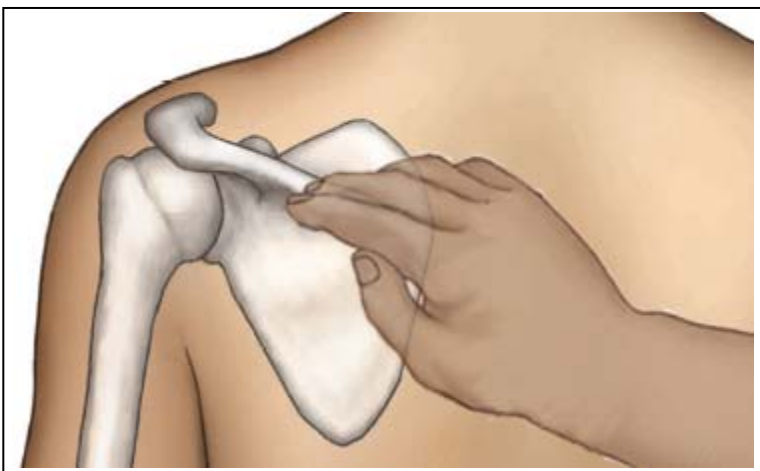
## 2D Mercy TAPE - Instructions for Use

### A. Landmarks and Measurements

The Mercy TAPE uses two anatomic landmarks on the upper arm and two corresponding measurements to estimate a child's weight. These are the:

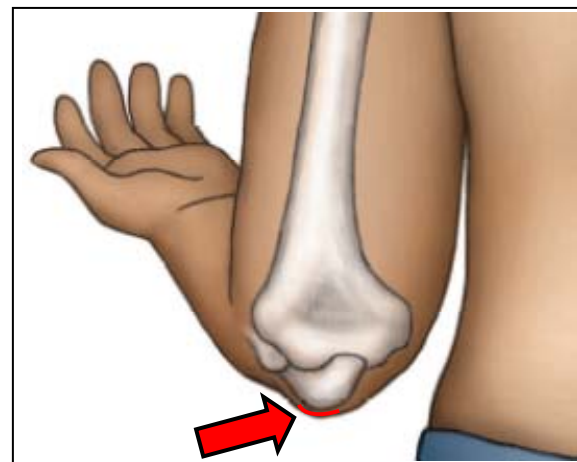
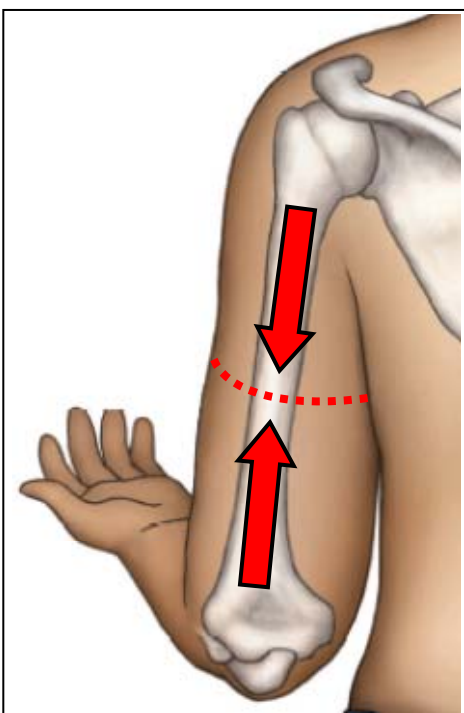
#### Acromion (end of the bony ridge on the shoulder blade)

Follow the bony ridge on the shoulder blade (known as the spine of the scapula) toward the arm until it makes a sharp V-turn to the front of the body. The acromion occurs at the spot immediately before this turn.



#### Olecranon (bony tip of the elbow)

Follow the posterior surface of the upper arm down to the tip of the elbow. This tip represents the olecranon process.



#### Humeral Length (HL)

The distance between the acromion and the olecranon. This measurement is obtained with the arm bent at 90°.

#### Mid-Upper Arm

The midpoint between the acromion (starting point) and the olecranon (ending point). This is easiest to identify when the arm is bent at 90°.

#### Mid-Upper Arm Circumference (MUAC)

Circumference around the mid-upper arm. This measurement is determined with the arm straight at the child's side as depicted on the next page.

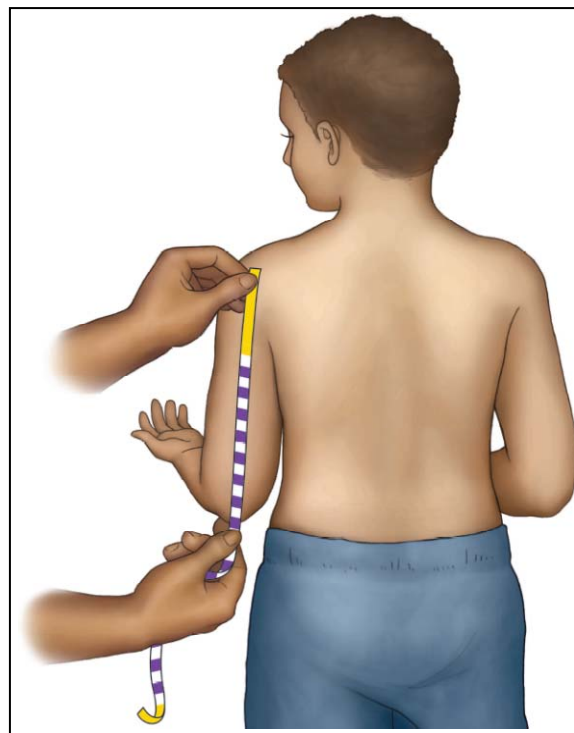
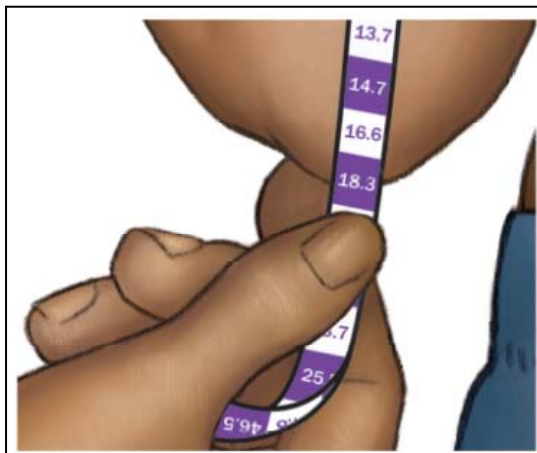
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### B. Estimating Weight with the 2D Mercy TAPE



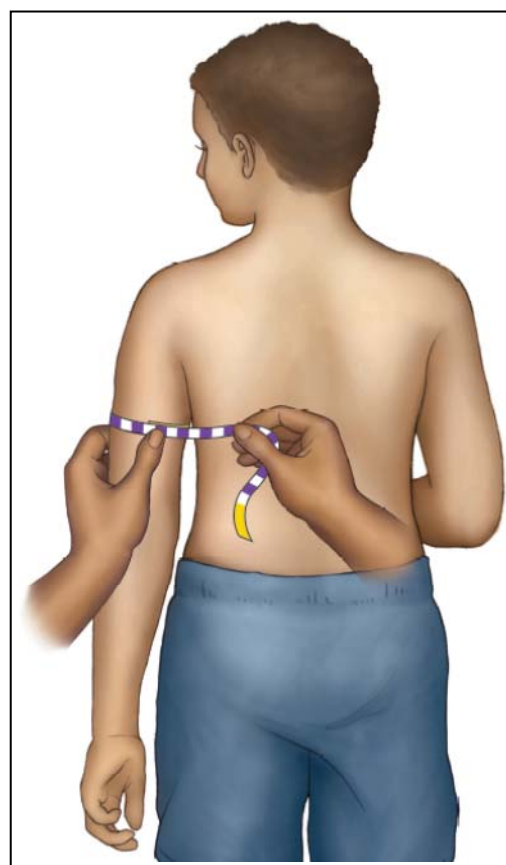
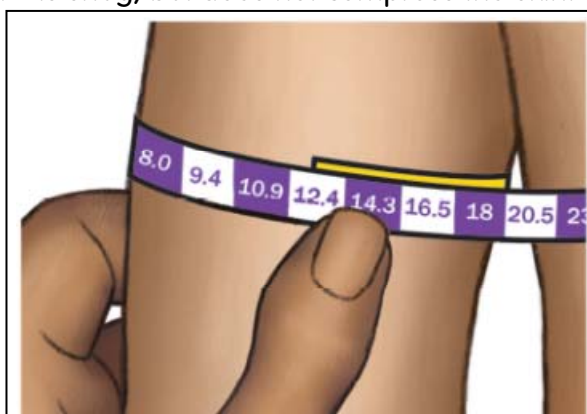
#### Humeral Fractional Weight

- Remove any items covering the child's arm and bend the arm at the elbow 90°.
- Identify the "HL" side of the 2D TAPE.
- Hold the start tip at the acromion.
- Extend the TAPE down the posterior surface of the arm to the olecranon process, making sure the device is centered on the back of the arm.
- Identify the square that spans the tip of the olecranon process and record the number in that box.



#### MUAC Fractional Weight

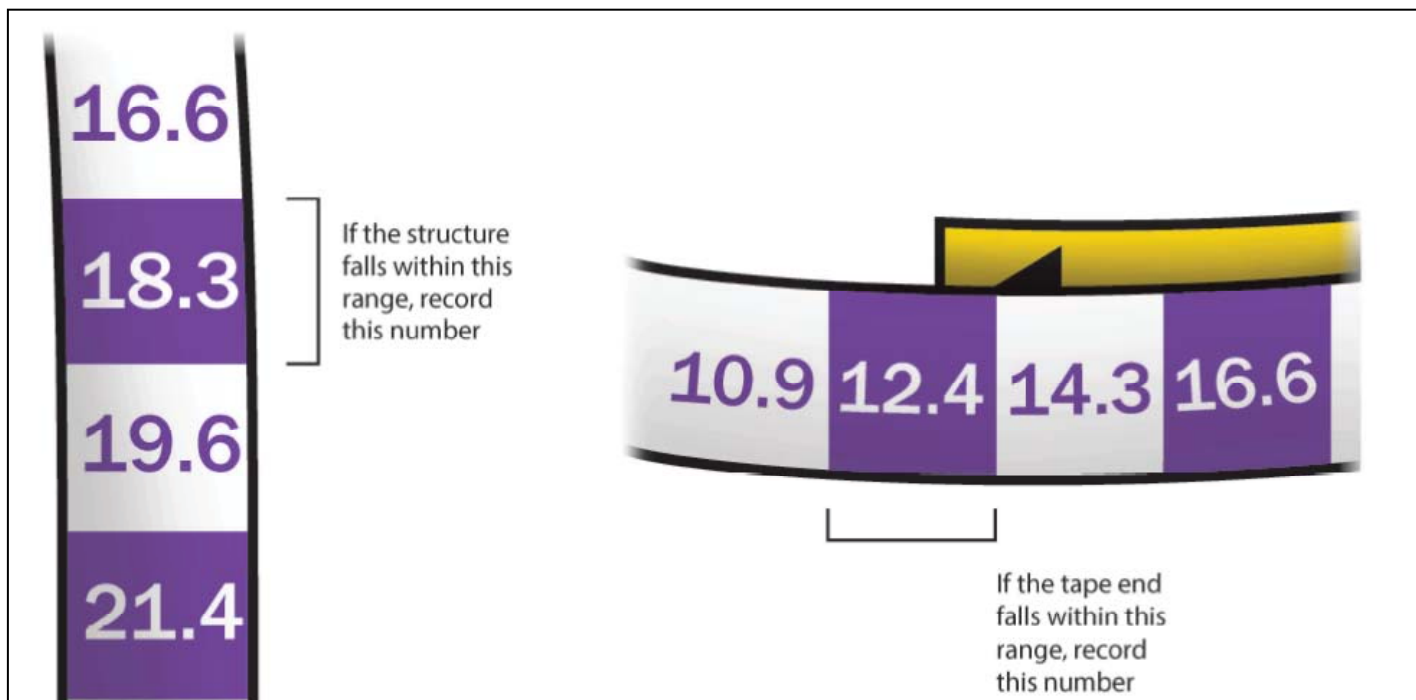
- Have the child relax the arm at their side with the elbow extended.
- The muscle should not be flexed or tightened.
- Approximate the location on the humerus that is the midway between the acromion and the olecranon.
- Identify the "MUAC" side of the 2D TAPE.
- Starting with the tip of the TAPE, wrap the "MUAC" side around the midpoint of the arm (MUAC facing outward) so that it is perpendicular to the humerus.
- Make sure that the TAPE is snug, but does not compress the skin.
- Identify the square that spans the tip of the TAPE and record the number in that box.



## 2D Mercy TAPE - Instructions for Use

### C. Determining the Weight

Add the two numbers together. This is the child's estimated weight in kilograms.



$$\begin{array}{r}
 18.3 \\
 + 12.4 \\
 \hline
 = 30.7 \text{ kg}
 \end{array}$$