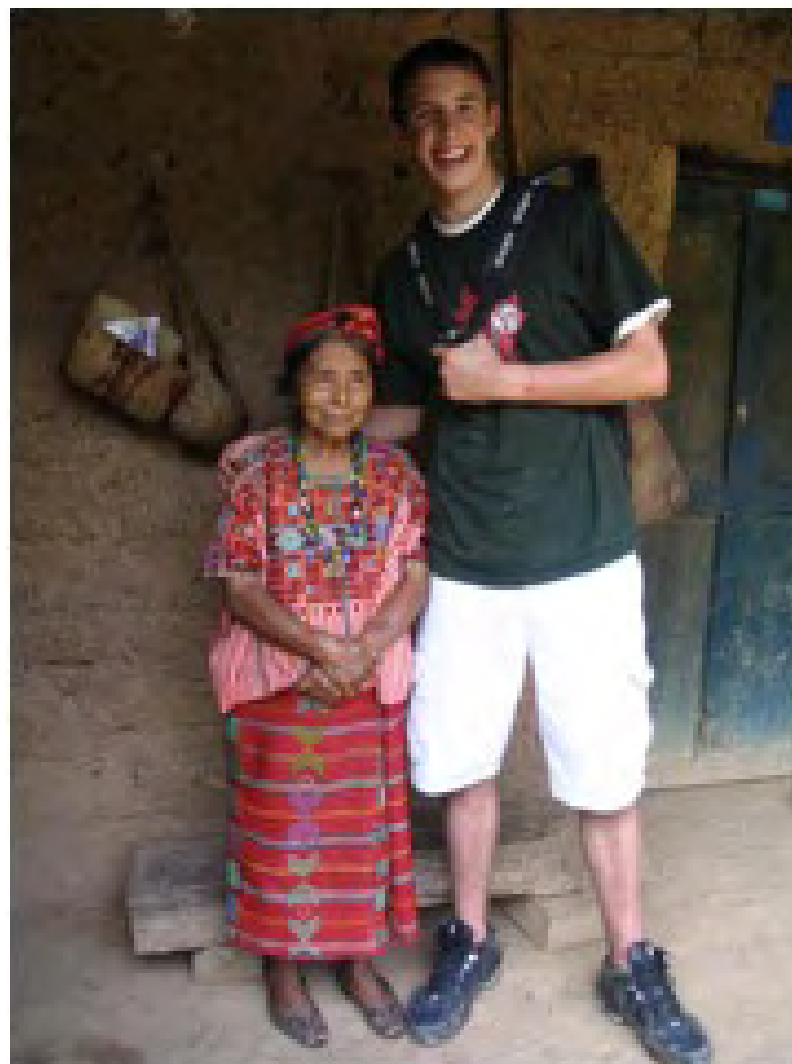
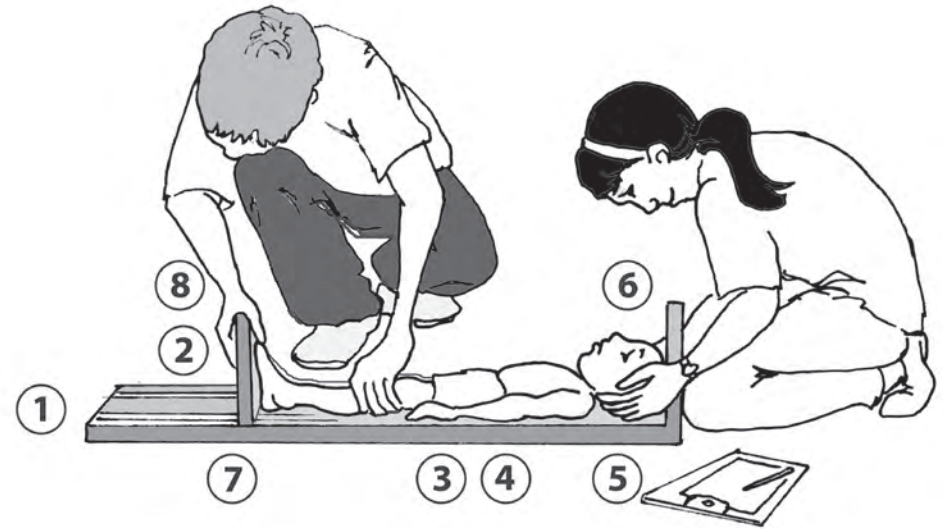


Height Differences



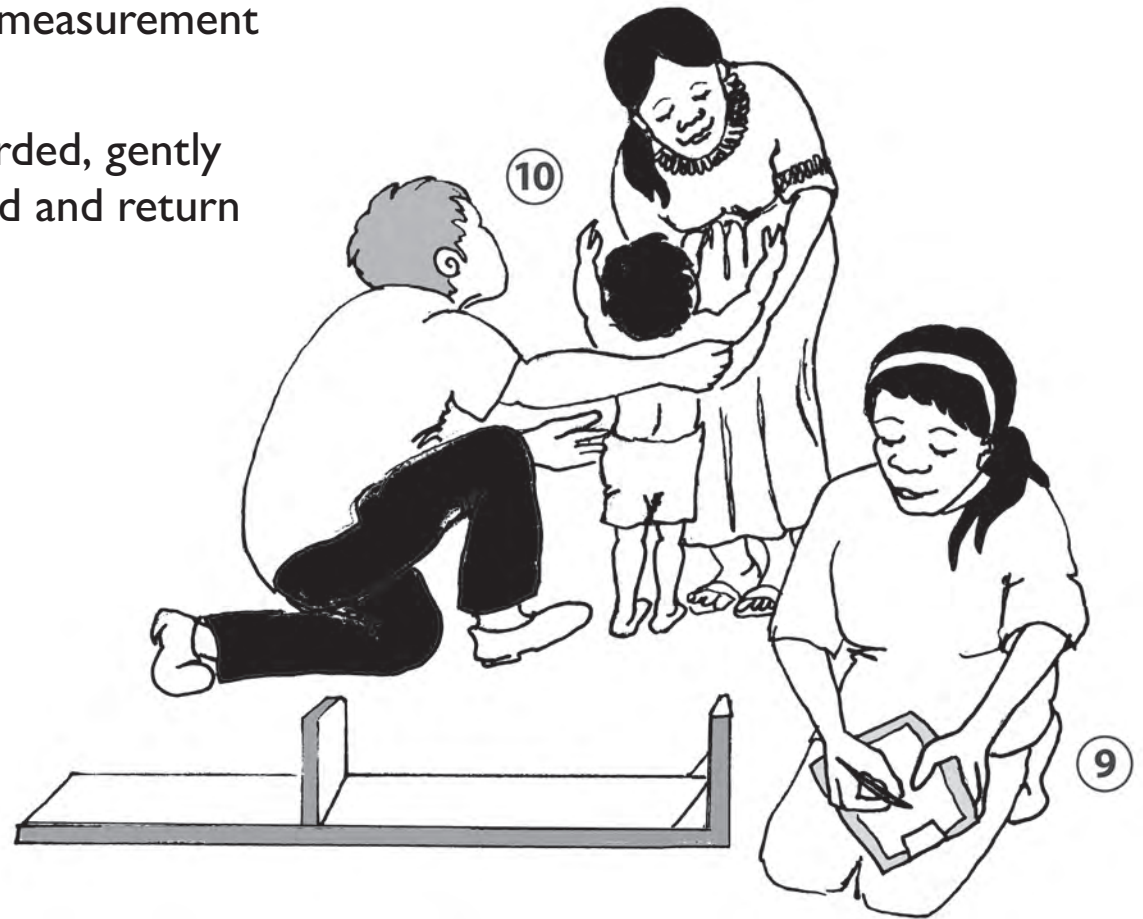
Measuring Length of Children Under 2 Years

1. Place the length board on flat ground or a low, flat surface. Be sure it is secure so the child will not fall off.
2. Ask the mother to remove the child's shoes and any hat or hair ornament.
3. Ask the mother to lay the child down on their back, on top of the length board.
4. Ensure that the child's head, shoulders, back, buttocks and heels are flat against the length board.
5. The top of the child's head should be against the end of the length board that does not move.
6. The assistant will hold the head of the child so that the child's eyes look up. The assistant's head should be directly over the child's head, and he or she should look directly into the child's eyes.
7. The measurer presses gently with one hand on the child's knees to straighten them. At the same time, the measurer quickly moves the moveable footpiece with his or her other hand so that the child's feet are pressed flat against it.
8. Quickly read the measurement aloud without moving the child or the moveable foot piece. This is the length of the child.

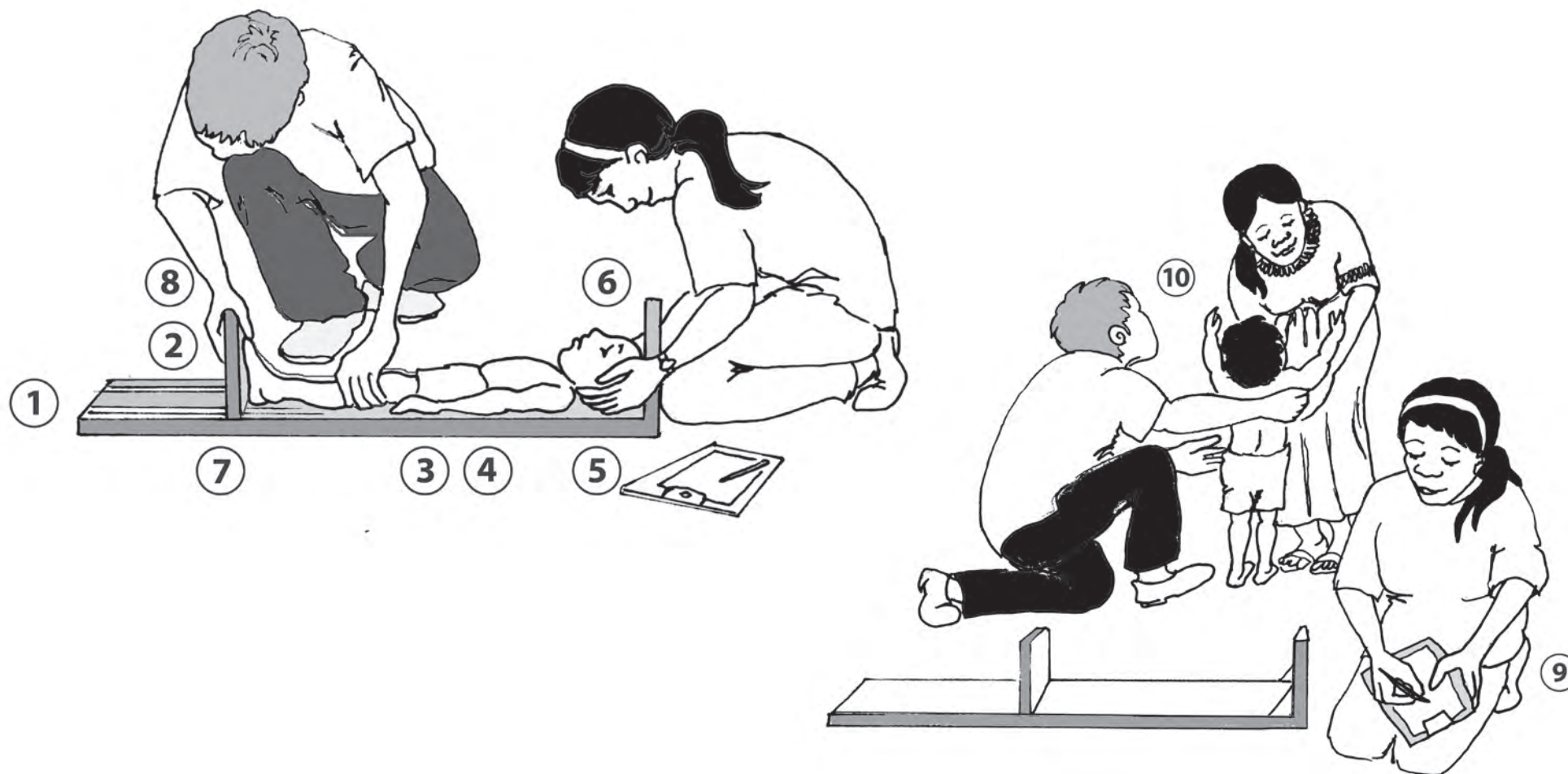


Measuring Length of Children Under 2 Years

9. The assistant will repeat the measurement aloud and then write it down. Ensure the measurement is recorded correctly.
10. When the numbers have been recorded, gently help the child to get up off the board and return to his or her mother.

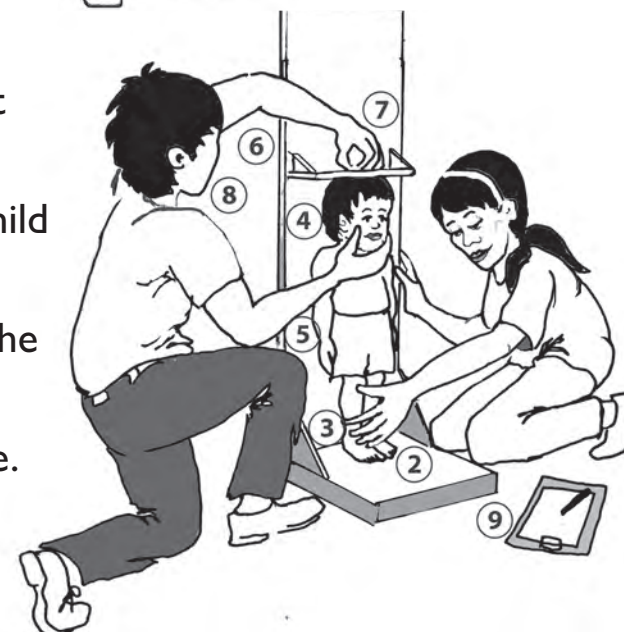


Review the Steps to Measure a Child's Length



Measuring Height of Children Over 2 Years

1. Place the height board on flat ground against a wall or tree that is upright. Ensure that the board will not move.
2. The child must be barefoot and not have anything on top of his or her head (such as a hat or hair ornament). Ask the mother to remove these items.
3. Stand the child on the platform at the base of the height board, heels together and knees straight. Heels, calves, thighs, trunk and buttocks should touch the back of the board.
4. Lift the child's chin so the child's eyes are looking straight ahead.
5. The arms should be hanging down at the child's side. The child's weight should be distributed evenly on both feet.
6. The measurer squats down right in front of and at eye level with the child (that is, looking into the child's eyes).
7. Gently and firmly slide the moveable headpiece down until it touches the crown of the child's head. Hold it firmly there.
8. The measurer reads aloud the measurement indicated by the headpiece.
9. The assistant repeats the measurement aloud and then writes it down. The measurer checks that the number is written correctly and neatly.



Review the Steps to Measure a Child's Height



Data Collection Form

Children 0 - 59 months

Remember to:

1. Record the date of birth (year/month/day) and the sex (M or F) of the child.
2. Record the child's height/length to nearest 0.1 cm, weight to 0.1 kg and MUAC to 0.1 cm or colour.
3. Record the date of measurement.

ADP/Program:

Date of Measurement (yy/mm/dd):

Community:

Name of Data Collector:

[illegible]

* Not necessary when collecting data for surveys.

Review – Correct or Incorrect?



What is correct? Incorrect?



What is correct? Incorrect?

Data Collection Form

Remember to:

1. Record the date of birth (year/month/day) and the sex (M or F) of the child.
2. Record the child's height/length to nearest 0.1 cm, weight to 0.1 kg and MUAC to 0.1 cm or colour.
3. Record the date of measurement.

ADP/Program:

Date of Measurement (yy/mm/dd):

Community:

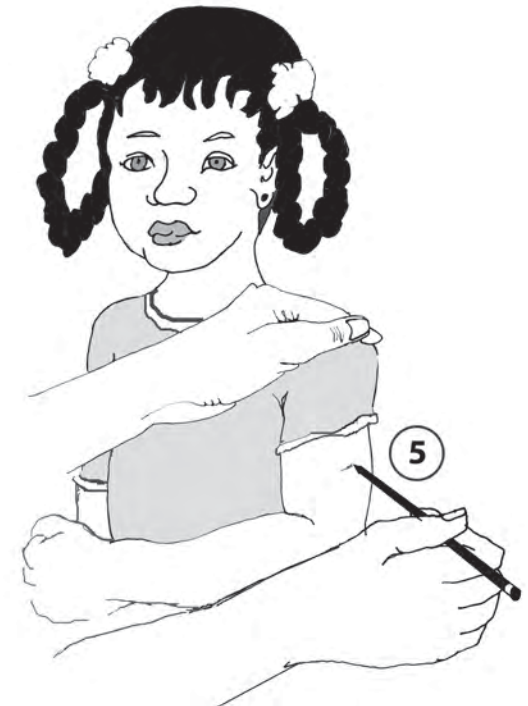
Name of Data Collector:

[illegible]

* Not necessary when collecting data for surveys.

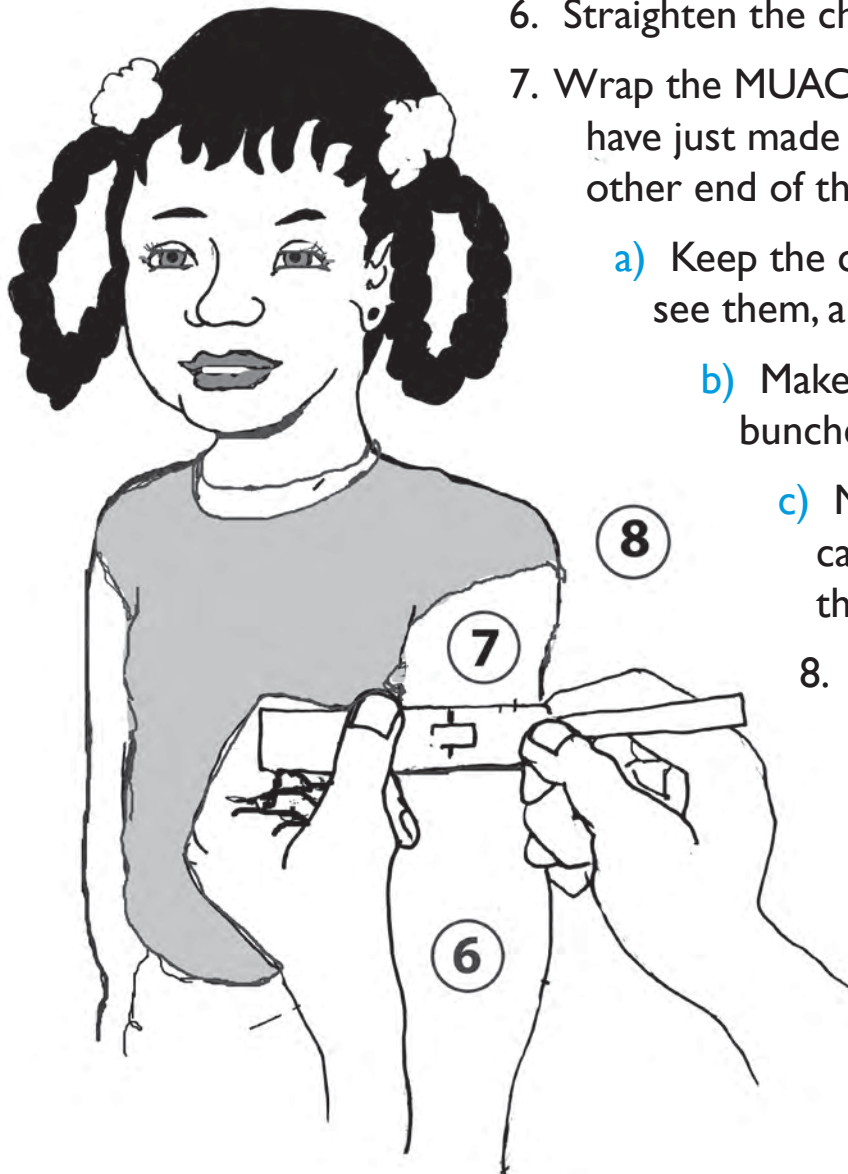
Review Steps 1 – 5 in Measuring MUAC

1. Work at eye level.
Sit down when that is possible.
2. Ask the mother to remove any clothing that covers the child's arm.



3. Locate the tip of the child's shoulder with your fingertips.
4. Bend the child's elbow so the arm makes a right angle.
5. Estimate where the middle of the upper arm is between the shoulder tip and the elbow. Mark this as the mid-point.

Review Steps 6 – 8 in Measuring MUAC



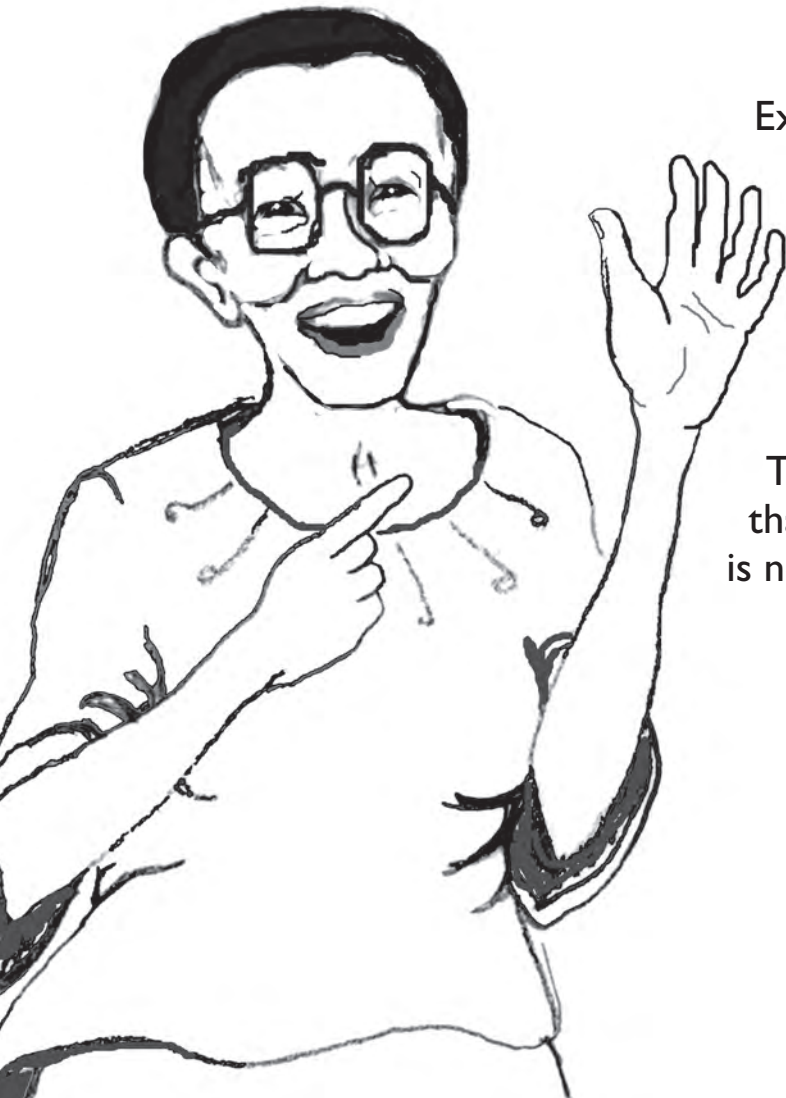
6. Straighten the child's arm.
7. Wrap the MUAC band around the child's left arm at the mid-point mark you have just made by inserting the end of the band through the thin opening at the other end of the band.
 - a) Keep the colours or numbers on the band right side up so that you can see them, and be sure that the band is flat against the skin.
 - b) Make sure the band is not too tight (if the band is too tight, this bunches up the skin and we do not get an accurate reading).
 - c) Make sure the band is not too loose (the band is too loose if you can fit a pencil under it) Make sure the band is horizontal around the child's arm.
8. Read the measurement aloud (either the colour or number which shows most completely in the wide window on the band). Ask the assistant to repeat the measurement and to record it on the form.
 - a) Check that the measurement is recorded correctly.
 - b) Gently remove the band from the child's arm. Thank the mother and the child for their cooperation.

Common Errors in Measuring

Common Errors	Solution
1. All Measurements	
Restless child	Postpone measurement. Involve parent in procedure.
Inaccurate reading	Training and retraining stressing accuracy.
Recording	Record results immediately after taking measurements and confirm record.
2. Length/Height	
Incorrect method for age	Use length only when child is under 2 years old [or unable to stand properly].
Foot wear/headgear	Remove.
Head or body not straight, knees bent, or feet not flat on floor	Correct technique with practise and regular retraining. Provide adequate assistance. Calm the child.
Child not straight along board and foot not parallel with movable board	Parent or assistant should be present. [Move head board to compress hair].
Sliding board not firmly against heels/head	Settle child. Correct pressure should be practised. [Move head board to compress hair.]
3. Weight	
Scale not calibrated to zero	Recalibrate after every measurement. [Zero after every measurement, recalibrate at the start of each weighing session with a known weight.]
Child wearing heavy clothing	Remove or make allowances for clothing.
Child moving or anxious	Wait until child is calm or remove cause of anxiety.
4. MUAC	
Child not standing in the correct position	Position subject correctly.
Mid-point of mid-upper arm incorrectly marked	Measure mid-point carefully.
Examiner not level with subject, tape around the arm not at mid-point, tape too tight/too loose	Correct techniques with training, supervision and retraining. Take into account cultural practices for example, wearing of arm bands.

This chart is adapted from Appendix 2, page 39, 'Sources of error in taking anthropometrical measurements' in: Food Security Analysis Unit for Somalia (FSAU). Nutrition: A Guide to Data Collection, Analysis, Interpretation and Use. (Nairobi; FSAU, 2005). The contents of this manual may be copied, reproduced or stored without permission, with FSAU acknowledged as the source. Website: www.fsasomalia.org

Five Things To Remember



BE FRIENDLY

Remember that each child is a special individual not a project number. Be kind and friendly when you relate to the child and the mother.

BE CLEAR

Explain in simple terms what you are doing. Ask the mother if she has any questions.

BE SAFE

Never leave the child alone with the equipment. Make sure the child does not slip or fall.

BE PARTNERS

Two people work together to take the measurements. This helps ensure that the child is placed correctly on the height board or the scale. If there is no other trained person available to assist, then explain the procedure to the child's mother and ask her to help you.

BE BETTER

Work hard to do better quality work every day.

Data Collection Form

Remember to:

1. Record the date of birth (year/month/day) and the sex (M or F) of the child.
2. Record the child's height/length to nearest 0.1 cm, weight to 0.1 kg and MUAC to 0.1 cm or colour.
3. Record the date of measurement.

ADP/Program:

Date of Measurement (yy/mm/dd):

Community:

Name of Data Collector:

[illegible]

* Not necessary when collecting data for surveys.

Form I Weight Standardisation

Form I Weight Standardisation

Name of Participant: _____

Date of Measurement: ____ / ____ / ____ (yy/mm/dd)

Name of Child	Age in Months	No.	My Measure	Standard Measure	Difference Sign (+, -)	Size of Difference (L, M, S)
		1				
		2				
		3				
		4				
		5				
		6				
		7				
		8				
		9				
		10				

Size of Differences:

Number of Large Differences

(0.3 kg or more)

Box 1

Number of Medium Differences

(0.2 kg)

Box 2

Number of Small Differences

(0.0 - 0.1 kg)

Box 3

Differences:

Number of positive signs (+) _____

Number of negative signs (-) _____

Form 2 Height/Length Standardisation

Form 2 Height/Length Standardisation

Name of Participant: _____

Date of Measurement: ____/____/____ (yy/mm/dd)

Name of Child	Age in Months	No.	My Measure	Standard Measure	Difference Sign (+, -)	Size of Difference (L, M, S)
		1				
		2				
		3				
		4				
		5				
		6				
		7				
		8				
		9				
		10				

Size of Differences:

Number of Large Differences

(1.0 cm or more)

Box 1

Number of Medium Differences

(0.6 - 0.9 cm)

Box 2

Number of Small Differences

(0.0 - 0.5 cm)

Box 3

Differences:

Number of positive signs (+) _____

Number of negative signs (-) _____

Form 3 MUAC Standardisation

Form 3 MUAC Standardisation

Name of Participant: _____

Date of Measurement: ____ / ____ / ____ (yy/mm/dd)

Name of Child	Age in Months	No.	My Measure	Standard Measure	Difference Sign (+, -)	Size of Difference (L, M, S)
		1				
		2				
		3				
		4				
		5				
		6				
		7				
		8				
		9				
		10				

Size of Differences:

Number of Large Differences

(0.5 cm or more)

Box 1

Number of Medium Differences

N/A

Box 2

Number of Small Differences

(0.0 - 0.5 cm)

Box 3

Differences:

Number of positive signs (+) _____

Number of negative signs (-) _____