

# INFANT FEEDING CUES

## Early Cues: "I'm hungry"

Stirring

Mouth opening

Turning head  
Seeking/rooting

## Mid Cues: "I'm really hungry"

Stretching

Increasing movement

Hand to mouth

## **Late Cues: “Calm me, then feed me”**

Crying

Lots of movement

Color turning red

## **Post-Feeding Cues: “I’m Done”**

Infant opens fists

Arms lie low  
across body

Falls asleep  
with body relaxed

**Day 1**

**Day 3**

**Day 7**

**1 Month**

**Day 1**

**Day 3**

**Day 7**

**1 Month**

## Activity Sheet: Key provisions and recommendations in the Code

### Instructions to the trainer

Divide participants in 4 groups and assign a stakeholder role to each group:

1) Manufacturers/Distributors/Marketing personnel 2) Governments 3) Health care facilities 4) Health care workers.

Print one activity sheet per group of participants. For each sheet, cut out rows before giving them to a group.

Let each group identify the responsibilities of the stakeholder you asked them to represent.

- The supply of BMS should be continued for as long as the infant concerned needs it (at least 6 months of age) (1994 resolution: *WHA 47.50*)
- There should be no direct or indirect gifts or free samples to pregnant women, mothers, their families, and health workers (*Articles 5.2 and 5.4*)
- Only health workers – or other community workers if necessary – should demonstrate feeding with BMS and demonstrations should be done only to the mothers or family members who need to use it (*Article 6.5*)
- BMS for infants who require them should be made available through the normal procurement process and not through free or subsidized supplies (*1886 resolution: WHA 39.28*)
- Labels should state the superiority of breastfeeding and warn that products should be used according to the instructions and following the advice of a health worker regarding the need for its use and the method of use (*Article 9.2*)

● Governments have the responsibility to ensure that the information on infant and young child feeding used by families and those involved in the field of infant and young child nutrition is objective and consistent (*Article 4.1*)

● Messages on labels should be easily readable and understandable and in an appropriate language (*Article 9.2*)

● Manufacturers should only provide scientific and fact-based information to health workers and never seek contact with mothers (*Article 7.2*)

● Health workers should not give samples (i.e. small quantities of a product at no cost) of infant formula to pregnant women, mothers of infants and young children, or members of their families (*Article 7.7*)

● There should be no free or subsidized supplies of BMS and other products covered by the Code in any part of the health care system (*1994 resolution: WHA 47.50*)

● No advertising of BMS and other products covered by the Code to the general public is permitted (*Article 5.1*)

Breastfeeding

Expressed breast milk

Commercial infant  
formula

Pasteurized cow's milk +  
oil, sugar, water, AND a  
multivitamin/mineral mix

Pasteurized cow's milk +  
oil, sugar, and water

Pasteurized cow's milk +  
oil, sugar, and water

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Expressed breast milk

Commercial infant  
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Pasteurized cow's milk +  
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oil, sugar, and water

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Pasteurized cow's milk +  
oil, sugar, water, AND a  
multivitamin/mineral mix

Pasteurized cow's milk +  
oil, sugar, and water

Feeder

Feeder

Feeder

Aggressive

Dismissive

Stressed

Eater

Eater

Eater

Eater

Aggressive

Dismissive

Sleepy

Stressed

# FOOD TEXTURES AND READINESS



Sitter



Crawler



Walker



Purée



Mashed



Diced

Your child can eat any of these foods in the appropriate texture.

Grains

Fruits

Vegetables

Dairy

Meat

Legumes & Pulse

Cereals and  
Grains

Roots and  
Tubers

Oils and Fats

Sugars

Animal  
Protein Foods







Legumes and  
Pulses

Dairy





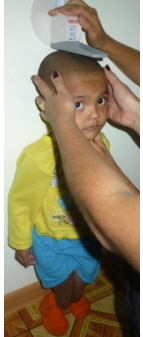
Vegetables

# Fruits

## “Can you spot the errors?” Answer Key

	Done correctly	Done incorrectly
	<ul style="list-style-type: none"> <li>• Proper equipment</li> <li>• Use of disposable mat</li> </ul>	<ul style="list-style-type: none"> <li>• Child wearing heavy clothing</li> <li>• Child holding a book</li> </ul>
	<ul style="list-style-type: none"> <li>• Proper equipment</li> <li>• Infant wearing only a diaper</li> <li>• Use of disposable mat</li> </ul>	<ul style="list-style-type: none"> <li>• Measurer’s hand on infant</li> <li>• Infant’s foot touching wall</li> </ul>
	<ul style="list-style-type: none"> <li>• None</li> </ul>	<ul style="list-style-type: none"> <li>• Infant not centered and straight on the length mat</li> <li>• Measurer holding pen too close to eye</li> </ul>
	<ul style="list-style-type: none"> <li>• Straight legs</li> </ul>	<ul style="list-style-type: none"> <li>• Infant wearing socks</li> <li>• Infant’s body not straight</li> <li>• Assistant not positioned behind the child’s head</li> </ul>
	<ul style="list-style-type: none"> <li>• Right foot flat and positioned well against the board</li> </ul>	<ul style="list-style-type: none"> <li>• One foot used instead of both feet</li> </ul>
	<ul style="list-style-type: none"> <li>• Good head position</li> </ul>	<ul style="list-style-type: none"> <li>• Foot deformity</li> <li>• Child with socks on</li> </ul>



	<ul style="list-style-type: none"> <li>• Correct type of measuring tape</li> </ul>	<ul style="list-style-type: none"> <li>• Tape wraps over ears</li> <li>• Tape too loose</li> <li>• Tape does not go over the bump on the back of the head</li> </ul>
	<ul style="list-style-type: none"> <li>• Correct type of measuring tape</li> </ul>	<ul style="list-style-type: none"> <li>• Tape too loose</li> <li>• Child's arm bent</li> <li>• Incorrect position of tape (too low)</li> </ul>
	<ul style="list-style-type: none"> <li>• Correct type of measuring tape</li> <li>• Correct tape position</li> </ul>	<ul style="list-style-type: none"> <li>• Tape too tight</li> <li>• Child's arm bent</li> </ul>
	<ul style="list-style-type: none"> <li>• Correct equipment used</li> </ul>	<ul style="list-style-type: none"> <li>• Child's feet are not against the wall</li> <li>• Child is wearing shoes</li> <li>• Child is wearing a hat</li> <li>• The measurer's position is not to the side where the board numbers are</li> </ul>
	<ul style="list-style-type: none"> <li>• Good head position</li> </ul>	<ul style="list-style-type: none"> <li>• Child unable to stand straight due to leg deformity</li> <li>• Child with socks on</li> </ul>

## Growth Assessment Steps

*Cut along the dotted lines and fold where indicated*

### Weigh and measure children

*Fold here*

This step includes measuring weight, length or height, head circumference, and mid-upper arm circumference (MUAC). Taking accurate measurements is critical. Consider the child's age and physical ability (for instance, ability to stand or fully stretch legs) when selecting which measurements to conduct.

### Compare measurements to standards

*Fold here*

Standards like the WHO growth charts allow comparison to growth patterns of children living under optimal conditions. To assess if a child is growing well, it is essential to plot a series of measurements on a growth chart. WHO growth charts can be used for all children, including those with special health care needs.

## Design a care plan

This step involves designing culturally- and context-appropriate care plans to meet the needs of the child and address growth problems identified in Step 2. Care plans may include dietary modifications, supplementation, changes to feeding practices, referrals to a health clinic, and follow-up.

Fold here

## Counsel the caregiver

This step involves counseling caregivers on the child's growth and care plan using clear language. Build on their existing knowledge and listen carefully to their concerns. Confirm their understanding of the care plan and ability to make changes; provide follow-up information.

Fold here

## Follow-up

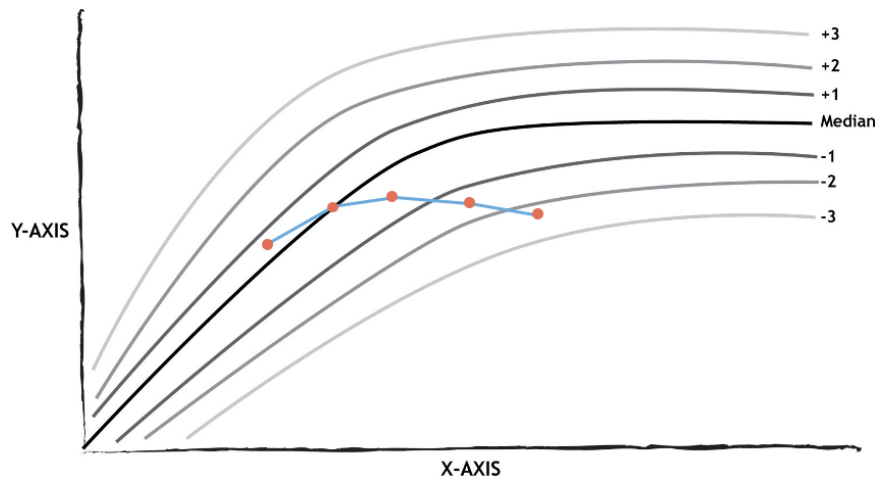
This step involves repeating steps 1 to 4 at follow-up visits. It allows us to determine if the child is growing well and responding to interventions, and to adapt the care plan accordingly. It also provides opportunities to reinforce nutrition and feeding best practices.

Fold here

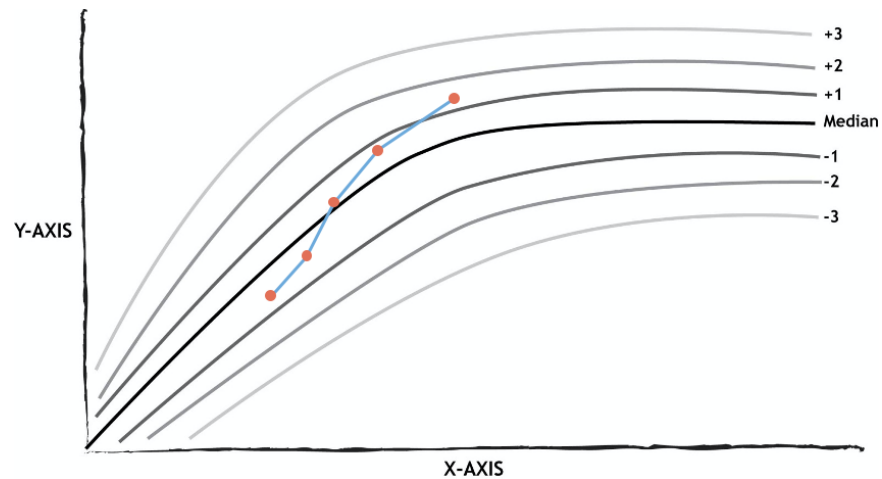
# Growth Points and Patterns Matching Cards

Cut along the dotted lines. Shuffle cards and pack in one set.

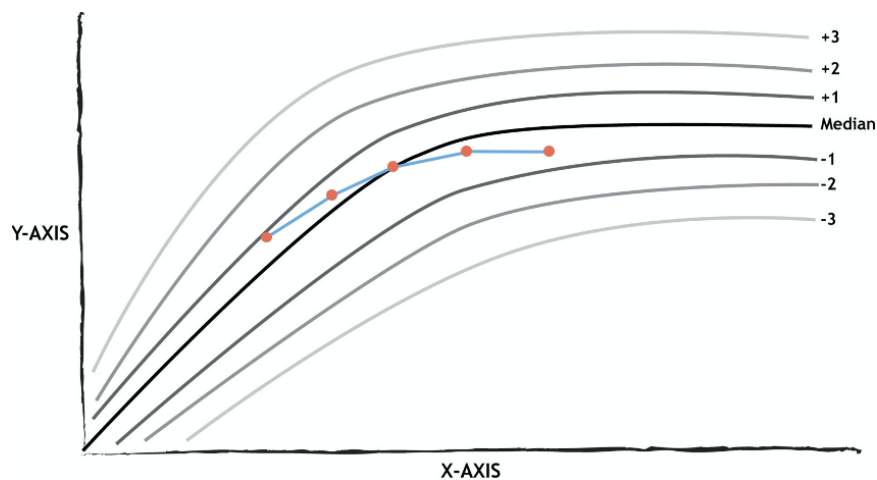
1



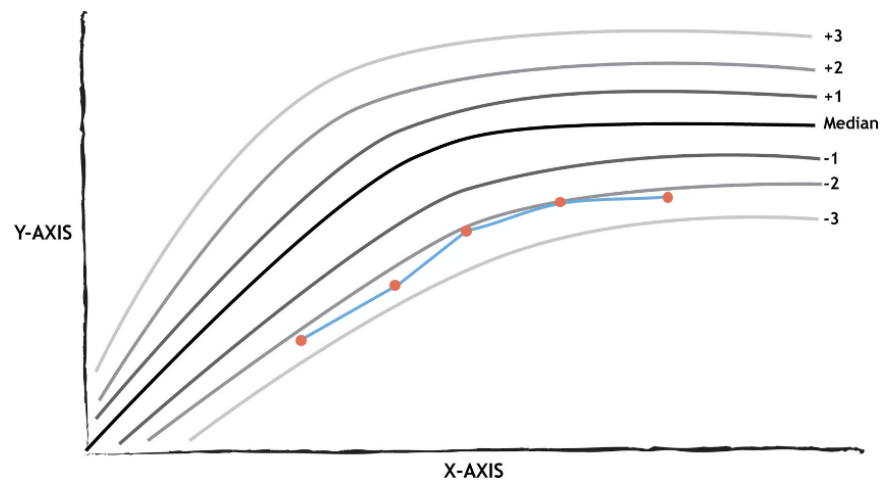
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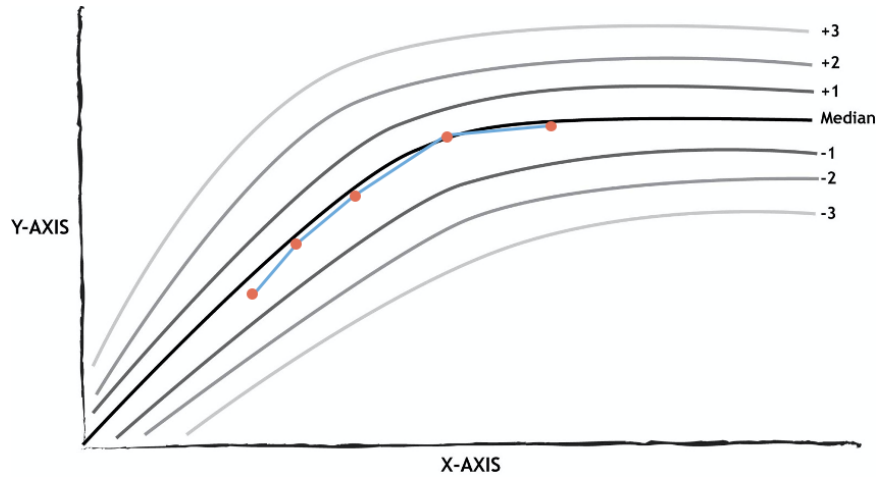
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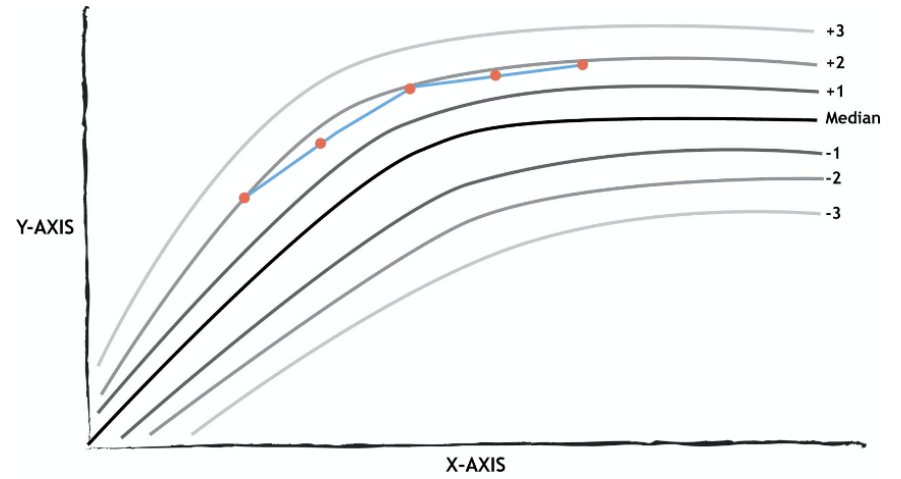
4



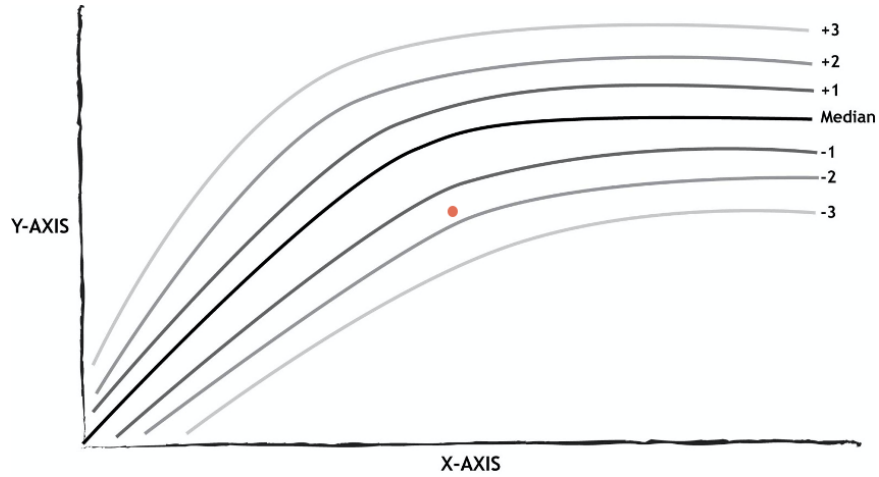
5



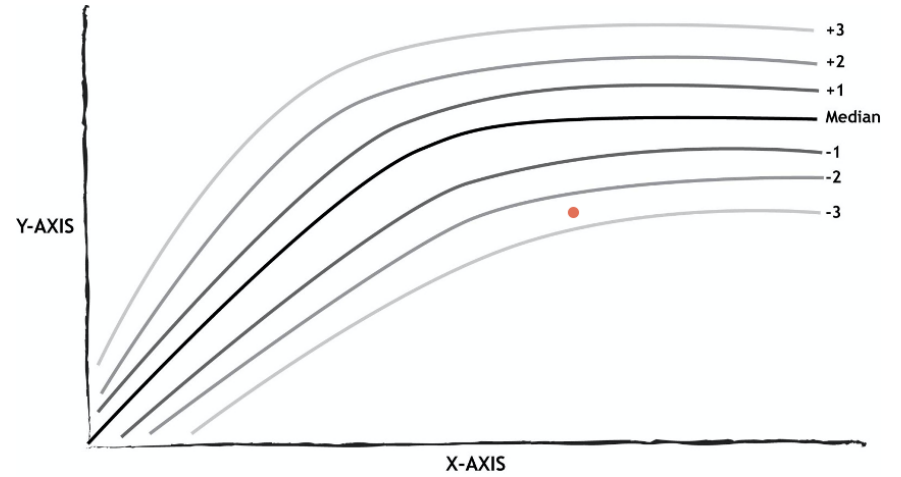
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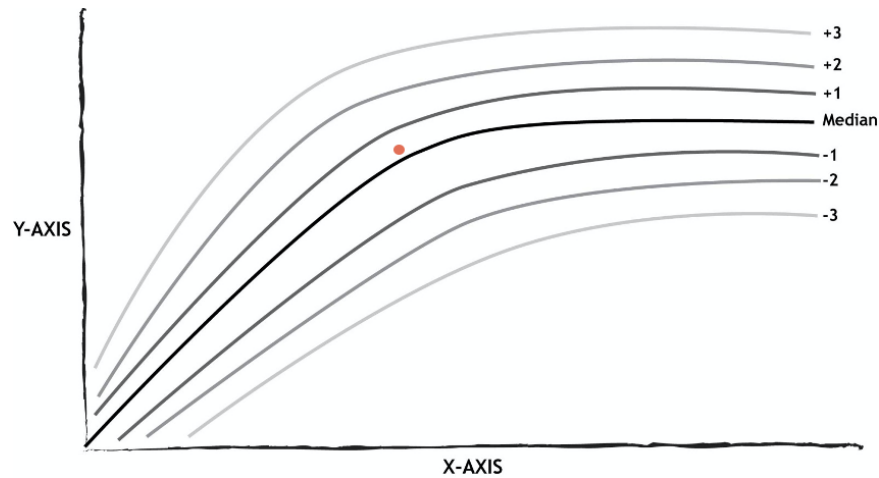
7



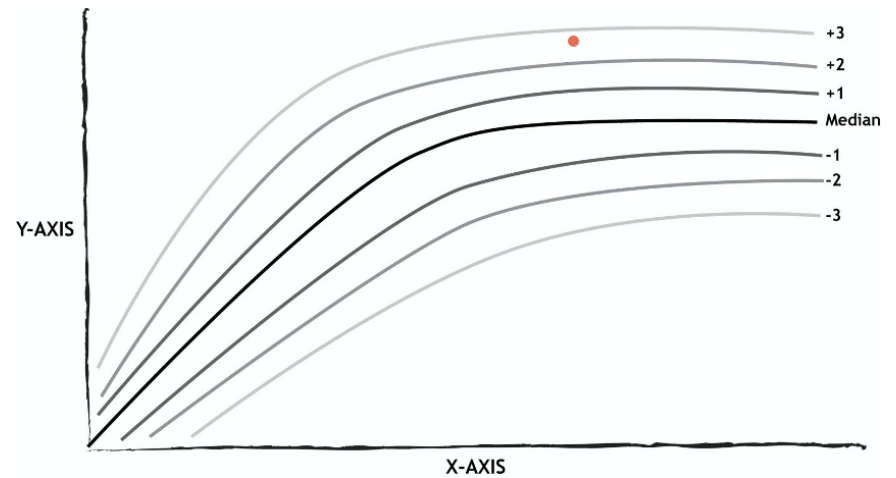
8



9



10



A

The child is growing at a faster rate than what is expected for age and sex. This may indicate catch-up growth. It is concerning, however, when it applies to head circumference.

B

The child is losing weight. This generally takes place due to a severe bout of illness or undernourishment. This growth pattern is always concerning.

C

The child is not growing or is growing at a slower rate than what is expected for age and sex. This growth pattern is generally concerning.

D

The child's growth line is tracking above the median. Even though the growth line is around the +2 z-score, the child is growing consistently at an expected rate for age and sex. This can be concerning if other risk factors are present.

E

The child's growth line is tracking below the median. Even though the growth line is slightly below the -2 z-score line, the child is growing consistently at an expected rate for age and sex. This can be concerning if other risk factors are present.

F

The child's growth line is within the normal z-score range. The child is growing at an expected rate for age and sex. This indicates no concern.



**G**

The child's growth point is above the +2 z-score line. This indicates a possible growth concern and requires attention.

**H**

The child's growth point is below the -2 z-score line. This indicates a possible growth concern and requires attention.

**I**

The child's growth point is close to the median, indicating no concern.

**J**

The child's growth point is below the median but is considered to be in the normal range. This can be concerning if other risk factors are present.

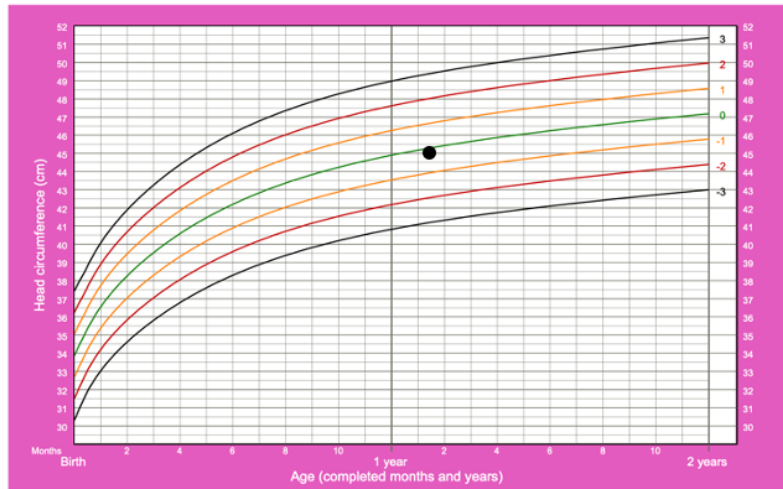
## Interpreting Growth Scenarios

Answer questions about each growth chart and identify what growth concerns, if any, are apparent.  
There is one correct answer per question.

### Scenario 1

#### Head circumference-for-age GIRLS

Birth to 2 years (z-scores)



WHO Child Growth Standards

Sex:  Boy  Girl

Age:  Older than 1 year  Younger than 1 year

The growth point indicates \_\_\_\_\_.

- microcephaly
- hydrocephaly
- a head circumference normal for age
- a head growing at a normal rate

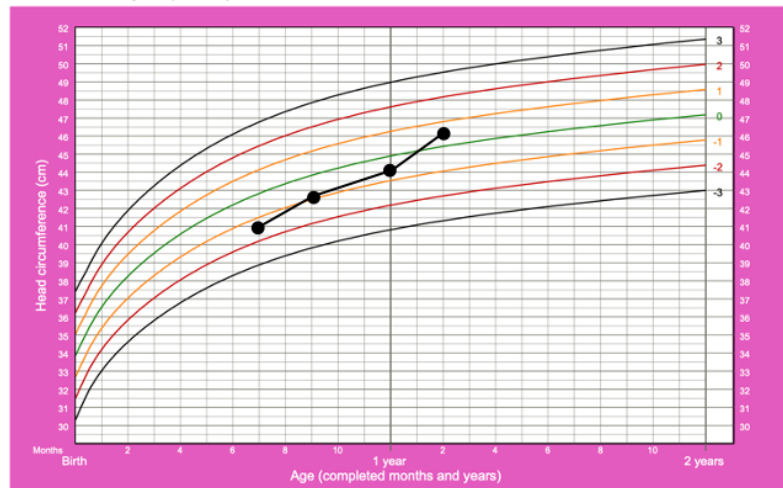
Do we need to measure the head circumference on the next visit?

- No, because we did not identify any concerns
- Yes, because we need to establish a growth pattern

### Scenario 2

#### Head circumference-for-age GIRLS

Birth to 2 years (z-scores)



WHO Child Growth Standards

Sex:  Boy  Girl

Age:  Younger than 2 years  Older than 2 years

The growth chart shows head circumference measurements for \_\_\_\_\_ visits.

- 3  4  5

Based on the last visit, you notice that the head size has experienced a \_\_\_\_\_.

- normal growth  sharp incline  sharp decline  flat growth

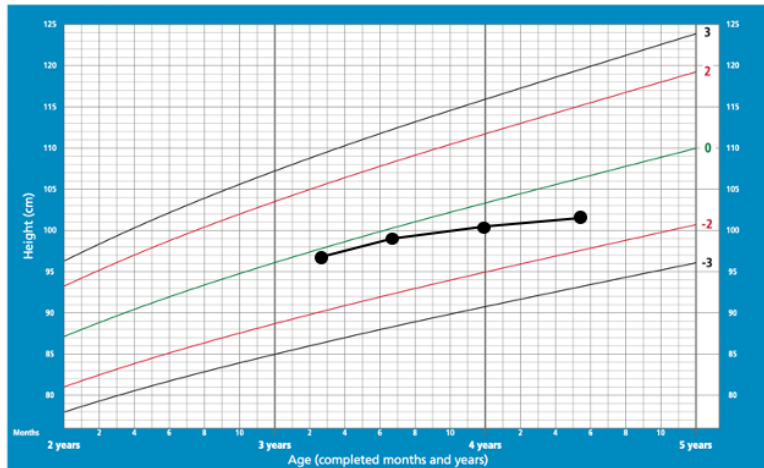
Judging from the growth pattern, you conclude that the head size is growing \_\_\_\_\_.

- slower than is expected for age and requires further evaluation
- faster than is expected for age and requires further evaluation
- at a normal rate for age and is not of concern

### Scenario 3

#### Height-for-age BOYS

2 to 5 years (z-scores)



WHO Child Growth Standards

Sex:  Boy  Girl

Age:  Older than 5 years  Younger than 2 years  Younger than 5 years

This child has height measured \_\_\_\_ times.

3  4  5  6

Judging from the growth pattern, you conclude that the child is experiencing a \_\_\_\_\_.

normal growth  sharp incline  sharp decline  flat growth

As of the last visit, has the child become stunted?

No, because the child is still above the -2 z-score

Yes, because the child is below the median

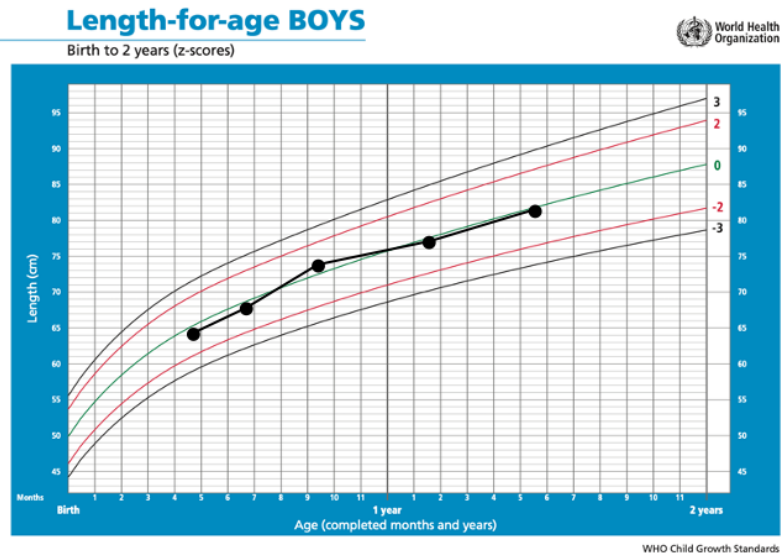
What do you recommend for next steps?

Refer child to a program for the management of acute malnutrition

Investigate the cause of poor growth and review other growth charts

Measure child again in six months

## Scenario 4



Sex:  Boy  Girl

Age:  Older than 2 years  Younger than 2 years

This child has his length measured \_\_\_\_\_ times.

3  4  5  6

Judging from the growth pattern, you conclude that the child \_\_\_\_\_.

- is growing consistently and well
- has experienced concerning rapid growth on his third visit
- has experienced concerning slow growth on his fourth visit

What other growth charts should you review?

- head circumference-for-age and BMI-for-age
- head circumference-for-age and weight-for-length
- weight-for-age and weight-for-height

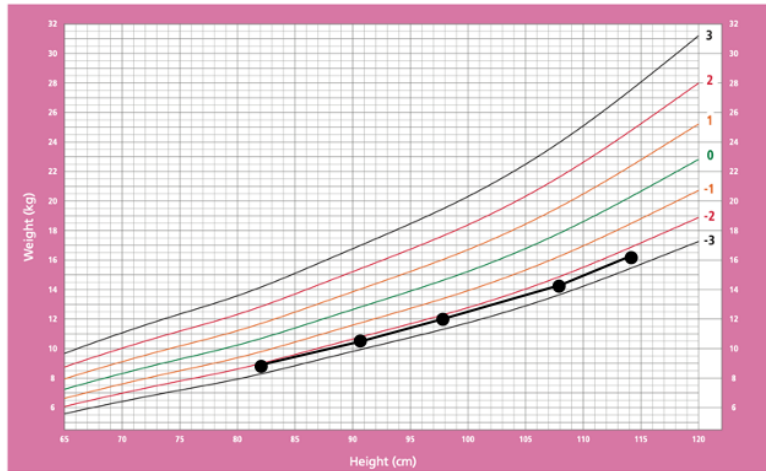
An appropriate recommendation for this child is to continue proper nutrition and care and measure again in one month.

True  False

## Scenario 5

### Weight-for-Height GIRLS

2 to 5 years (z-scores)



WHO Child Growth Standards

Sex:  Boy  Girl

Age:  Older than 5 years  Younger than 2 years  Between 2 and 5 years

What measurements is this growth chart showing?

Weight and length  Weight and height  Weight and age

This child was weighed and measured \_\_\_\_ times.

3  4  5  6

Judging from the growth pattern, you conclude that the child

- \_\_\_\_\_.
- is growing in height but not weight
  - is growing in weight but not height
  - is growing in both weight and height

The growth pattern shows a \_\_\_\_\_.

normal trend  sharp incline  sharp decline  flat growth

Even though this child's growth line tracks below the -2 z-score, the child is growing consistently and well.  True  False

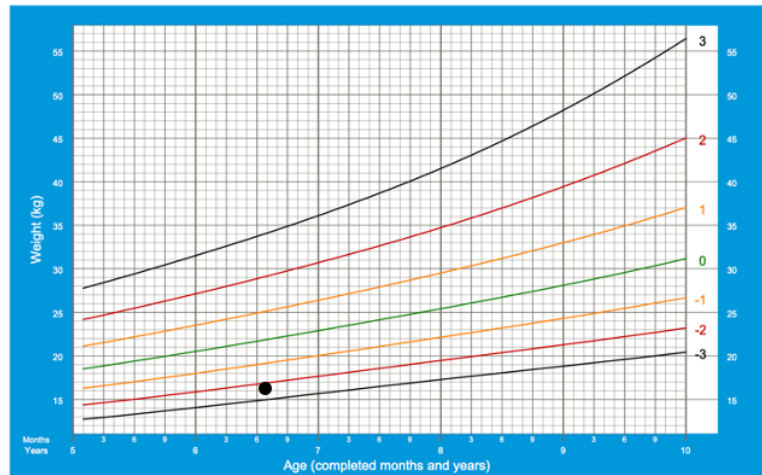
An appropriate step for this child is to \_\_\_\_\_.

- learn about the child's overall health and food intake
- refer the child to an in-patient program for the management of acute malnutrition

## Scenario 6

### Weight-for-age BOYS

5 to 10 years (z-scores)



Sex:  Boy  Girl

Age:  Older than 5 years  Younger than 5 years  Older than 10 years

How does this child's weight-for-age compare to the median?

- It is above the median
- It is at the median
- It is below the median

Judging from the plotted point, you consider this child

- \_\_\_\_\_.
- stunted
  - wasted
  - underweight

This child is underweight because the child is likely \_\_\_\_\_.

- short and/or thin
- short only
- thin only

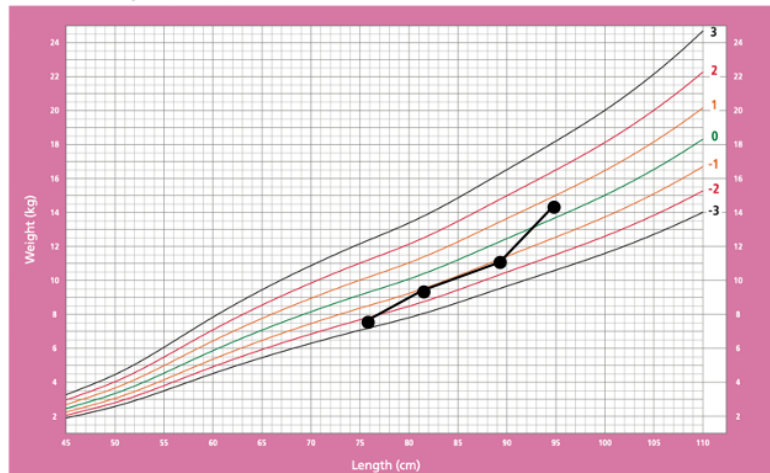
Another growth chart you recommend reviewing is the child's

- \_\_\_\_\_.
- height-for-age
  - length-for-age
  - head circumference-for-age

## Scenario 7

### Weight-for-length GIRLS

Birth to 2 years (z-scores)



WHO Child Growth Standards

Sex:  Boy  Girl

Age:  Older than 2 years  Younger than 2 years

This child was weighed and measured during \_\_\_\_ visits.

3  4  5  6

Judging from the growth pattern, you conclude that the child

- \_\_\_\_\_.
- is growing in length but not weight
  - is growing in weight but not length
  - is growing in both weight and length

The growth pattern shows a \_\_\_\_\_.

- typical growth rate indicating normal trend
- sharp incline indicating catch-up growth
- sharp decline indicating risk for overweight

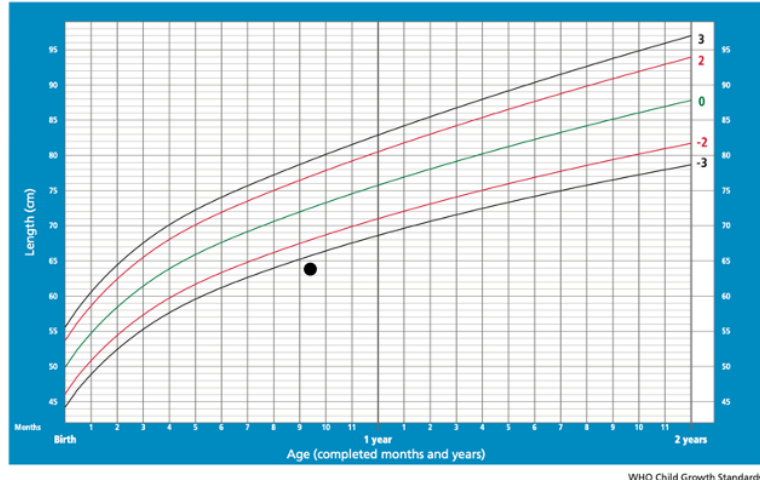
Should we refer this child to a program for the management of acute malnutrition?

- No, the child is responding well to interventions and is already catching up
- Yes, we do not want the child to become malnourished again

## Scenario 8

### Length-for-age BOYS

Birth to 2 years (z-scores)



Sex:  Boy  Girl

Age:  Older than 1 year  Younger than 1 year

**How does this child's length compare to that of other children of the same age?**

- The child has the same length as most children
- The child is taller than most children
- The child is shorter than most children

**Judging from the plotted point, does this child seem to have any growth concerns?**

- No, this child does not have growth concerns
- Yes, this child is stunted
- Yes, this child is underweight

**Is it possible to reverse stunting in this child?**

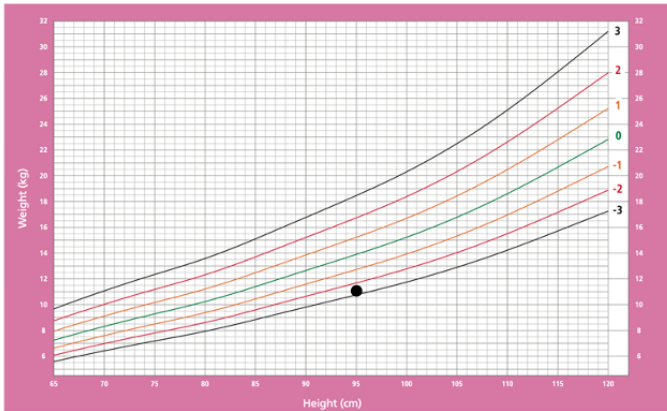
- Yes, because the child is younger than 2 years of age
- No, because the child is too old to be able to catch-up



## Scenario 9

### Weight-for-Height GIRLS

2 to 5 years (z-scores)



WHO Child Growth Standards

Sex:  Boy  Girl

Age:  Older than 5 years  Younger than 2 years  Between 2 and 5 years

Between which z-score lines is this child's weight-for-height z-score?

- Between the -2 and -3 z-score lines
- Below the -3 z-score line
- Between the -1 and the -2 z-score lines

Judging from the plotted point, you consider this child

- \_\_\_\_\_\*
- stunted
  - wasted
  - underweight

You learn that the child's height is normal for age. Based on the child's plotted weight-for-height, you suspect that this child has experienced poor nutrition over a \_\_\_\_\_ period of time.

- long
- short

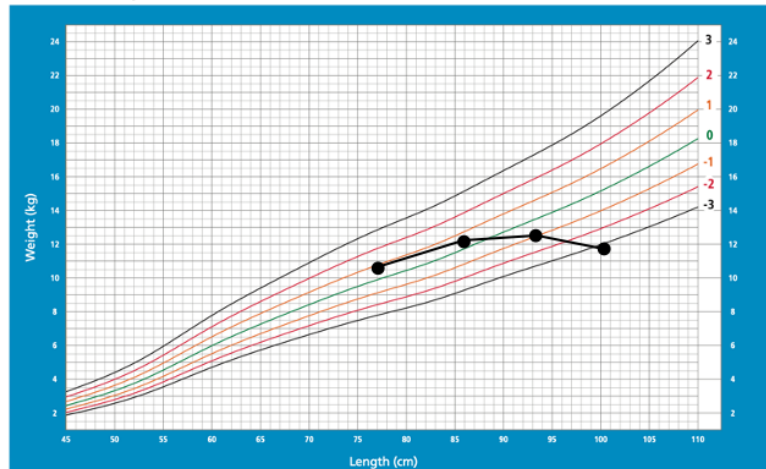
Is it possible to reverse wasting for this child?

- Yes, only with proper nutrition and care
- No, because the child is too old to be able to catch up

## Scenario 10

### Weight-for-length BOYS

Birth to 2 years (z-scores)



WHO Child Growth Standards

Sex:  Boy  Girl

Age:  Older than 2 years  Younger than 2 years

This child has his weight and length measured \_\_\_\_ times.

3  4  5  6

Judging from the growth pattern, you conclude that the child

- \_\_\_\_\_.
- is growing in weight and length
  - has lost weight but is growing in length
  - is growing in weight but not length

As of his last visit, the child is considered \_\_\_\_\_.

stunted  wasted  underweight

An appropriate recommendation for this child is to \_\_\_\_\_.

- refer him to a health facility for further evaluation and management of acute malnutrition
- continue proper nutrition and care and measure again in one month

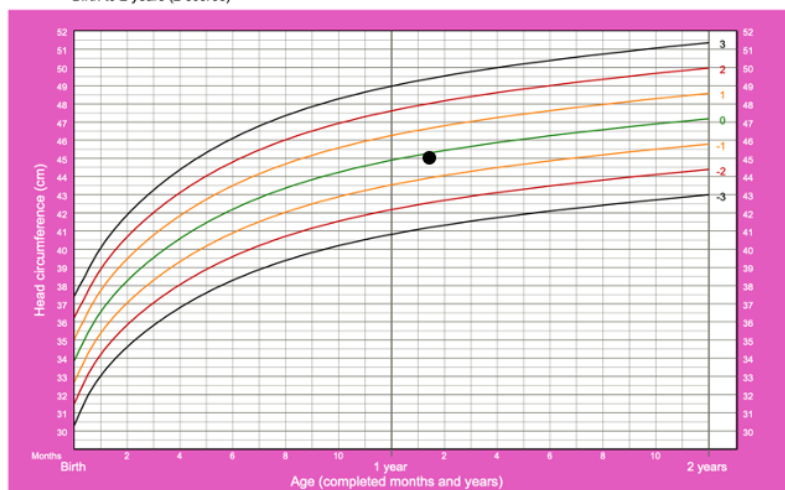
## Interpreting Growth Scenarios

Answer questions about each growth chart and identify what growth concerns, if any, are apparent.  
There is one correct answer per question.

### Scenario 1

#### Head circumference-for-age GIRLS

Birth to 2 years (z-scores)



WHO Child Growth Standards

Sex:  Boy  Girl

Age:  Older than 1 year  Younger than 1 year

The growth point indicates \_\_\_\_\_.

- microcephaly
- hydrocephaly
- a head circumference normal for age
- a head growing at a normal rate

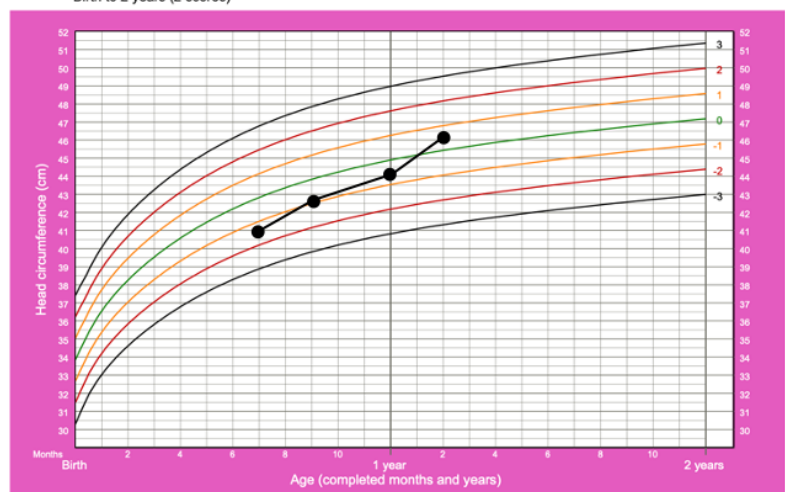
Do we need to measure the head circumference on the next visit?

- No, because we did not identify any concerns
- Yes, because we need to establish a growth pattern

### Scenario 2

#### Head circumference-for-age GIRLS

Birth to 2 years (z-scores)



WHO Child Growth Standards

Sex:  Boy  Girl

Age:  Younger than 2 years  Older than 2 years

The growth chart shows head circumference measurements for \_\_\_\_\_ visits.

- 3
- 4
- 5

Based on the last visit, you notice that the head size has experienced a \_\_\_\_\_.

- normal growth
- sharp incline
- sharp decline
- flat growth

Judging from the growth pattern, you conclude that the head size is growing \_\_\_\_\_.

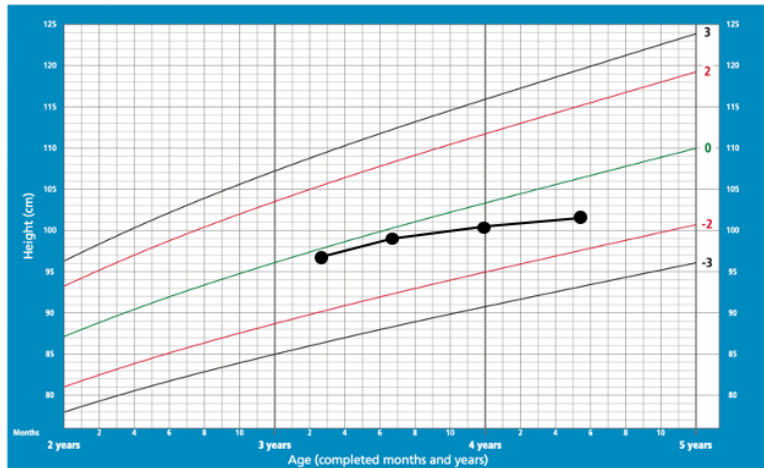
- slower than is expected for age and requires further evaluation
- faster than is expected for age and requires further evaluation
- at a normal rate for age and is not of concern



### Scenario 3

#### Height-for-age BOYS

2 to 5 years (z-scores)



WHO Child Growth Standards

Sex:  Boy  Girl

Age:  Older than 5 years  Younger than 2 years  Younger than 5 years

This child has height measured \_\_\_\_ times.

3  4  5  6

Judging from the growth pattern, you conclude that the child is experiencing a \_\_\_\_\_.

normal growth  sharp incline  sharp decline  flat growth

As of the last visit, has the child become stunted?

No, because the child is still above the -2 z-score  
 Yes, because the child is below the median

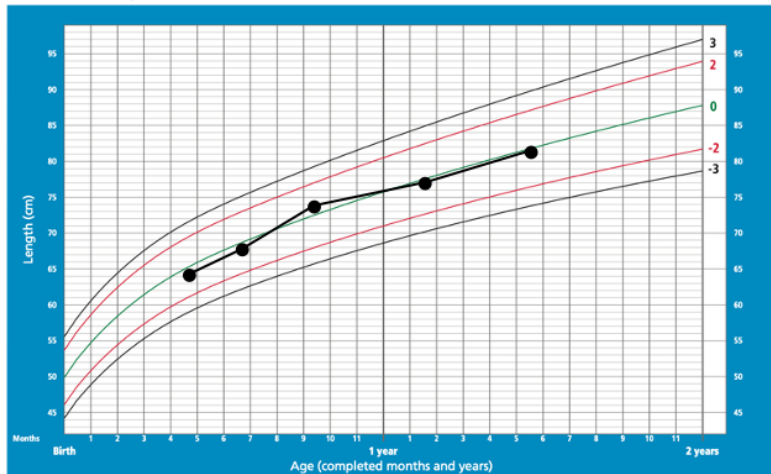
What do you recommend for next steps?

Refer child to a program for the management of acute malnutrition  
 Investigate the cause of poor growth and review other growth charts  
 Measure child again in six months

## Scenario 4

### Length-for-age BOYS

Birth to 2 years (z-scores)



WHO Child Growth Standards

Sex:  Boy  Girl

Age:  Older than 2 years  Younger than 2 years

This child has his length measured \_\_\_\_ times.

3  4  5  6

Judging from the growth pattern, you conclude that the child

- \_\_\_\_\_.
- is growing consistently and well
  - has experienced concerning rapid growth on his third visit
  - has experienced concerning slow growth on his fourth visit

What other growth charts should you review?

- head circumference-for-age and BMI-for-age
- head circumference-for-age and weight-for-length
- weight-for-age and weight-for-height

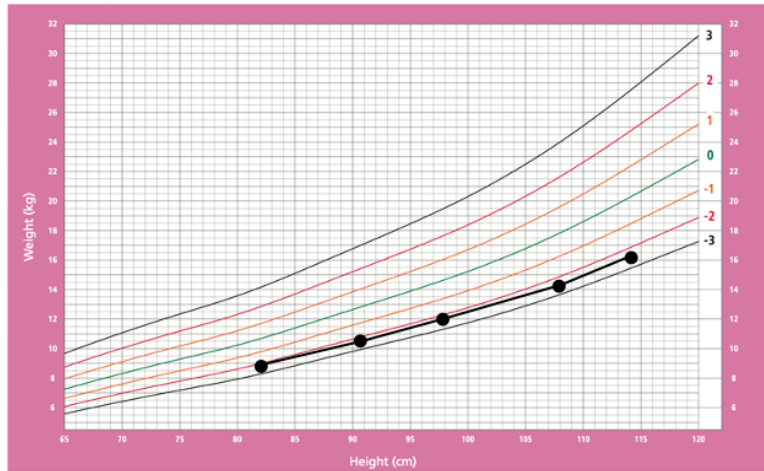
An appropriate recommendation for this child is to continue proper nutrition and care and measure again in one month.

True  False

## Scenario 5

### Weight-for-Height GIRLS

2 to 5 years (z-scores)



WHO Child Growth Standards

Sex:  Boy  Girl

Age:  Older than 5 years  Younger than 2 years  Between 2 and 5 years

What measurements is this growth chart showing?

Weight and length  Weight and height  Weight and age

This child was weighed and measured \_\_\_\_ times.

3  4  5  6

Judging from the growth pattern, you conclude that the child

- \_\_\_\_\_.
- is growing in height but not weight
  - is growing in weight but not height
  - is growing in both weight and height

The growth pattern shows a \_\_\_\_\_.

normal trend  sharp incline  sharp decline  flat growth

Even though this child's growth line tracks below the -2 z-score, the child is growing consistently and well.  True  False

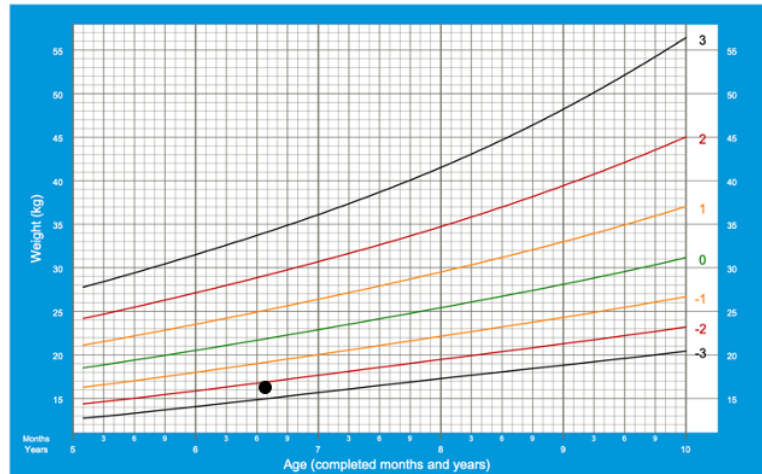
An appropriate step for this child is to \_\_\_\_\_.

- learn about the child's overall health and food intake
- refer the child to an in-patient program for the management of acute malnutrition

## Scenario 6

### Weight-for-age BOYS

5 to 10 years (z-scores)



2007 WHO Reference

Sex:  Boy  Girl

Age:  Older than 5 years  Younger than 5 years  Older than 10 years

How does this child's weight-for-age compare to the median?

- It is above the median  
 It is at the median  
 It is below the median

Judging from the plotted point, you consider this child

- stunted  wasted  underweight

This child is underweight because the child is likely \_\_\_\_\_.

- short and/or thin  short only  thin only

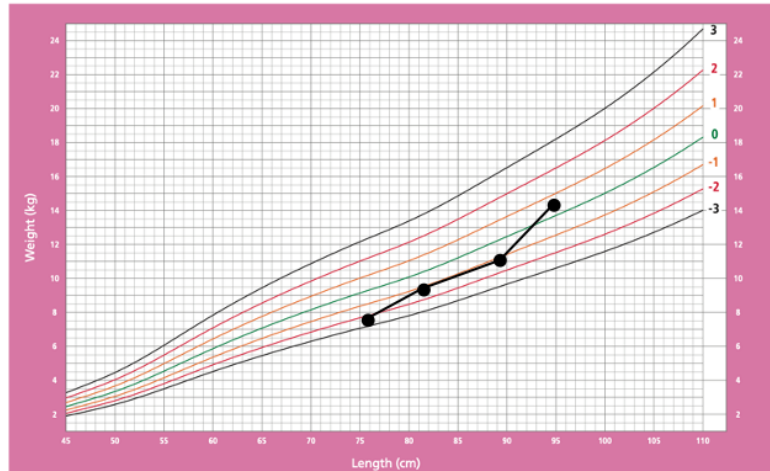
Another growth chart you recommend reviewing is the child's

- height-for-age  length-for-age  head circumference-for-age

## Scenario 7

### Weight-for-length GIRLS

Birth to 2 years (z-scores)



WHO Child Growth Standards

Sex:  Boy  Girl

Age:  Older than 2 years  Younger than 2 years

This child was weighed and measured during \_\_\_\_ visits.

3  4  5  6

Judging from the growth pattern, you conclude that the child

- \_\_\_\_\_.
- is growing in length but not weight
  - is growing in weight but not length
  - is growing in both weight and length

The growth pattern shows a \_\_\_\_\_.

- typical growth rate indicating normal trend
- sharp incline indicating catch-up growth
- sharp decline indicating risk for overweight

Should we refer this child to a program for the management of acute malnutrition?

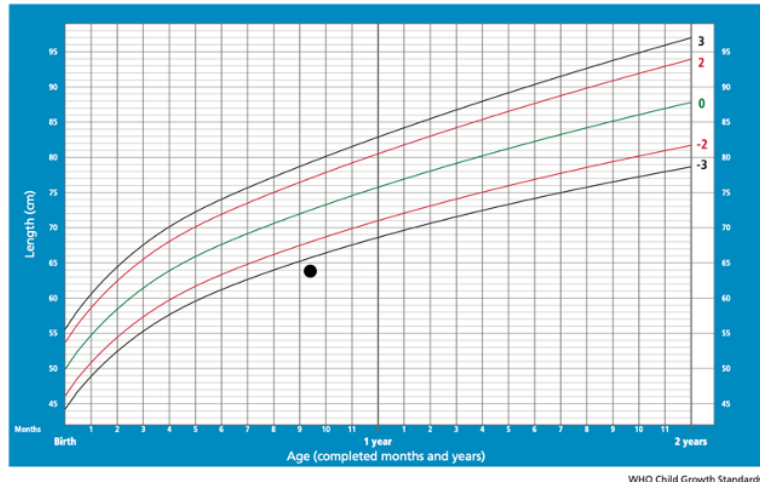
- No, the child is responding well to interventions and is already catching up
- Yes, we do not want the child to become malnourished again



## Scenario 8

### Length-for-age BOYS

Birth to 2 years (z-scores)



WHO Child Growth Standards

Sex:  Boy  Girl

Age:  Older than 1 year  Younger than 1 year

How does this child's length compare to that of other children of the same age?

- The child has the same length as most children
- The child is taller than most children
- The child is shorter than most children

Judging from the plotted point, does this child seem to have any growth concerns?

- No, this child does not have growth concerns
- Yes, this child is stunted
- Yes, this child is underweight

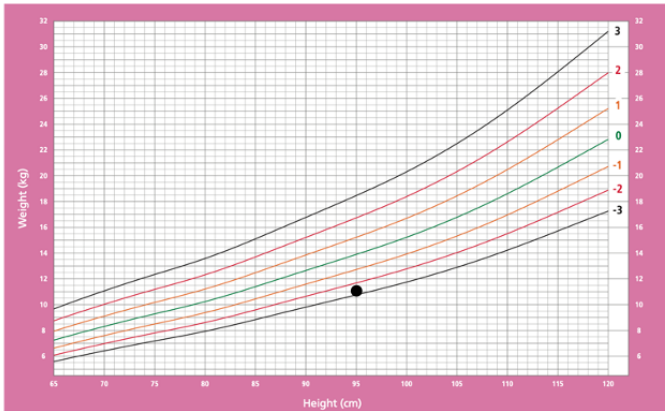
Is it possible to reverse stunting in this child?

- Yes, because the child is younger than 2 years of age
- No, because the child is too old to be able to catch-up

## Scenario 9

### Weight-for-Height GIRLS

2 to 5 years (z-scores)



WHO Child Growth Standards

Sex:  Boy  Girl

Age:  Older than 5 years  Younger than 2 years  Between 2 and 5 years

Between which z-score lines is this child's weight-for-height z-score?

- Between the -2 and -3 z-score lines  
 Below the -3 z-score line  
 Between the -1 and the -2 z-score lines

Judging from the plotted point, you consider this child

stunted  wasted  underweight

You learn that the child's height is normal for age. Based on the child's plotted weight-for-height, you suspect that this child has experienced poor nutrition over a \_\_\_\_\_ period of time.

long  short

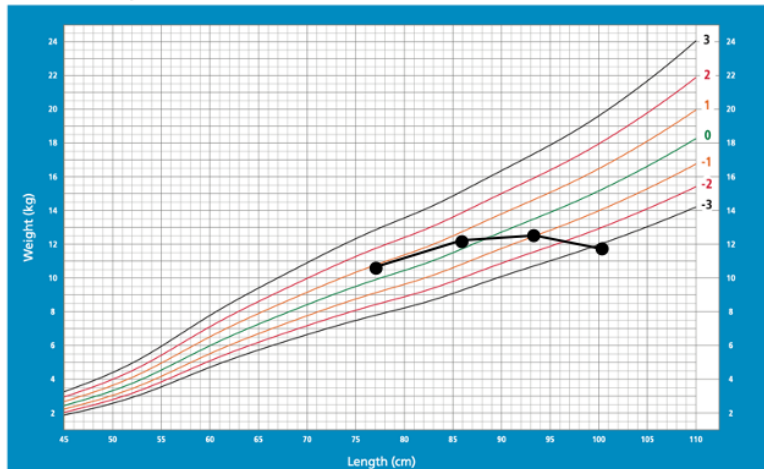
Is it possible to reverse wasting for this child?

- Yes, only with proper nutrition and care  
 No, because the child is too old to be able to catch up

## Scenario 10

### Weight-for-length BOYS

Birth to 2 years (z-scores)



WHO Child Growth Standards

Sex:  Boy  Girl

Age:  Older than 2 years  Younger than 2 years

This child has his weight and length measured \_\_\_\_\_ times.

3  4  5  6

Judging from the growth pattern, you conclude that the child \_\_\_\_\_.

- is growing in weight and length
- has lost weight but is growing in length
- is growing in weight but not length

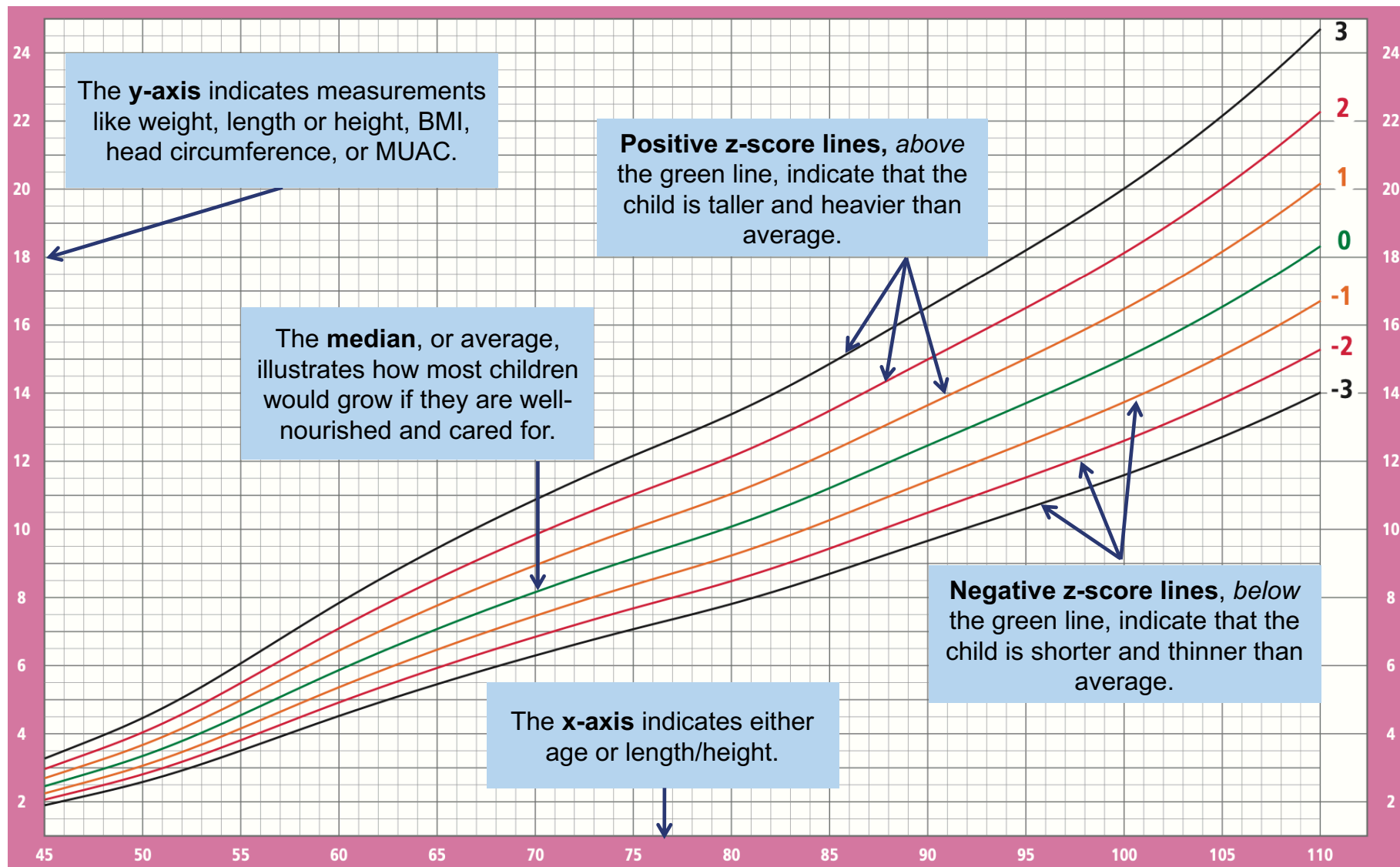
As of his last visit, the child is considered \_\_\_\_\_.

stunted  wasted  underweight

An appropriate recommendation for this child is to \_\_\_\_\_.

- refer him to a health facility for further evaluation and management of acute malnutrition
- continue proper nutrition and care and measure again in one month

# Understanding Growth Charts



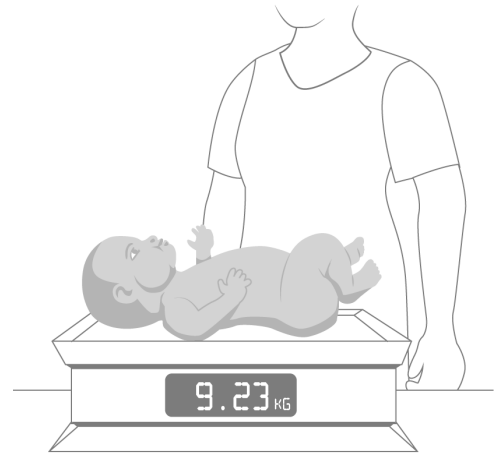
# How to measure weight for children younger than 2 years

## You need

- An electronic baby scale
- A soft towel or disposable paper (*optional*)

## Follow these steps

1. Place the scale on a flat, hard surface.
2. Turn the scale on.
3. Make sure the scale is set to kg.
4. Make sure the scale reads zero before using.
5. Remove child's clothing and, if appropriate, the diaper.
6. Lay the child at the center of the scale.
7. Read the weight off the display and record the value to the nearest 0.01 kg (e.g., 9.23 kg).



## Tips

- If a baby scale is not available, use a standing scale and follow the steps for “Standing weight for children unable to stand.”
- To keep scale clean and make the baby more comfortable, place a soft towel or smooth disposable paper on the scale before you turn the scale on.
- Make sure the child is not touching anything nearby.
- Do not touch the child while taking the weight measurement.
- If the diaper is not removed, make sure it is dry.
- Do not weigh children right after feeding.

### Remember to...

- Sanitize your hands before and after measuring children.
- Sanitize equipment after use.
- Store equipment in a dry place.

# How to measure weight for children 2 years and older able to stand alone

## You need

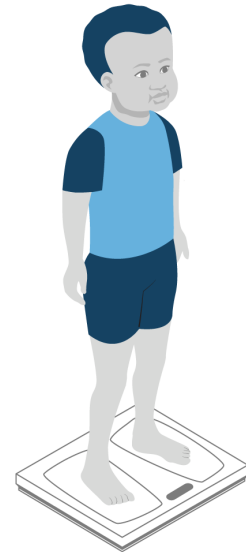
- An electronic standing scale

## Follow these steps

1. Place the scale on a flat, hard surface.
2. Turn the scale on.
3. Make sure the scale is set to kg.
4. Make sure the scale reads zero before using.
5. Remove child's shoes and heavy clothes.
6. Ask the child to stand in the center of the scale.
7. Read the weight on the display, and record the value to the nearest 0.01 kg (e.g., 14.22 kg).

## Tips

- Make sure the child is not touching anything nearby.
- Do not touch the child while measuring weight.
- Make sure the child can stand without support.



## Remember to...

- Sanitize your hands before and after measuring children.
- Sanitize equipment after use.
- Store equipment in a dry place.

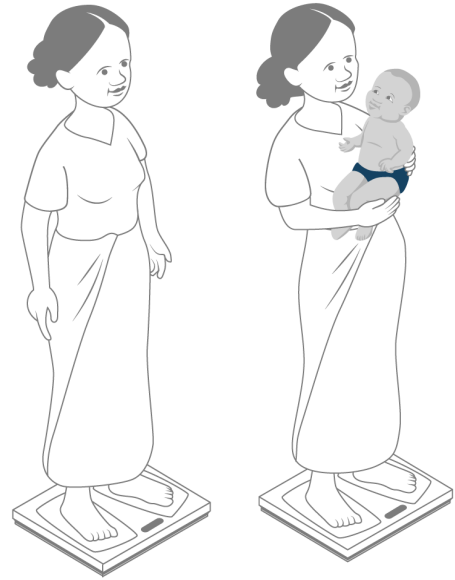
# How to measure weight for children 2 years and older unable to stand alone

## You need

- An electronic standing scale
- An assistant

## Follow these steps

1. Place the scale on a flat, hard surface.
2. Turn the scale on with no load on the scale.
3. Make sure the scale is set to kg.
4. Make sure the scale reads zero before using.
5. Remove the child's shoes and heavy clothes.
6. Ask the assistant to stand on the center of the scale.
7. Set the scale to zero by pressing the "Tare" or "Zero" button on the scale.
8. Hand the child to the assistant to be held.
9. Read the weight on the display, and record the value to the nearest 0.01 kg (e.g., 14.22 kg).



## Tips

- Do not touch the child or assistant while measuring weight.
- Make sure the assistant and the child are not touching anything around them.
- If the "Tare" function is not available on the standing scale, calculate the child's weight by subtracting the weight of the assistant from the weight of the assistant carrying the child:  $\text{Child's weight} = \text{the weight of the assistant with the child} - \text{the weight of the assistant}$ .
- Children older than 2 years who are small in size and unable to stand can be weighed using a baby scale.

### Remember to...

- Sanitize your hands before and after measuring children.
- Sanitize equipment after use.
- Store equipment in a dry place.

# How to Measure Length

## Measure length for

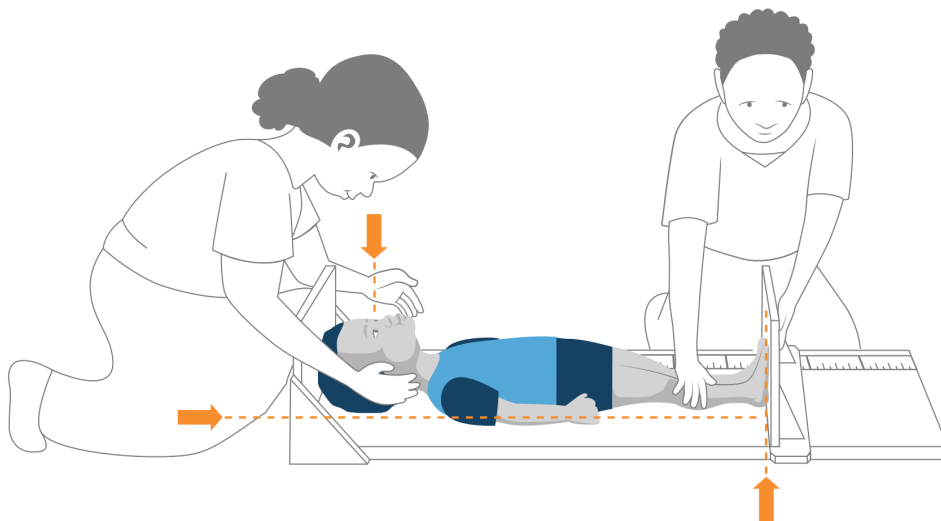
- Children younger than 2 years
- Children 2 years and older unable to stand

## You need

- A length board
- An assistant

## Follow these steps

1. Place length board on a flat surface (floor or a steady table).
2. Remove the child's shoes, hats, and hair ornaments.
3. Lay the child flat and centered on the length mat/board.
4. Stand to the side of the child where the length board numbers show.
5. Ask the assistant to stand behind the headpiece. The assistant's head should be straight over the child's head, looking directly into the child's eyes.
6. Ask the assistant to align the top of the head against the fixed headpiece. The head should be positioned so that the child's line of sight is perpendicular to the base of the board.
7. Straighten the child's legs by placing your hand on the child's shins or knees and pressing them firmly but gently against the board.
8. Adjust the foot piece so that the child's feet are flat against it.
9. Read and record the length value to the nearest 0.1 cm (e.g., 86.4 cm).



## Tips

- If you are standing to the right of the child, hold the child's shins or knees with the left hand and the foot piece with the right hand.
- The person standing to the side of the child, not the assistant, should be the one reading the measurement.



- The head and the foot pieces should press firmly against the child's head and feet, respectively.
- Before reading the measurement, make sure all of the child's body parts are properly positioned.
- Do not measure length using a measuring tape or ruler taped to a baby scale or floor.
- Do not use the length board on children older than 2 years who are unable to stand if they are longer than the board.
- If you measure recumbent length for a child 2 years and older, subtract 0.7 cm from the length value to convert it to height.

**Remember to...**

- Sanitize your hands before and after measuring children.
- Sanitize equipment after use.
- Store equipment in a dry place.

# How to Measure Height

## Measure height for

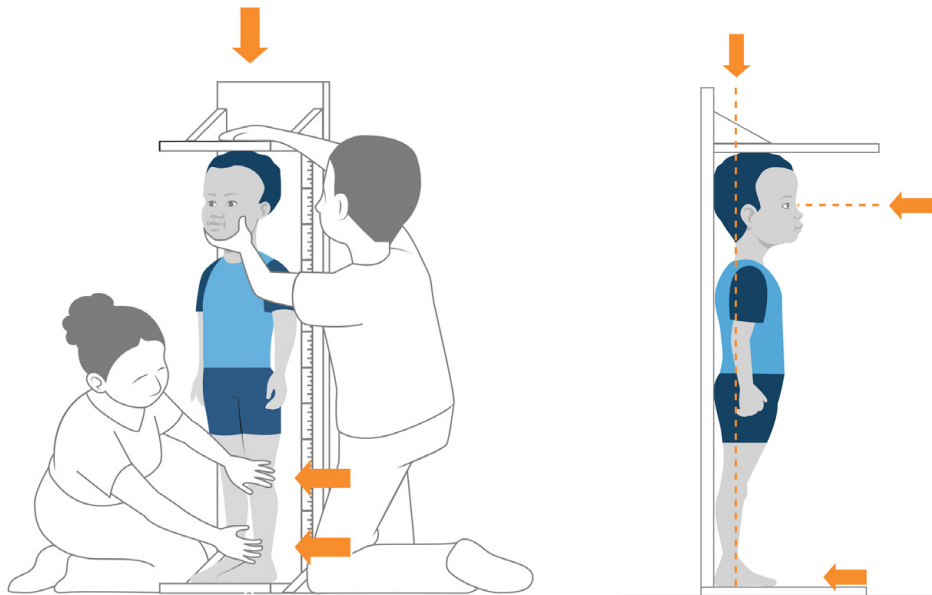
- Children 2 years and older able to stand alone

## You need

- A height board
- An assistant

## Follow these steps

1. If using a height board, place it on a flat floor surface against a wall.
2. Remove the child's shoes, hat and hair ornaments.
3. Ask the child to stand in the center and against the base of the board or wall.
4. Stand or kneel to the side of the child where the height board numbers show.
5. Ask the assistant to kneel on the side opposite from you.
6. Ask the assistant to make sure the child's legs are straight and their heels and calves are against the board or wall.
7. Make sure the child's shoulders are level; their hands are at their side; and their head, shoulder blades and buttocks are against the board/wall.
8. Place your hand under the child's chin and gently close your hand. Do not cover the child's mouth or ears.
9. Ask child to look straight ahead until line of sight (imaginary line through the eyes) is parallel to the ground. Adjust the child's head as needed.
10. Slide the headpiece downwards through the child's hair.
11. Read and record the height value to the nearest 0.1 cm (e.g., 112.8 cm).



## Tips

- If you are standing to the left side of the child, hold the headpiece with the right hand and the child's chin with the left hand.
- The headpiece should press firmly against the child's head pushing through the hair.
- The person lowering the head piece, not the assistant, should be the one reading the measurement.
- Before reading the measurement, make sure all of the child's body parts are properly positioned.
- Do not measure height using a measuring tape or ruler attached to a wall.
- Do not measure height for a child who is unable to independently stand up straight.
- If you measure standing height for a child younger than 2 years, add 0.7 cm to the height value to convert it to length.

### Remember to...

- Sanitize your hands before and after measuring children.
- Sanitize equipment after use.
- Store equipment in a dry place.

# How to Measure Mid-Upper Arm Circumference (MUAC)

## Measure MUAC for

- Children 3 months to 5 years

## You need

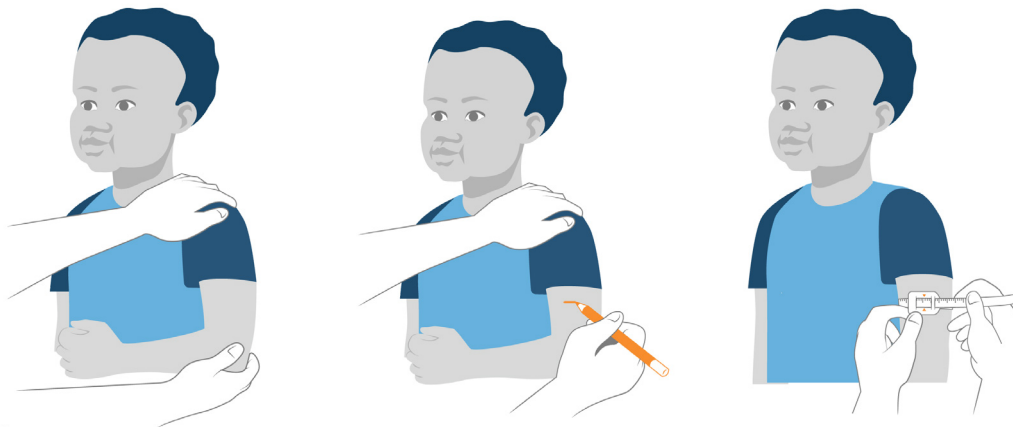
- A non-elastic measuring tape
- An assistant (for infants and young children)

### Remember to...

- Sanitize your hands before and after measuring children.
- Sanitize equipment after use.
- Store equipment in a dry place.

## Follow these steps

1. Sit down, if possible, to work at eye level. Infants and young children can sit in the assistant's lap.
2. Remove any clothing that covers the child's left arm.
3. Find the midpoint of the child's upper arm by following these steps:
  - Locate the tip of the child's shoulder with your fingertips.
  - Bend the child's elbow so the arm makes a right angle.
  - Estimate where the middle of the upper arm is (the upper arm is the section between the shoulder tip and the elbow).
  - Mark this as the midpoint.
4. Straighten the child's arm.
5. Wrap the tape around the child's arm at the midpoint mark you just made.
6. Make sure that the tape is:
  - against the skin and not over any clothing
  - horizontal around the child's arm
  - not too tight (the band is too tight if the skin bunches up)
  - not too loose (the band is too loose if you can fit a pencil under it).
7. Read the measurement and record it to the nearest 0.1 cm (e.g., 14.2 cm).



## Tips

- Use a measuring tape that cannot be stretched (non-elastic).
- If using the special insertion tapes, insert the end of the band through the thin opening at the other end of the band.

# How to Measure Head Size

## Measure head size for

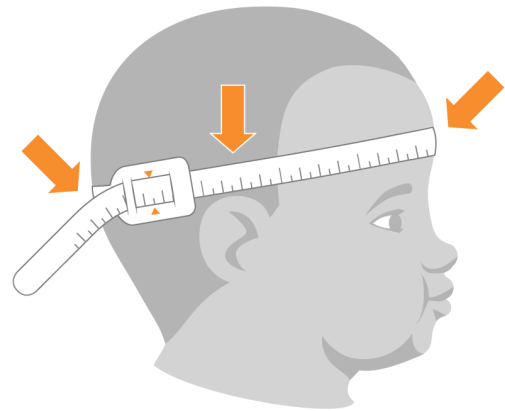
- Children younger than 5 years

## You need

- A non-elastic measuring tape
- An assistant (for infants and young children)

## Follow these steps

1. Ask the child to sit on a chair. Infants and young children can sit in the assistant's lap.
2. Remove hair ornaments and hat, if any.
3. With your fingers, feel for a bump in the back of the head and position the tape over the bump.
4. Ask the assistant to hold the tape in place over the bump.
5. Wrap the tape tightly around the head making sure to position it over the most prominent part of the forehead (often 1-2 fingers above the eyebrow).
6. Secure the tape using both hands and gently tug on it by moving your left hand to the left and right hand to the right.
7. Read the head size measurement and record it to the nearest 0.1 cm (e.g., 43.2 cm).



## Tips

- Use a measuring tape that cannot be stretched (non-elastic).
- Always measure the widest possible circumference of a child's head.
- Make sure the tape does not cover the child's ears.

### Remember to...

- Sanitize your hands before and after measuring children.
- Sanitize equipment after use.
- Store equipment in a dry place.

# Weight-for-length GIRLS

Birth to 2 years (z-scores)



WHO Child Growth Standards

## Counseling Caregivers Role Play

Using knowledge from the training and a scenario below, role play a counseling session. One participant will be the Feeding and Nutrition Counselor and will apply the steps to counseling. Another, playing the caregiver, will demonstrate a challenging attitude throughout the role play.

### SCENARIO 1

Christopher, a 7-month-old, has been recovering well from his cleft repair surgery that took place last month. He just started to eat plain maize porridge. In addition, he has been receiving cow's milk.

You have just completed his growth assessment and identified that he is experiencing poor growth. He is still recovering from his surgery and may not be receiving enough calories and nutrients from his diet.

This is a critical time for Christopher because he is healing from surgery and he is at an age where he is growing rapidly and may not be receiving enough food to keep up with his body's demands.

### Feeding and Nutrition Counselor

Counsel Christopher's mother about his growth and provide recommendations to improve his diet by including nutrient-dense complementary foods.

Think about strategies for:

- promoting intake nutrient-dense complementary foods high in protein
- addressing the intake of cow's milk
- enriching the porridge with foods for growth, energy, and protection

### Caregiver Attitude

Resistant to change. Caregiver may understand that there is a challenge, but does not want to change practices or behaviors.

## SCENARIO 2

Ruth is 1-month old infant with bilateral cleft lip and palate. After completing an assessment, you are concerned about her risk for poor growth.

Her mother shares that she has been having trouble with breastfeeding and is growing frustrated with how difficult it is for Ruth and how long it takes.

### Feeding and Nutrition Counselor

Counsel Ruth's mother about her concerning growth and provide recommendations to support improved breastfeeding.

Use strategies to support breastfeeding for infants with cleft lip and/or palate including:

- Feed often—at least every 2 hours.
- Sit upright and position infant upright.
- For bilateral cleft: position infant upright, face-to-face with cleft-modified football hold.
- Burp frequently.

### Caregiver attitude

Too busy to listen and too busy to change behaviors and practices.



## SCENARIO 3

Joseph is a 2-year-old with a cleft palate who is awaiting surgery for repair. You complete a follow-up growth assessment and identify possible concerns.

His mother shares that he eats mashed foods and drinks milk, but recently, he has been having diarrhea.

Developmentally, Joseph is ready to advance the textures of food that he eats, but has not yet been offered the opportunity.

### Feeding and Nutrition Counselor

Counsel Joseph's mother about his growth concerns and provide recommendations to improve his diet including advancing to more appropriate food textures.

Think about strategies for:

- advancing food textures
- addressing nutrient loss caused by diarrhea
- prevention of diarrhea

### Caregiver attitude

Denies there is a problem.

## Next Best Activity

Read the examples of ideal behaviors that might be recommended to a caregiver. Identify at least 1-2 smaller steps the caregiver could take that are “on the way” to the ideal behaviors.

Ideal Behaviors	“On the way” Behaviors
Offer fruits and vegetables that are orange, yellow, red, or dark green at least three times a week.	
Always feed your infant when early hunger cues are observed.	
Offer iron-rich foods like meat, eggs, beans, and nuts at least once every day.	
Wipe your infant’s gums and/or clean teeth with a clean towel after every feeding.	
Offer a food high in protein like meat, eggs, beans, and nuts in every meal.	
Introduce a cup for drinking liquids. Choose one meal or snack to consistently give liquid from a cup every day.	
Offer foods from at least four food groups every day.	

# Steps to Counsel Caregivers

These steps will help you apply strategies to support changing behaviors and establish a path in collaboration with the caregiver toward improved nutrition and feeding practices.

## Ask

*Ask* relevant, open-ended questions to learn about the child and the caregiver.

## Listen

*Listen* and reflect on what you learn.

## Inform

*Inform* caregivers about the challenges that were observed, reported, or identified. Provide the knowledge and skills to educate the caregiver on ideal practices and behaviors.

## Identify

*Identify* potential barriers or obstacles. This includes listening to understand what matters to caregivers.

## Prioritize

*Prioritize* recommendations.

## Recommend

*Recommend* a plan that you have agreed on with the caregiver.

## Clarify

*Clarify* to make sure the caregiver understands and feels comfortable with the actions they will take.

## Follow-up

Make a plan for *follow-up* to check on progress and plan for next steps.