

Combined course on growth assessment and IYCF counselling

**Job-aid:
Investigating causes of malnutrition and food intake 6-23 months**



**World Health
Organization**

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Job-aid: Investigating Causes of Undernutrition

Interview the mother of a child who has **undernutrition** to determine likely causes of the problem, and then counsel the mother on how to address the causes. Also discuss the feeding recommendations for the child's current age group as described in the *Growth Record* or for the next age group if the child will soon enter it.

Use this job aid when a child is:

- **wasted** (below -2 z-score weight-for-length/height or BMI-for-age) or
- **underweight** (below -2 z-score weight-for-age*) or
- **stunted** (below -2 z-score length/height-for-age*) and not overweight, or
- **has a trend toward one of these problems.**

Refer urgently for specialized care any child who:

- is **severely wasted** (below -3 z-score weight-for-length/height or BMI-for-age) or
- has **clinical signs of marasmus or kwashiorkor**, and/or
- has **oedema of both feet.**

Turn this booklet over for
*Job-aid: Investigating
Causes of Overweight*

Page references for age groups:

- Birth to 6 months** – pages **2 & 3** and **10 & 11**
- 6 months to 1 year** – pages **4 & 5** and **10 & 11**
- 1 to 2 years** – pages **6 & 7** and **10 & 11**
- 2 to 5 years** – pages **8 & 9** and **10 & 11**

* Note: In highly undernourished populations, the number of children below -2 z-score in weight-for-age and length/height-for-age will be high, and it may be necessary to consider lower cut-offs for selecting children for counselling.

Baby from Birth to 6 Months of Age

Investigating Causes of Undernutrition

Step 1. Determine whether the baby is currently ill or has a chronic disease that could be a cause of undernutrition.

If yes, →

If no, ↓

Treat the baby's illness, or refer the baby for treatment.

Advise the mother to increase the frequency of breastfeeding and encourage her to maintain exclusive breastfeeding until the baby is 6 months old.

Wait to investigate other possible reasons for undernutrition when the baby returns for follow-up.

Step 2. Explain that there are many possible causes of undernutrition. You are going to ask the mother some questions in order to better understand her baby's situation and, with the mother's help, determine the likely causes of the problem.

Step 3. Ask: Has the baby been breastfeeding (or eating) less than usual? If yes, ask why. Then →

If the child has **not** recently been eating less than usual, been sick or experienced trauma ↓

If the baby has been sick, advise the mother on feeding during illness and recovery. In this age group it means increased frequency of breastfeeding to ensure that the baby receives all the fluids and nutrients that the body needs to recover from the illness and refill nutrient stores.

If the baby has experienced trauma (for example, death of the mother, change in caregiver), understand that this may be a contributing factor to loss of appetite. Assess the situation and decide whether to investigate causes of undernutrition with the person who has brought the child, or to wait until another time. If you will wait, give an appointment for a return visit, or if there is a home follow-up programme, plan a home visit.

Step 4. Ask the questions below about child feeding. Do not give any advice yet.

Listen carefully to the mother's answers and identify any causes of undernutrition, such as not breastfeeding frequently enough, difficulties with breastfeeding technique, early supplementation, replacement of breast milk with poor quality supplements or inadequate replacement feeding.

After asking the questions about feeding for this age group, go on to steps 5–8 (pages 10–11) for all children.

As the final step in the interview (step 8), you will provide advice.



Questions about feeding a baby from birth to 6 months of age For this age group, exclusive breastfeeding is recommended.

Ask:

Advise (in step 8) if causes are identified:

<p>How are you feeding your baby? <i>If breastfeeding, How many times does the baby breastfeed during the day? Do you also breastfeed during the night?</i> <i>If not breastfeeding, see inset box below.</i></p>	<p>Refer to recommendations on page 14 of the <i>Growth Record</i>:</p> <ul style="list-style-type: none"> • Advise the mother to breastfeed as often and for as long as the baby wants, day and night. • If breastfeeding less than 8 times in 24 hours, advise to increase frequency of feeding.
<p>Do you give any other fluids besides breast milk? If yes, why? Do you give the baby any semi-solid or solid foods?</p>	<ul style="list-style-type: none"> • Advise the mother to gradually decrease other fluids and foods and feed only breast milk until the baby is 6 months of age, if she is willing to try and if her situation (at home and at work) permits it. • Build the mother's confidence that she can produce all the breast milk that the baby needs. • Suggest giving more frequent, longer breastfeeds, day and night, and gradually reducing other milk or foods. • For times when the mother must leave the baby, encourage her to express breast milk to be fed to the baby while she is gone. If she is willing, teach her how to express breast milk. Also teach her to use soap and hot (boiled) water to clean the storage container and baby's cup, and how to store the breast milk until it is given to the baby (refrigerate, or keep at room temperature up to 8 hours).
<p>Do you have any problems breastfeeding? If possible, assess breastfeeding:</p> <ul style="list-style-type: none"> – Assess attachment and suckling. – Look for ulcers or white patches in the baby's mouth. 	<ul style="list-style-type: none"> • If not well-attached or not suckling effectively, teach correct positioning and attachment, or refer the mother to a lactation counsellor for breastfeeding assessment and counselling. • If ulcers or white patches are found, treat or refer for treatment.
<p>If the baby is not breastfed, ask:</p> <ul style="list-style-type: none"> • What formula or other milk is given? How much? • How frequently do you feed the baby? • How do you prepare the milk? • What do you use to feed the baby? <p><i>If you judge it to be appropriate, discuss the mother's willingness to attempt relactation.</i></p>	<ul style="list-style-type: none"> • Counsel the mother about: <ul style="list-style-type: none"> – Using an appropriate breast milk substitute. – Ensuring that the other milk is correctly and hygienically prepared and given in adequate amounts. – Finishing prepared milk within an hour. • If a bottle is used to feed the baby: <ul style="list-style-type: none"> – Recommend substituting a cup for the bottle. – Show the mother how to feed the baby with a cup. <p><i>If it is appropriate and mother is willing to attempt relactation, refer her to a lactation counselor.</i></p>

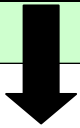
Months of age	Feeds per day	Amount of milk or formula per feed
0 to 1	8	60 ml
1 to 2	7	90 ml
2 to 4	6	120 ml
4 to 6	6	150 ml

Now turn to page 10, step 5, and ask questions about other factors that may contribute to the baby's undernutrition.

Baby Age 6 Months to 1 Year

Investigating Causes of Undernutrition

<p>Step 1. Determine whether the baby is currently ill or has a chronic disease that could be a cause of undernutrition.</p> <p style="text-align: right;">If yes, →</p> <p style="text-align: center;">If no, ↓</p>	<p>Treat the baby's illness, or refer the baby for treatment.</p> <p>Advise the mother to feed the child according to recommendations on page 16-17 of the <i>Growth Record</i>.</p> <p>Wait to investigate other possible reasons for undernutrition when the baby returns for follow-up.</p>
<p>Step 2. Explain that there are many possible causes of undernutrition. You are going to ask the mother some questions in order to better understand her baby's situation and, with the mother's help, determine the likely causes of the problem.</p>	
<p>Step 3. Ask: Has the baby been breastfeeding less or eating less than usual?</p> <p style="text-align: right;">If yes, ask why. Then →</p> <p style="text-align: center;">If the baby has not recently been eating less than usual, been sick or experienced trauma ↓</p>	<p>If the baby has been sick, advise the mother on feeding during illness: Feed the baby according to the recommendations for this age group and also give more fluids (breastfeed more for a breastfed baby). Encourage the child to eat soft, varied, appetizing, favourite foods. After illness, give food more often than usual and encourage the baby to eat more.</p> <p>If the baby has experienced trauma (for example, death of the mother, change in caregiver), understand that this may be a contributing factor to loss of appetite. Assess the situation and decide whether to investigate causes of undernutrition with the person who has brought the baby, or to wait until another time. If you will wait, give an appointment for a return visit, or if there is a home follow-up programme, plan a home visit.</p>
<p>Step 4. Ask the questions about feeding below. Do not give any advice yet.</p> <p>Listen carefully to the mother's answers and identify any causes of undernutrition, such as not feeding the right foods, not feeding enough food, or poor feeding practices.</p> <p>After asking the questions about feeding for this age group, go on to steps 5–8 (pages 10–11) for all children.</p> <p><u>As the final step in the interview (step 8), you will provide advice.</u></p>	



Questions about feeding a baby age 6 months to 1 year

At 6 months of age, all babies should begin to receive complementary foods while continuing to breastfeed.

Ask:

Advise (in step 8) if causes are identified:

<p>Do you breastfeed your baby? If yes, How many times do you breastfeed the baby in 24 hours?</p> <p>Do you give any other fluids besides breast milk? What fluids?</p>	<ul style="list-style-type: none"> • Advise the mother to breastfeed as often as the baby wants. • Advise the mother to select nutrient-dense fluids (such as milk, soups) rather than drinks with low nutrient value (for example, tea, coffee, sugary drinks and dilute sweet juices) that easily fill the baby up without providing many nutrients.
<p>If the baby is fed formula or any other milk, ask:</p> <ul style="list-style-type: none"> • What formula or other milk is given? How much? • How frequently do you feed the baby? • How do you prepare the milk? • What do you use to feed the baby? 	<ul style="list-style-type: none"> • Counsel the mother about: <ul style="list-style-type: none"> – Ensuring that the other milk or food is correctly and hygienically prepared and given in adequate amounts. – Finishing prepared milk within an hour. • If a bottle is used to feed the baby: <ul style="list-style-type: none"> – Recommend substituting a cup for the bottle. – Show the mother how to feed the baby with a cup.
<p>Has the baby begun eating semi-solid or solid foods? If no, → If yes ↓</p>	<p>Advise the mother to begin giving complementary foods, as described on page 16 of the <i>Growth Record</i>. And ↓</p>
<p>What foods does she take?</p> <p>How many meals does she eat each day? How much food does she eat at each meal?</p>	<ul style="list-style-type: none"> • Advise the mother to select nutritious foods, such as those on page 15 of the <i>Growth Record</i>. • Advise giving the serving size and number of meals recommended on pages 16–17 of the <i>Growth Record</i>. By 1 year of age, the child should have 3–4 meals per day plus 1–2 snacks. • Advise on safe food preparation as described on page 20 of the <i>Growth Record</i>.
<p>What do you use to feed the child? Does the child receive her own serving? Who feeds the child and how?</p>	<p>Counsel the mother to follow recommendations for active feeding on page 17 of the <i>Growth Record</i>, for example:</p> <ul style="list-style-type: none"> – Sit with the child and encourage eating. A child in this age group is likely to need to be fed. – Feed the child an adequate serving from a separate plate or bowl.

Minimum recommended amount of milk per day for non-breastfed children 6 to 24 months of age

	Animal milk	Commercial formula
If other animal-source foods are regularly consumed	200–400 ml	300–500 ml
If other animal-source foods are not consumed	300–500 ml	400–550 ml

6 months to 1 year

Now turn to page 10, step 5, and ask questions about other factors that may contribute to the baby's undernutrition

Child Age 1 to 2 Years

Investigating Causes of Undernutrition

Step 1. Determine whether the child is currently ill or has a chronic disease that could be a cause of undernutrition.

If yes, →

If no, ↓

Treat the child's illness, or refer the child for treatment.

Advise the mother to feed the child according to recommendations on page 18 of the *Growth Record*.

Wait to investigate other possible reasons for undernutrition when the child returns for follow-up.

Step 2. Explain that there are many possible causes of undernutrition. You are going to ask the mother some questions in order to better understand her child's situation and, with the mother's help, determine the likely causes of the problem.

Step 3. Ask: Has the child been breastfeeding less or eating less than usual? If yes, ask why. Then →

If the child has **not** recently been eating less than usual, been sick or experienced trauma ↓

If the child has been sick, advise the mother on feeding during illness: Feed the child according to the recommendations for this age group and also give more fluids (breastfeed more for a breastfed child). Encourage the child to eat soft, varied, appetizing, favourite foods. After illness, give food more often than usual and encourage the child to eat more.

If the child has experienced trauma (for example, death in the family, change in caregiver), understand that this may be a contributing factor to loss of appetite. Assess the situation and decide whether to investigate causes of undernutrition with the person who has brought the child, or to wait until another time. If you will wait, give an appointment for a return visit, or if there is a home follow-up programme, plan a home visit.

Step 4. Ask the questions about feeding below. Do not give any advice yet.

Listen carefully to the mother's answers and identify any causes of undernutrition, such as not feeding the right foods, not feeding enough food, or poor feeding practices.

After asking the questions about feeding for this age group, go on to steps 5–8 (pages 10-11) for all children.

As the final step in the interview (step 8), you will provide advice.



Questions about feeding a child age 1 to 2 years

Breastfeeding is encouraged up to age 2 years and beyond with adequate complementary feeding.

Ask:

Advise (in step 8) if causes are identified:

<p>Do you breastfeed your child?</p>	<ul style="list-style-type: none"> • Recommend continued breastfeeding as often as the child wants. • If the child is not breastfed, milk is an important animal-source food.
<p>What foods does the child eat?</p> <ul style="list-style-type: none"> – Does the child eat meat, fish, poultry? Eggs, milk and milk products? Legumes and nuts? – What staple food is the child given (for example, cereal, porridge, cooked grains)? – Is the staple food thick or dilute? – Does the child eat fruits and vegetables? – Are there any foods that the child is allergic to or does not eat? 	<p>Refer to recommended foods listed on page 15 of the <i>Growth Record</i>.</p> <ul style="list-style-type: none"> • Encourage adding legumes and animal-source food to meals to improve nutrient quality of the diet. This is especially important for the stunted child to promote growth in height without excess weight gain. • If the diet is mainly cereal-based, encourage the mother to make the cereal thick, not dilute, and add some fat (for example, oil) to increase energy density. • Encourage feeding yellow-fleshed fruit and vegetables and dark-green leafy vegetables. • If the child is allergic to a specific food, give advice on use of an alternative that contains similar nutrients. • Encourage the mother to offer other foods; new foods should be introduced gradually.
<p>How many times does the child eat each day? How much does the child eat at a meal?</p>	<p>As described on page 18 of the <i>Growth Record</i>, recommend giving 3–4 meals daily (3/4 to 1 cup each) of complementary or family foods, plus 1–2 snacks between meals.</p>
<p>What do you use to feed the child? Does the child receive her own serving? Who feeds the child and how?</p>	<p>Counsel the mother to actively help the child to eat:</p> <ul style="list-style-type: none"> – Sit with the child and encourage eating. – Give the child an adequate serving in a separate plate or bowl. – Patiently encourage the child to eat until he or she has finished the serving. – Offer more food to a child who finishes his plate and wants more.
<p>Is the child's appetite good?</p>	<p>Suggest using varied, appetizing foods to encourage the child to eat.</p>

Now turn to page 10, step 5, and ask questions about other factors that may contribute to the child's undernutrition.

Child Age 2 to 5 Years

Investigating Causes of Undernutrition

Step 1. Determine whether the child is currently ill or has a chronic disease that could be a cause of undernutrition.

If yes, →

If no, ↓

Treat the child's illness, or refer the child for treatment.

Advise the mother to feed the child according to recommendations on page 19 of the *Growth Record*.

Wait to investigate other possible reasons for undernutrition when the child returns for follow-up.

Step 2. Explain that there are many possible causes of undernutrition. You are going to ask the mother some questions in order to better understand her child's situation and, with the mother's help, determine the likely causes of the problem.

Step 3. Ask: Has the child been breastfeeding less or eating less than usual? If yes, ask why. Then →

If the child has **not** recently been eating less than usual, been sick or experienced trauma ↓

If the child has been sick, advise the mother on feeding during illness: Feed the child according to the recommendations for this age group and also give more fluids (breastfeed more for a breastfed child). Encourage the child to eat varied, appetizing, favourite foods. After illness, give food more often than usual and encourage the child to eat more.

If the child has experienced trauma (for example, death in the family, change in caregiver), understand that this may be a contributing factor to loss of appetite. Assess the situation and decide whether to investigate causes of undernutrition with the person who has brought the child, or to wait until another time. If you will wait, give an appointment for a return visit, or if there is a home follow-up programme, plan a home visit.

Step 4. Ask the questions about feeding below. Do not give any advice yet.

Listen carefully to the mother's answers and identify any causes of undernutrition, such as not feeding the right foods, not feeding enough food, or poor feeding practices.

After asking the questions about feeding for this age group, go on to steps 5–8 (pages 10–11) for all children.

As the final step in the interview (step 8), you will provide advice.



Questions about feeding a child age 2 to 5 years

A child in this age group needs a nutritious, varied diet and opportunities to play and develop.

Ask:

Advise (in step 8) if causes are identified:

<p>What foods does the child eat?</p> <ul style="list-style-type: none"> – Does the child eat meat, fish, poultry? Eggs, milk and milk products? Legumes, and nuts? – What staple food is the child given (for example, cereal, porridge, cooked grains)? – Is the staple food thick or dilute? – Does the child eat fruits and vegetables? – Are there any foods that the child is allergic to or does not eat? <p>How many meals does the child eat each day? How much does the child eat at a meal?</p> <p>Does the child eat any snacks between meals? How many? What does she eat for snacks?</p>	<p>Refer to feeding recommendations on page 19 of the <i>Growth Record</i>.</p> <ul style="list-style-type: none"> • Advise the mother to: <ul style="list-style-type: none"> – Give the child family foods at 3 meals each day. – Also, twice daily, give nutritious snacks between meals such as _____ . • Encourage using legumes and animal-source foods in the family's meals, to improve nutrient quality of the diet. This is especially important for the stunted child to promote growth in height without excess weight gain. • If the diet is mainly cereal-based, encourage the mother to make the cereal thick, not dilute. • Encourage feeding yellow-fleshed fruit and vegetables and dark-green leafy vegetables. • If the child is allergic to a specific food, give advice on use of an alternative that contains similar nutrients.
<p>Who feeds the child?</p> <p>How do you feed the child?</p> <ul style="list-style-type: none"> – Do you sit with the child and encourage the child to eat? – Does the child have her own plate? 	<p>Counsel the mother to:</p> <ul style="list-style-type: none"> – Sit with the child and encourage eating. – Give the child an adequate serving in a separate plate or bowl. – Patiently encourage the child to eat until he or she has finished the serving. – Offer more food to a child who finishes his plate and wants more.
<p>Is the child's appetite good?</p>	<p>Encourage the mother to offer a wide variety of foods that the child will find appetizing.</p>

Now turn to the next page, step 5, and ask questions about other factors that may contribute to the child's undernutrition.



Continue investigating (for children of all ages)

Advise (in step 8) if causes are identified:

Step 5. Ask: Does your child often seem tired or sick, such as with diarrhoea, cough, or fever?

If no, go to step 6 below.

If yes, ask the mother questions to learn about her situation:

- Does the family use a latrine or toilet?
- What is the family's water source?
- Do you boil or treat your drinking water?
- How is water stored in your home?
- How do you keep food safe and clean? (Are utensils washed with clean water? Is food storage clean? Are left-over foods handled safely?)
- (If deworming is recommended in the area) Has the child been de-wormed recently?

Refer to recommendations for safe food preparation and hygiene on page 20 of the *Growth Record*.

Advise the mother about likely causes of recurrent illnesses, especially diarrhoea, and make specific suggestions to reduce infections in her household, if possible.

- Poor sanitation: Counsel on use of a latrine and handwashing after using the latrine.
- Contaminated water: Counsel on safe water collection, treatment, and storage.
- Infrequent handwashing: Counsel on how and when to wash hands (caregiver's and child's hands).
- Contaminated food: Counsel on safe food handling practices (food storage, preparation).

If necessary, deworm the child or refer for deworming.

If the child is stunted, explain that the child's recurrent illnesses contribute to his or her shortness. Correcting any problems that can cause recurrent illness in the household is important to improve the child's growth in height.

Step 6. Assess possible underlying factors (social and environmental) that may have adverse effects on the child's feeding and care.

- With whom does the child live? Do the child's mother and father live with the child?
- How many people live in the household? How many children under age 5 years live in the household?
- Are the parents in good health?
- Does the father spend time with the child and help with his/her care?
- Is there usually enough food to feed the family? If not, what is the main cause of this problem?

Discuss with the mother possible ways to ensure that the child is receiving adequate food, attention, and care. Discuss sources of assistance that may be available.



Step 7. With the mother, identify the most likely causes of the child's undernutrition.

Ask the mother's opinion on the causes of the child's undernutrition. Listen to her answer carefully so that you know which causes she recognizes.

"From the information you have given me, it seems that the child's undernutrition could be caused by a number of things, but is probably caused by _____."

Step 8. Counsel the mother on how to address the causes of undernutrition. Go back to the pages with advice for the specific causes found. For specific causes related to feeding, go to:

- page 3 – Birth to 6 months of age
- page 5 – Age 6 months to 1 year
- page 7 – Age 1 to 2 years
- page 9 – Age 2 to 5 years

Also review the feeding recommendations for the child's age group as described in the *Growth Record*. If the child will soon be in a new age group, refer to the recommendations for the next group.

For causes related to recurrent illness or other social and environmental factors, see page 10 for advice to give.

Ask: "What do you think that you can do to help the child, given these causes?"

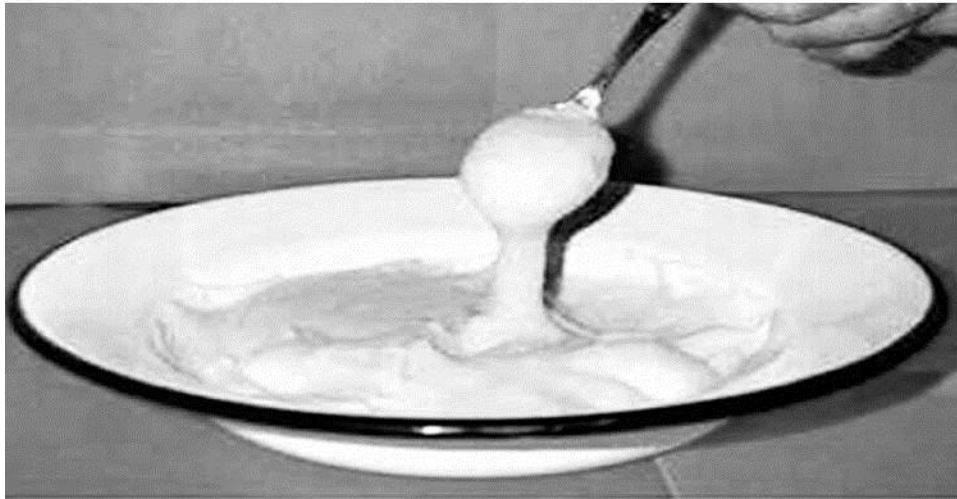
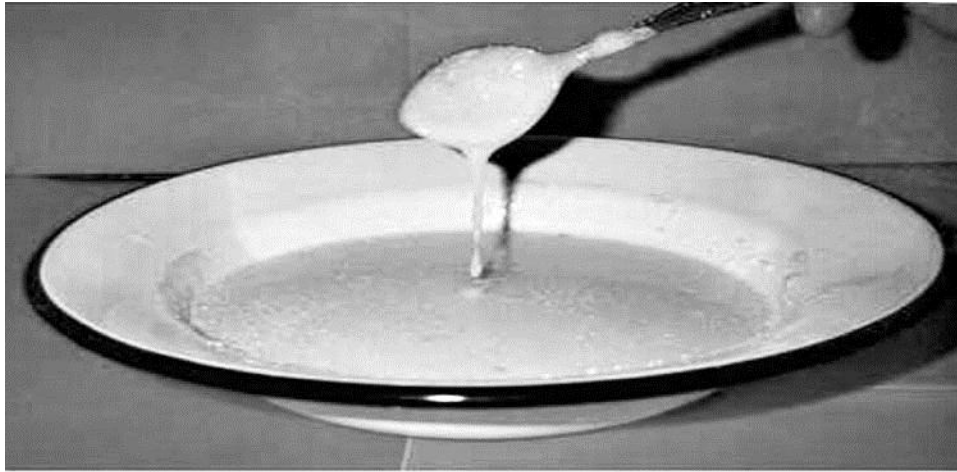
Discuss with the mother what is feasible to do and who can provide help and support. Acknowledge her situation and encourage her to take action towards improving growth for her child. With the mother, set goals for a few (2-3) actions that she can take.

Ask checking questions to ensure that she knows what to do.

Agree on a time when the child should return for further growth assessment.

FOOD INTAKE REFERENCE TOOL, 6-23 MONTHS

Feeding Practice	Ideal Feeding Practice	Key Messages to help counsel mothers
Growth appropriate?		Look at the shape of the growth curves of the child: is the child growing "normally"?
Child received breast milk?	Yes	Breastfeeding for 2 years of age or longer helps a child to develop and grow strong and healthy
How many meals of a thick consistency did the child eat yesterday? (use consistency photos as needed)	3 meals	Foods that are thick enough to stay in the spoon give more energy to the child
Child ate an animal-source food yesterday? (meat/fish/offal/bird/eggs)?	Animal-source foods should be eaten daily	Animal-source foods are especially good for children to help them grow strong and lively
Child ate a dairy product yesterday?	Try to give dairy products daily	Animal-source foods are especially good for children to help them grow strong and lively
Child ate pulses, nuts or seeds yesterday?	If meat is not eaten pulses or nuts should be eaten daily, with an iron enhancer such as a vitamin C rich food	Peas, beans, lentils, nuts and seeds are good for children
Child ate a dark-green or yellow vegetable or yellow fruit yesterday?	A dark-green or yellow vegetable or yellow fruit should be eaten daily	Dark-green leaves and yellow-coloured fruits and vegetables help the child to have healthy eyes and fewer infections
Child ate sufficient number of meals and snacks yesterday, for his/her age?	Child 6 – 8 months: 2 – 3 meals plus 1 – 2 snacks if child hungry Child 9 – 23 months: 3 – 4 meals plus 1 – 2 snacks if child hungry	A growing child needs 2 – 4 meals a day plus 1 – 2 snacks if hungry: give a variety of foods
Quantity of food eaten at main meal yesterday appropriate for child's age?	Child 6 – 8 months: gradually increased to approx. ½ cup at each meal Child 9 – 11 months: approx. ½ cup at each meal Child 12 – 23 months: approx. ¾ to 1 cup at each meal	A growing child needs increasing amounts of food
Mother assisted the child at meal times?	Yes, assists with learning to eat	A young child needs to learn to eat: encourage and give help... with lots of patience
Child took any vitamin or mineral supplements?	Vitamin and mineral supplements may be needed if child's needs are not met by food intake	Explain how to use vitamin and mineral supplements if they are needed
Child ill or recovering from an illness?	Continue to eat and drink during illness and recovery	Encourage the child to drink and eat during illness and provide extra food after illness to help them recover quickly



Enter ✓ in the Yes column if the practice is in place.
 Enter your initials if a message is given (see FOOD INTAKE REFERENCE TOOL, 6-23 MONTHS for the message).

FOOD INTAKE JOB AID, 6-23 MONTHS		
Child's name		
Date of birth		Age of child at visit
Feeding practice	Yes / number where relevant	Key Message given
Growth appropriate?		
Child received breast milk?		
How many meals of a thick consistency did the child eat yesterday? (use consistency photos as needed)		
Child ate an animal-source food yesterday? (meat/fish/offal/bird/eggs)?		
Child ate a dairy product yesterday?		
Child ate pulses, nuts or seeds yesterday?		
Child ate a dark-green or yellow vegetable or yellow fruit yesterday?		
Child ate sufficient number of meals and snacks yesterday, for his/her age?		
Quantity of food eaten at main meal yesterday appropriate for child's age?		
Mother assisted the child at meals times?		
Child took any vitamin or mineral supplements?		
Child ill or recovering from an illness?		

Enter ✓ in the Yes column if the practice is in place.
 Enter your initials if a message is given (see Food Intake Reference Tool for the message)

FOOD INTAKE JOB AID, 6-23 MONTHS		
Child's name:		
Date of birth:		Age of child at visit: 11 months
Feeding practice	Yes / number where relevant	Key Message given
Growth appropriate?	Slow growth	
Child received breast milk?	✓	
How many meals of a thick consistency did the child eat yesterday? (use consistency photos as needed)	2	Yes
Child ate an animal-source food yesterday? (meat/fish/offal/bird/eggs)?	✓	
Child ate a dairy product yesterday?	✓	
Child ate pulses, nuts or seeds yesterday?	✓	
Child ate a dark-green or yellow vegetable or yellow fruit yesterday?	✓	
Child ate sufficient number of meals and snacks yesterday, for his/her age?	✓	
Quantity of food eaten at main meal yesterday appropriate for child's age?	✓	
Mother assisted the child at meal times?	✓	
Child took any vitamin or mineral supplements?	-	
Child ill or recovering from an illness?	-	

Job-aid: Investigating Causes of Overweight

Interview the mother of a child who is **overweight** to determine likely causes of the problem, and then counsel the mother on how to address the causes. Also teach the feeding recommendations for the child's current age group as described in the *Growth Record* or for the next age group if the child will soon enter it.

Use this job aid to interview the mother of a child who is:

- **overweight** (above 2 z-score in weight-for-length/height or BMI-for-age) or
- **has a trend towards overweight**

If a stunted child is overweight or obese, the problem to address now is the overweight.

Refer for medical assessment and specialized management any child who:

- is **obese** (above 3 z-score in weight-for-length/height or BMI-for-age)

If there is no referral system for obese children, use this job aid to interview the mother about causes and give her appropriate advice.

Turn this booklet over
for *Job-aid: Investigating
Causes of Undernutrition*

Step 1: Explain that there are many possible causes of overweight. You are going to ask the mother some questions in order to better understand her child's situation and, with the mother's help, determine the likely causes of the problem.

Step 2: Ask the questions about feeding for the child's age group (on next two pages). Do not give any advice yet.

After asking the questions about feeding for the child's age, go on to steps 3–5.

As the final step in the interview (step 5), you will provide advice.

Baby from birth to 6 months of age

Ask:

Advise (in step 5) if causes identified:

<p>Is the baby exclusively breastfed? If yes, →</p> <p>If no, ask: ↓</p>	<ul style="list-style-type: none"> • Encourage the mother to feed only breast milk until age 6 months. • Reassure the mother of an exclusively breastfed infant that such babies become leaner when they begin to crawl and walk. • Encourage the mother to continue breastfeeding until 2 years of age and beyond.
<p>Is the baby continuing to breastfeed?</p> <p>Is the baby fed any milk formula or other milk? If yes,</p> <ul style="list-style-type: none"> – What formula or other milk is given? – How much formula or other milk is the child fed each day? – How is the formula or other milk prepared? – Is anything added to sweeten or thicken the formula or milk? 	<p>Advise the mother:</p> <ul style="list-style-type: none"> • If the baby is breastfed as recommended on page 14 of the <i>Growth Record</i>, she/he does not require additional foods or fluids. • Breast milk supplements should be prepared with the correct amount of water and no added sugar, cereal, or other thickeners. • In the absence of breastfeeding, daily formula/other milk intake should be 480 ml at age 0-1 mo, 630 ml at 1-2 mo, 720 ml at 2-3 mo and 900 ml at 4-6 mo.

Now go to step 4 (on page 4) and, with the mother, try to identify possible causes of the problem

Baby from 6 months to 2 years of age

Ask:

Advise (in step 5) if causes identified:

<p>Is the baby breastfed? If yes, →</p>	<p>Encourage the mother to continue breastfeeding until 2 years of age and beyond.</p>
<p>What complementary foods are eaten?</p> <ul style="list-style-type: none"> – How many times is the child fed each day? – How much food does the child eat at each meal? – How much formula or other milk does the child receive? 	<p>Advise the mother:</p> <ul style="list-style-type: none"> • Give nutritious complementary foods, avoiding fatty foods, sweets, and refined cereals. Refer to the list of appropriate foods on page 15 of the <i>Growth Record</i>. • Follow the recommendations for portion sizes and number of meals and snacks on page 16 of the <i>Growth Record</i> (for age 6 months to 1 year) or page 18 (for age 1 to 2 years). • 500 ml formula or other milk per day is sufficient when the child is also receiving complementary foods. • Do not force the child to eat.

Now go to step 3 (on page 4) to ask about physical activity

Child 2 to 5 years of age

Ask:

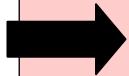
Advise (in step 5) if causes identified:

<p>What does the child eat in a typical day?</p> <ul style="list-style-type: none"> – What type of staple food does the child eat? What type of bread? – Does the child drink soft drinks? How often? – Does the child eat: <ul style="list-style-type: none"> * cakes or sweets? How often? * butter or margarine spread, or sweet spreads (for example, honey, chocolate, peanut butter, jam, jelly)? How much? * high-energy snacks (for example, chips)? How often? * fried foods (for example, French fries, deep-fried breads or meats)? How often? * fatty meat? 	<p>Advise the mother on healthy eating for the family. Advise her to:</p> <ul style="list-style-type: none"> • Offer the family a variety of nutritious foods. Modify food preparation, if needed, to use less fat and sugar. • Provide unrefined carbohydrate sources, for example, brown bread, potatoes. • Limit the consumption of sweetened beverages (no more than twice a week). • Limit intake of cakes and sweets (no more than twice a week). • Use high-fat or sweet spreads sparingly. • Avoid high-energy snacks. Provide snacks of fresh fruits and vegetables for example, carrot sticks). • Decrease intake of fried foods. • Trim the fat from meat.
<p>How many meals and snacks does the child eat each day? Do you think that your child eats too much at meals?</p>	<ul style="list-style-type: none"> • Plan and provide regular meals and snacks; 3 meals per day plus 2 nutritious snacks. • Serve small portions, depending on the child's age, size and activity levels. Let the child finish the portion before offering more. Wait a few minutes before additional servings to determine whether the child is really hungry. • Do not force the child to eat more. • Create a positive environment for meals, allowing the child to relax and enjoy the food. • Eat family meals together when possible; mealtimes should involve pleasant conversation, not a discussion of problems.
<p>Does the child often eat between meals? Does the child usually sit down at a table to eat?</p>	<ul style="list-style-type: none"> • Limit eating to mealtimes and planned snacks. • Always encourage the child to sit at a table to eat. Discourage eating while watching television. • Avoid using food as a reward, as a way to ease hurt or disappointment, or as a cure for boredom.

2 to 5 years

Now go to step 3 (on the next page) to ask about physical activity





Continue investigating (for children of all ages)

Advise (in step 5) if causes identified:

Step 3: Ask about physical activity in all children over age 6 months

How many physically inactive hours does the child spend each day? (For example, how much time does a baby spend confined in a crib or baby carrier? How many hours does an older child watch television or play computer or video games?)

What opportunities does the child have for active physical movement and play? How often?

- Allow babies to crawl and move around in a safe environment.
- Limit time spent watching television or playing video games.
- If the child has a television or computer in her room, move it to a family area or limit its use.
- Provide opportunities for and encourage active play and movement such as marching, jumping, throwing, kicking, and hopping.
- Find physical activities that the child will enjoy. Involve the child in household chores, for example, washing, sweeping, carrying.
- Encourage family involvement in regular physical activities, for example, taking walks, riding bicycles, playing ball.

Step 4: With the mother, identify the most likely causes of the child's overweight.

Ask the mother's opinion of the main causes of the child's overweight. Listen to her answer carefully so that you know which causes she recognizes.

"From the information you have given me, the child's overweight could be caused by a number of things, but is probably caused by _____."

Step 5: Counsel the mother how to address the causes of overweight. Consider what you have learned about the family meal patterns, food choices, and physical exercise. Go back to the advice provided for specific causes on pages 2 to 4. Also review the feeding recommendations for the child's age group as described in the *Growth Record*. If the child will soon be in a new age group, refer to the recommendations for the next group.

Ask: "What do you think that you can do to help the child, given these causes?"

Discuss with the mother what is feasible to do and who can provide help and support. Acknowledge her situation and encourage her to take action towards improving growth for her child. With the mother, set goals for a few (2-3) actions that she can take.

Ask checking questions to ensure that she knows what to do.

Agree on when the child should return for further growth assessment.

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