

Complementary Feeding and Micronutrients

Leader Mother Flipchart

Module 2 of 6



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Acknowledgements

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Credits

The Game and Attendance illustrations were adapted from Where There is No Artist, by Petra Röhr-Rouendaal, ITDG Publishing (October 1, 1997).

Lesson 1: First Foods

Not Eating (Picture 1.1)



? What do you see in these pictures?

Ruth followed the advice of Mary and started exclusively breastfeeding Hardship. She also went to the clinic at six weeks for a vitamin A capsule. Now both she and Hardship are much stronger. Now Hardship is older and [Caregiver B and Father B] are trying to encourage Hardship to eat foods. When Ruth tries this, the infant spits up and makes ugly faces. Her neighbors each have a piece of advice for Ruth telling her that she is doing it wrong. Ruth doesn't know what to do.¹



? Is it normal for an infant to refuse new foods?
When is the proper time to begin giving foods to an infant?

¹ This story emphasizes Mother B's lack of **self efficacy**, a behavior determinant found in Barrier Analysis. Although she desires to help her child eat, she doesn't know how to do it and is feeling discouraged. Use this story and discussion to show mothers how to give first foods to a child and increase the confidence in their ability to do it.

Not Eating (Picture 1.1)



Breast Feeding (Picture 1.2)



? What do you see in these pictures?

- At six months of age, Mary begins giving foods to Of Great Worth to help her grow.
- She prepares porridge or well mashed foods in a small bowl and adds oil after she removes it from the fire or heat.
- Adding uncooked oil gives more nutrients and energy than cooked oil.
- During the first week that she gives foods, she tries one or two spoonfuls of soft porridge once or twice a day after the infant has breastfed to help her get accustomed to new foods.
- Mary will breastfeed her infant Of Great Worth for 24 months or more.
- Breast milk is the most important food for infants.
- Always breastfeed before feeding and whenever the child asks for it.
- Breast milk protects the infant from sickness.

? If the infant refuses new foods, what should the mother do?

- Talk to the infant calmly encouraging the infant to eat. Try singing or making up songs to encourage eating.
- Feed slowly and patiently.
- Add breast milk to the cooked porridge. It helps the infant to adjust to the new food. It smells and tastes familiar.
- Don't force an infant to eat. The food may get into their lungs if they begin to cry and breathe in the food. Food in the lungs could cause death.
- If you find foods that the infant does like, continue to give them the foods they like, encouraging them to eat.

Breast Feeding (Picture 1.2)





Adding New Foods (Picture 1.3)



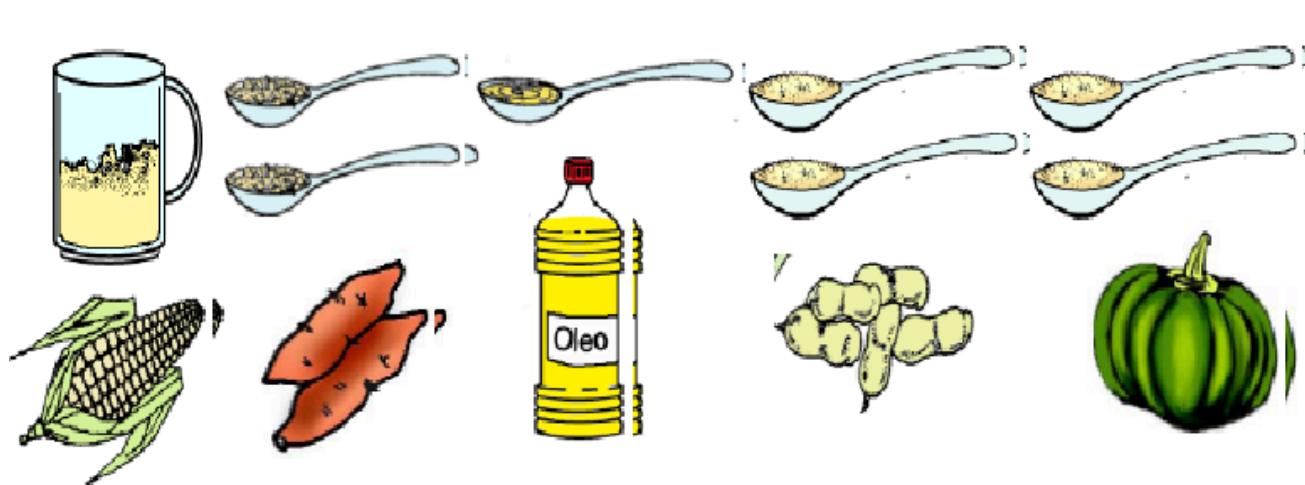
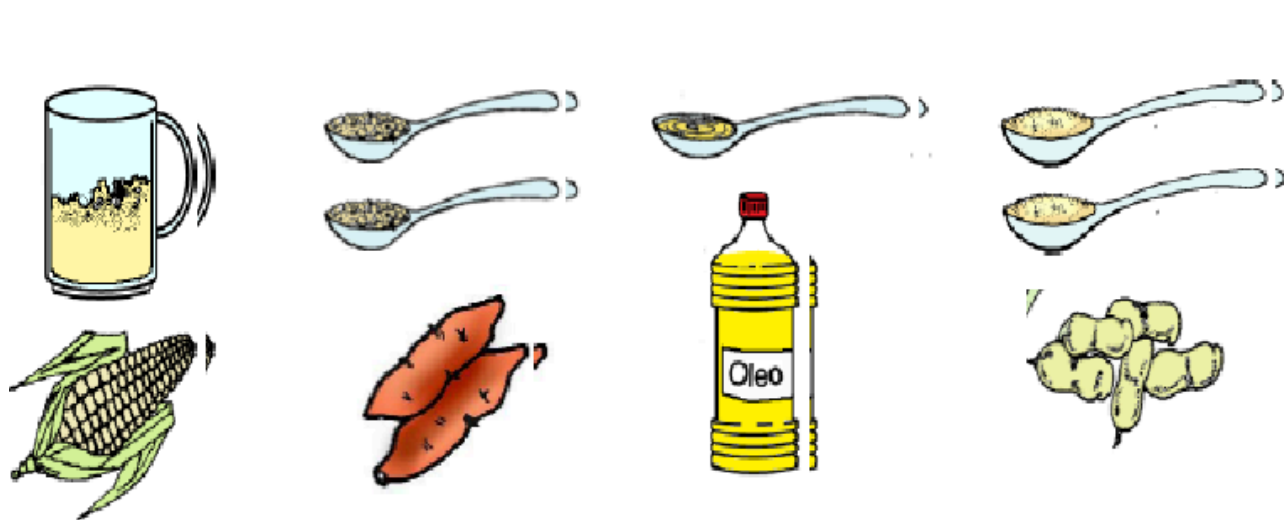
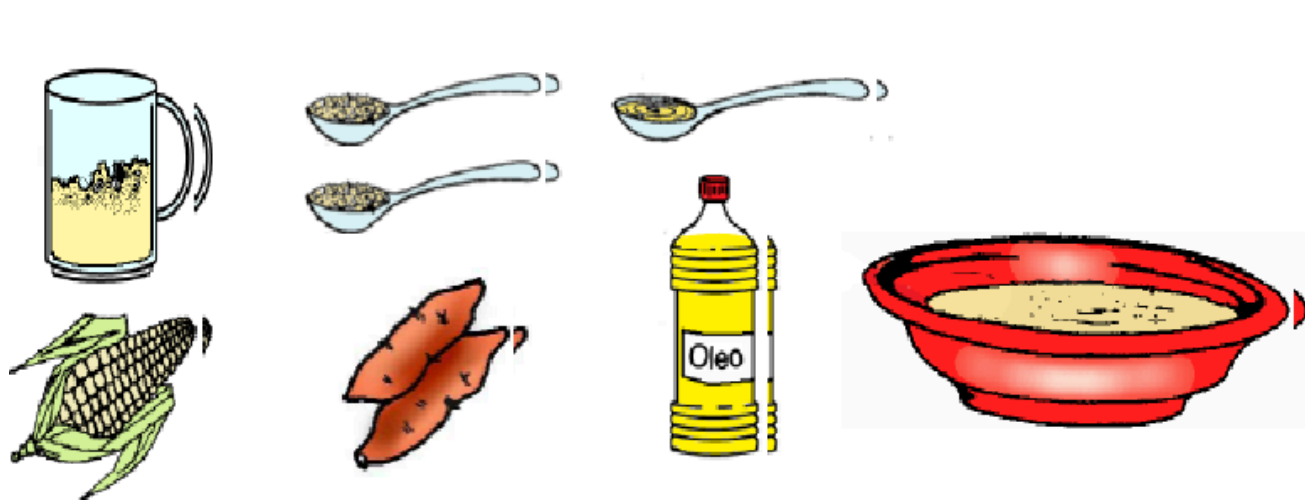
? What do you see in these pictures?

- The first four days that she begins feeding Of Great Worth porridge, she begins with only a staple, and oil. After four days she adds maize.
- She could have chosen fish or beans or any new food to add to the porridge.
- It will take a few days for an infant to get accustomed to a new food.
- Then she adds peanut paste and waits four more days.
- Introduce new foods for four days to make sure that the infant can tolerate the food.
- If they can tolerate the new food after four days, then add another food to porridge to make it more nutritious.

? What foods could be added to make porridge more nutritious?

- Add butter, oil, and peanut paste to porridge.
- Add small pieces of ground meat, eggs, lentils, and vegetables.
- Add red and yellow vegetables to increase the infant's vitamin A.
- Add mashed fruits and vegetables such as sweet potato, leafy greens, pumpkin, carrots and tomatoes.

Adding New Foods (Picture 1.3)



Quantity of Food for Each Feeding (Picture 1.4)



? What do you see in these pictures?

- From six to eight months of age, she feeds her infant three times a day (morning, afternoon, and evening).
- From six to eight months of ages, she feeds her from a cup that contains four heaping tablespoons of nutrient-rich porridge.
- From nine to eleven months of age, she feeds her infant four times a day.
- From nine to eleven months of ages, she feeds her from a cup that is almost full (3/4 full).
- The mother begins giving the infant finger foods (or snacks) between meals.
- She is sitting with her infant and helping her to eat. She is focusing her attention on the infant.
- As the infant grows, Mary gradually increases the food and frequency of feeds.
- From nine to eleven months of age, Mary she gives infant finger foods that she can pick up with their hands. Finger sized pieces of soft food like ripe banana, avocado, ripe mangoes, papaya, and oranges.
- Continue to breastfeed as often as the infant wants until at least 24 months of age. Breastmilk alone should provide enough liquid to your child up to eleven months of age. If caregivers feel the need to give other liquids, clean water (chlorinated or purified) can be given to an infant beginning at six months of age.²
- A separate bowl or cup helps you to monitor how much the infant eats at each feeding.



Activity: Making the First Porridge

		Practice and Coaching		
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² As long as the mother is breastfeeding on demand, and child's urine is clear (not concentrated) and feces are not hard or dry, breastfeeding alone is the only liquid needed until age 11 months of age.

Probe	Inform		Request	Examine
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Quantity of Food for Each Feeding (Picture 1.4)

6 à 8 Meses

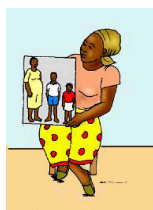


8 à 11 Meses



Lesson 2: Feeding during the second year (12-23 months)

Still Hungry (Picture 2.1)



? What do you see in these pictures?

It is only a few hours after Hardship has eaten. He is already hungry. Ruth prepares large bowls of porridge for Hardship three times a day. He is never able to eat it all. Within a few hours Hardship is hungry again. Ruth is upset. She wants Hardship to eat more at each feeding so that she doesn't have to feed him so often. She simply doesn't have time to cook five times a day.³



- ? Do you think Ruth has a right to be angry with Hardship?
- ? How often do you feed children between 12 and 23 months of age? How much do you give them at each feeding?

³ This story emphasizes Ruth's lack of **self efficacy**, a behavior determinant found in Barrier Analysis. Although she desires to feed her child enough; it is difficult to keep up and she is frustrated. Use this story and discussion to show mothers how to overcome the difficulties of feeding a child frequently. Give them ideas to lessen the cooking times and preparations. Increase their confidence in their ability to feed children frequently.

Still Hungry (Picture 2.1)



Feed First (Picture 2.2)



? What do you see in these pictures?

- Mary and Mary's husband feed Of Great Worth from a separate bowl so they can monitor the food she eats.
- After 12 months of age, children get more energy from food than breast milk.
- After 12 months, Mary feeds first and then breastfeeds.
- Mary breastfeeds Hardship day and night as often as Hardship wants and will continue for at least 24 months

Feed First (Picture 2.2)



Quantity and Frequency Increased (Picture 2.3)



? What do you see in these pictures?

- From ages 12 to 24 she feeds Of Great Worth three times a day with family foods.
- She gives one snack when Of Great Worth is 12 to 17 months old. She gives two snacks when she is older.
- She continues to help and encourage Of Great Worth to eat.
- She increases the quantity of food and the diversity of food as the child ages.

? If Of Great Worth becomes sick, should Mary continue to feed her the same amounts of food?

- Mary should feed her the recommended amounts. She should add more fluids, breastfeeding more than usual.
- When children are malnourished (that is, not receiving enough nutrients over a long period) they may lose their appetite.
- Mary needs to encourage Of Great Worth to eat, trying new foods, textures, and methods of encouragement.
- During and after sickness, Mary will give more food than usual to help the child regain energy.

Quantity and Frequency Increased (Picture 2.3)



Daily Nutrients Needed (Picture 2.4) – 5 minutes



? What do you see in these pictures?

- At each feeding Of Great Worth eats a cup worth of food (3/4 full or heaping depending on her age).
- There are several important things that infants 12 - 24 months eat every day or several times a week:
- Vegetables like peas, beans, pumpkin and cabbage lentils, beans and green leafy vegetables
- Fruits like banana, orange, and mango
- Oils or margarine
- Meat products like organ meats, and egg, cow's milk or fish
- Red and yellow foods like orange sweet potato, carrots, pumpkin, mangoes, pawpaw and plantains
- Snacks between meals like Sam Sam, bread, groundnuts, or fruits
- Whole grains or maize

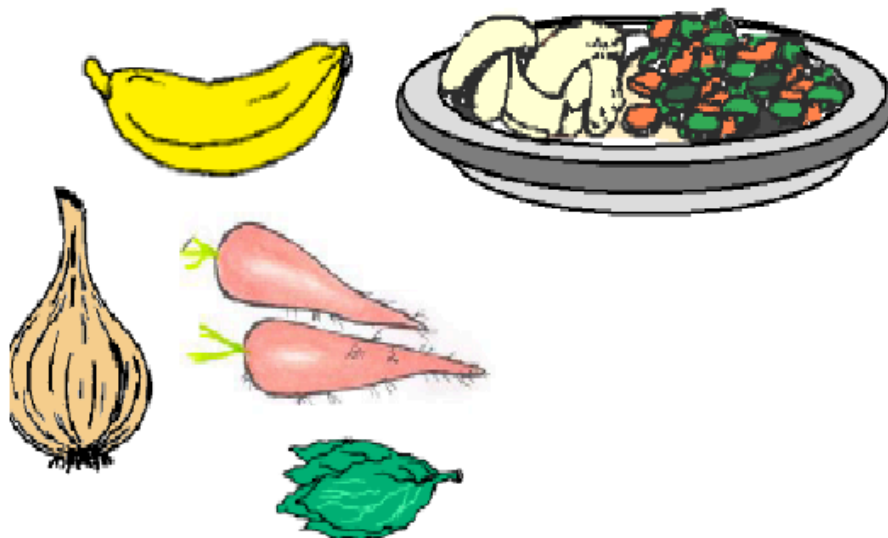
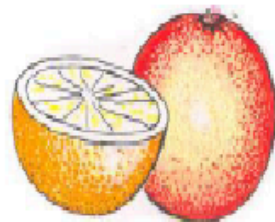
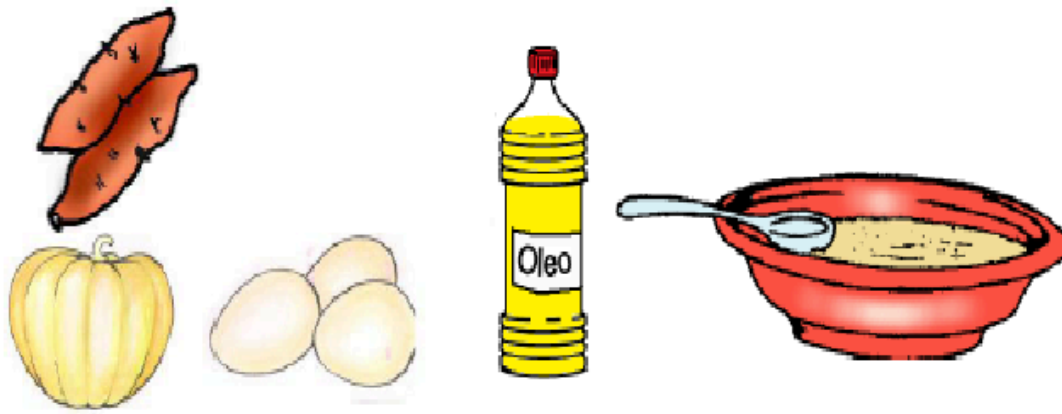
? What other nutritious snacks would you suggest for children 12 to 24 months?



Activity: A Child's Daily Needs

		Practice and Coaching		
Probe	Inform		Request	Examine

Daily Nutrients Needed (Picture 2.4)



Lesson 3: Sanitary Food Preparation and Cleanup

Worms and Sickness (Picture 3.1)



? What do you see in these pictures?

Ruth is trying hard to follow the new practices that she was learning. She prepares porridges, family foods and snacks for Hardship. But Hardship often gets sick and has been losing weight. Sometimes Hardship has diarrhea for many days and loses his appetite. Sometimes she sees worms in Hardship's feces. Ruth's mother-in-law tells Ruth not to worry. All children have sickness. Diarrhea is not very serious you should not worry yourself about these things.⁴



- ? What do you think about what Ruth's mother-in-law is saying? Do you believe that diarrhea is a serious problem?
- ? Do you see anything else in this picture that might give you clues to why Hardship is always sick?

⁴ This story emphasizes Ruth's **perceived severity**, a behavior determinant found in Barrier Analysis. Ruth's mother-in-law doesn't believe that diarrhea is a problem for children; she believes that all children have diarrhea and that it is nothing to be concerned about. Use this story and discussion to discuss how serious diarrhea can be for young children (increasing perceived severity). When a small child has diarrhea, they can become dehydrated quickly and die; Ruth should be concerned and find ways to help her child.

Worms and Sickness (Picture 3.1)



Spoiled Foods and Hands (Picture 3.2)



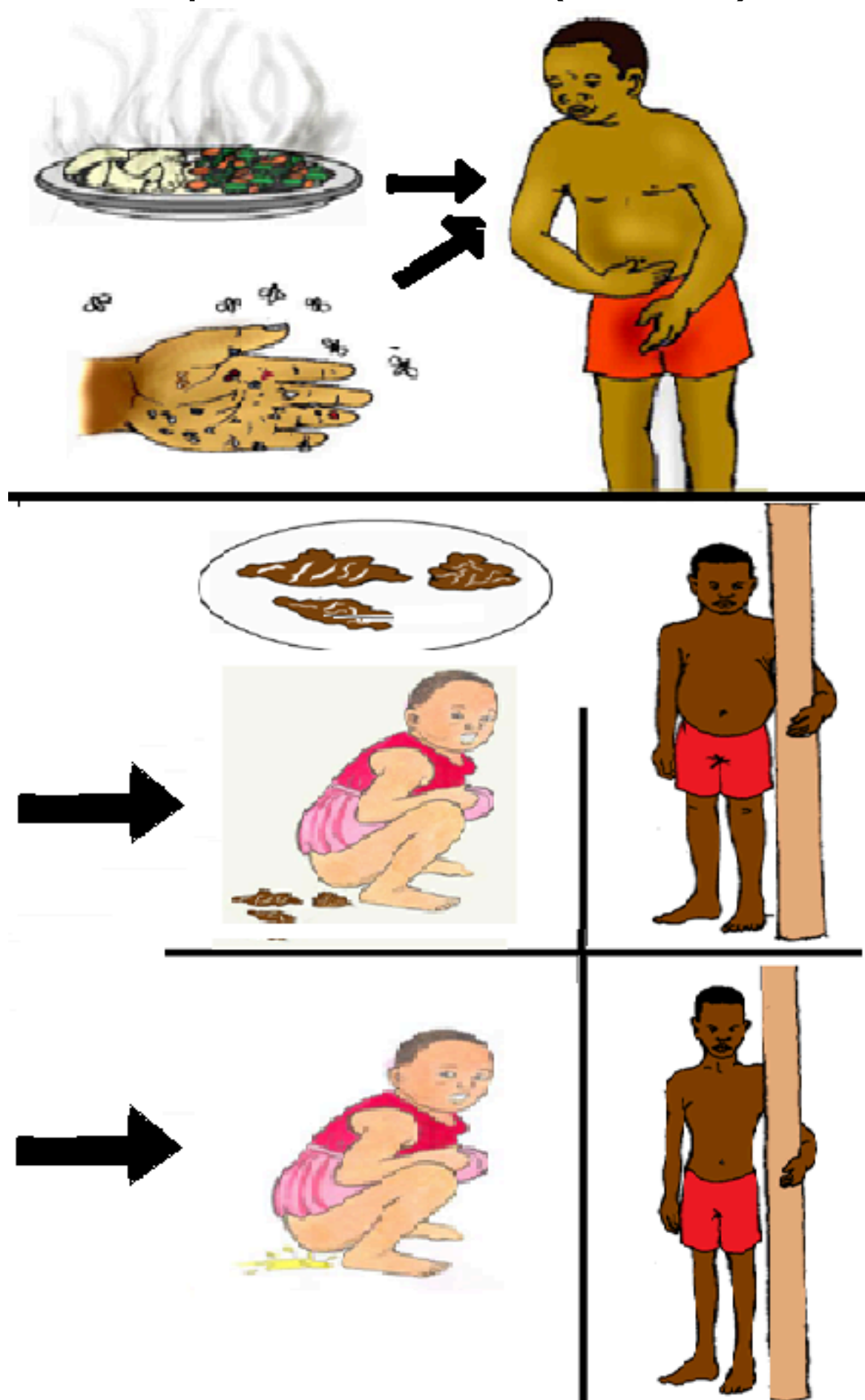
? What do you see in these pictures?

- There are many different ways a child can get sickness and diarrhea.
- The most common way is by the things that children put on their mouth.
- Eating uncovered, cold foods that have been sitting for more than three hours can cause sickness.
- Using dirty hands to eat can cause sickness. Using dirty hands to prepare food can also cause sickness.
- These things prevent a child from growing well and put the child at risk of malnutrition.
- The contaminants (or dirty things on the food and hands) give children diarrhea and sometimes worms.

? Do you think families should do something to stop their child from malnutrition? Why?

- The things that caregivers do can make a big difference in a child's life.
- Each life is sacred and has much value. The child's life is worth protecting from harm.
- By taking care and adopting healthy practices, we can not only help them to withstand illness, but also help them to thrive.

Spoiled Food and Hands (Picture 3.2)



Preparing Hands, Foods and Utensils (Picture 3.3)



? What do you see in these pictures?

- Washing with soap and water cleans dirt, worm eggs and things which bring sickness from the food and cooking materials.
- Water is not enough to clean hands; only soap kills the contaminants that bring sickness.
- Those who prepare food should wash hands with soap and water before preparing food or feeding a child.
- Caregivers (or those who help a child to eat) should wash the child's hands with soap and water before the child begins eating.
- All foods cooked or uncooked should be washed with soap and water before eating to kill worms eggs that may be on the foods.

Preparing Hands, Foods and Utensils (Picture 3.3)



Cook Food Well and Cover (Picture 3.4)

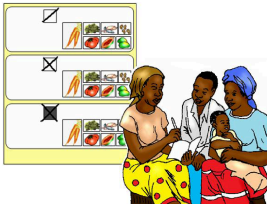


? What do you see in these pictures?

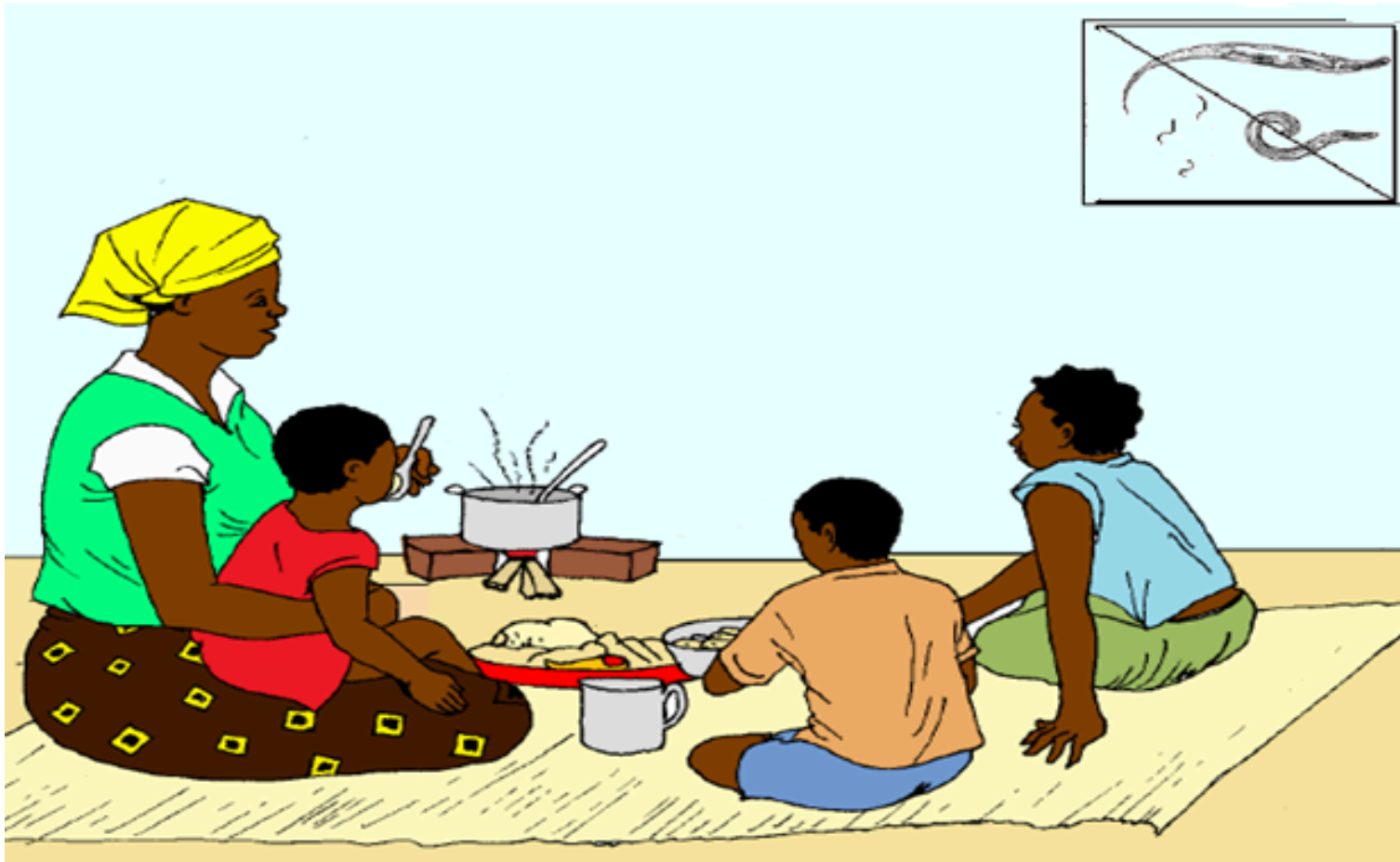
- Food that is not cooked through (hot throughout) can contain worm eggs. Eggs are killed when the food is hot throughout.
- Eat cooked foods while they are still hot. Do not let liquid foods (like soup or porridge) become cold before eating.
- Cover food until it is time to eat. After eating, cover leftover food with a cloth or lid so that flies cannot land on the food.
- Flies leave feces and dirt, too small for the eye to see on the food they touch.
- Keep the food in a cool place up off the ground.
- Covering food with a damp cloth will help to keep it cool.
- Always reheat stored foods until the center is hot (or the liquid is boiling) before eating.
- Discard food that is left at room temperature for longer than three hours.
- Reheat liquid foods such as porridge or soups that have been sitting. If liquids have been sitting for more than three hours, throw them away.
- Solid foods may be eaten cold (such as cooked potatoes) if covered and kept in a cool place for up to three hours.
- After three hours, they should be thrown away.



Activity: Food Covers

 Probe	 Inform	Practice and Coaching	 Request	 Examine
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Cook Food Well and Cover (Picture 3.4)



Lesson 4: Vitamin A

Too Expensive (Picture 4.1)



? What do you see in these pictures?

Ruth had heard from the care group that she should add different foods and foods of different colors to her meals. She finds a vendor who is selling red, orange and yellow foods. The vendor tells her that these foods help children to stay healthy. However as she looks at the foods she gets worried. She cannot afford to buy animal liver, carrots, mango and yellow squash every week - even if it will keep her child healthy. "I can't afford these foods," she says. She turns away from the vendor wishing she had more coins in her pocket.⁵



- ? What do you think about Ruth's dilemma? Do you sometimes struggle with these choices?
- ? What would you advise Ruth to do?

⁵ This story emphasizes Ruth's lack of **self-efficacy**, a behavior determinant found in Barrier Analysis. Although she desires to keep her children healthy; she does not believe that she has enough money to purchase the foods that she needs. Use this story and lesson to show mothers how to use their money wisely in buying vitamin A foods. Point out highly nutritious low cost vitamin A foods that they can include regularly. Help them identify other foods that they could include weekly.

Too Expensive (Picture 4.1)



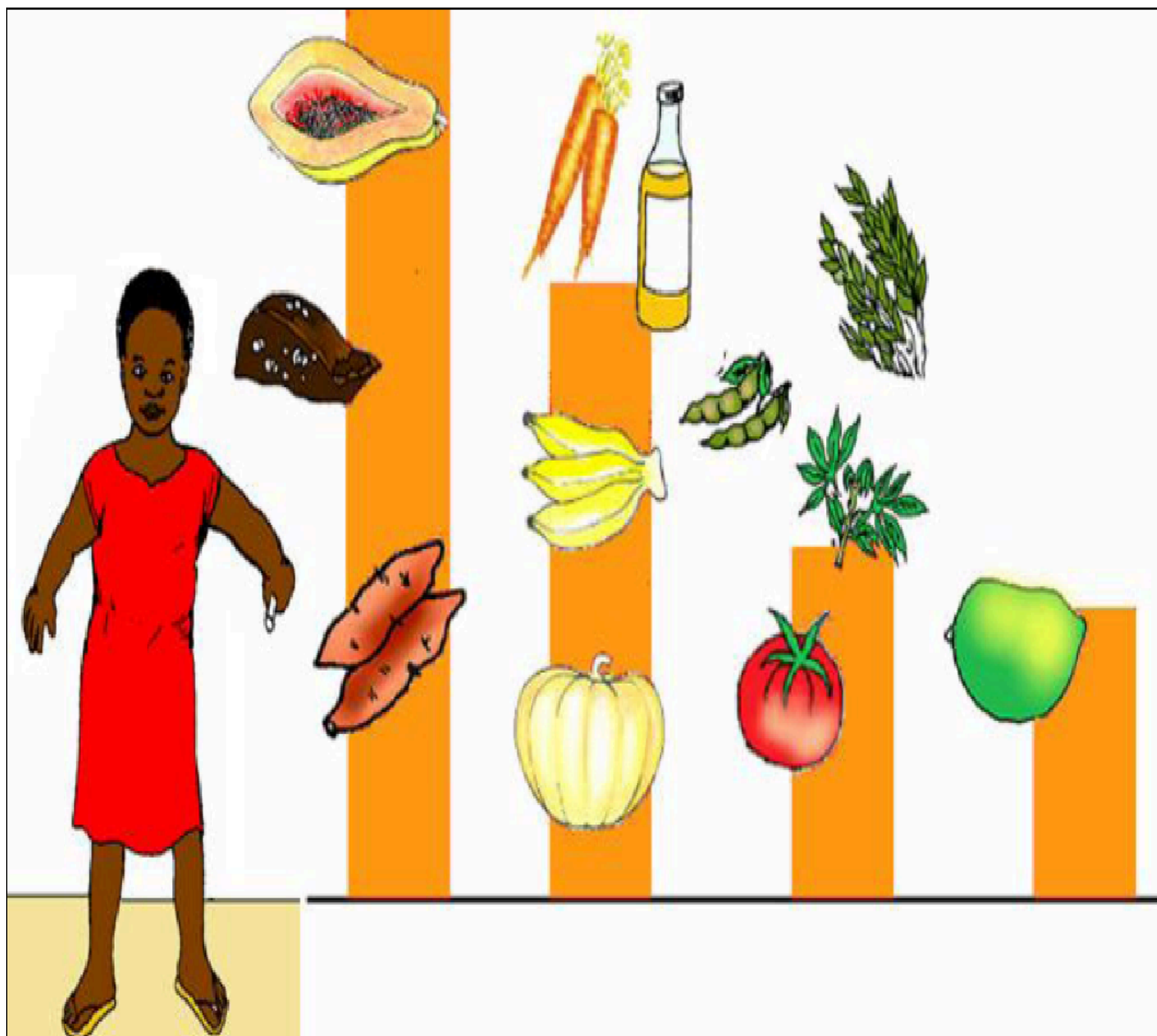
Foods with Vitamin A (Picture 4.2)



? What do you see in these pictures?

- Animal liver, red meat, fish, sweet potato, and papaya have the highest amount of vitamin A.
- Red palm oil, plantain, peas, pumpkin and carrots have Vitamin A, but not as much as red meat, fish, sweet potato and papaya.
- Dark green leafy vegetables like manioc leaves and spinach have vitamin A but not as much as red meat, fish, sweet potato, papaya, palm oil, plantain, peas, pumpkin and carrot.
- Mango has vitamin A, but not as much as all of the other foods already mentioned.
- All of these foods contain Vitamin A which protects against severe illness and sickness. Vitamin A keeps children healthy.
- Caregivers should try to include high vitamin A foods (from the first column) at least once a week. They have very high vitamin A and do not need to be eaten as often.
- Caregivers could also choose to purchase a food with lower concentration, but include it in the child's food every day or several times a week.
- Most foods high in vitamin A are orange or yellow on the inside and out.
- Vitamin A in vegetables is reduced by overcooking. Cook them only for a short time before eating.
- If it is possible to eat the vegetable raw without cooking, these will contain higher concentrations of vitamin A.
- Fruit that is overripe will also lose some vitamin A. Try to eat food before it begins to over ripen.

Vitamin A (Picture 4.2)



Night Blindness (Picture 4.3)



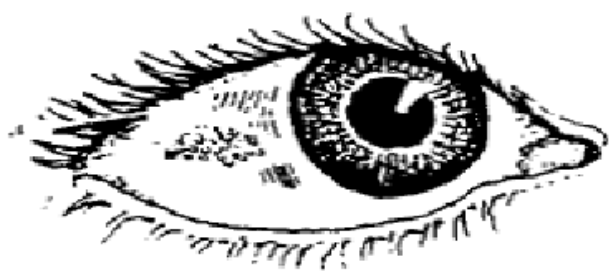
? What do you see in these pictures?

- A symptom of vitamin A deficiency (not enough vitamin A in the body) is night blindness.
- If the vitamin A foods and vitamin A supplements are not given immediately to those with night blindness, their eyes may become damaged.
- Scales or white patches may form on the white parts of the eye.
- If vitamin A deficiency continues the child or adult may become permanently blind with scars changing the shape of the eye.
- Vitamin A prevents blindness and keeps the eyes healthy.
- Many children have a mild form of vitamin A deficiency. They do not show signs of night blindness or eye scarring, but are often sick with many different illnesses.

? Why is it important for caregivers to seek treatment for their child when they see any of these signs?

- Blindness from vitamin A deficiency is a sign that the body needs help.
- Without immediate care, they may permanently lose their sight.
- As caregivers, what we do can make a difference in our child's health and survival.

Night Blindness (Picture 4.3)



Vitamin A Supplements (Picture 4.4)



? What do you see in these pictures?

- A mother should receive vitamin A at six weeks after birth from a health worker. This will help her own health and also to ensure that her breast milk contains enough vitamin A for her child.
- At the six months of age, infants should receive their first vitamin A supplement and receive one every six months until at least age five.
- Children with measles, severe infection, or severe malnutrition should go to the health clinic for a special treatment of Vitamin A.
- Sick children should also continue to eat many vitamin A foods during and after illness to help them recover and regain lost weight.
- Vitamin A protects against severe illness and sickness. Vitamin also helps to shorten illness once it begins.



Activity: Identifying Vitamin A Foods

		Practice and Coaching		
Probe	Inform		Request	Examine

Vitamin A Supplements (Picture 4.4)



Lesson 5: Nutrition Rich Foods

Seeing is Believing (Picture 5.1)



? What do you see in these pictures?

Ruth's husband noticed that Ruth had been adding many new foods to family meals. Although at first he was opposed to these new foods, he began to see a change in his children. Hardship had really gained strength. He recovered quickly from illness and has remained healthy. In fact, all of the family members seem healthier with the new foods that they have been eating. "At first I was not convinced that these new foods would help the children, he said. But now I have seen the changes, and believe."⁶



- ? Have you seen positive changes in the health of your children? How has this encouraged you?
- ? What types of foods do you think should be included every week in your child's foods?

⁶ This story reinforces **perceived action efficacy**, a behavior determinant in Barrier Analysis. Perceived action efficacy is whether or not the person believes that the new practices actually work to prevent illness and malnutrition. Ruth's husband has seen the improvement in his children and now believes; he has high perceived action efficacy. Use this story and discussion to increase mothers' belief that the new practices actually work to prevent malnutrition. Ask for personal stories of the improvements that they have seen.

Seeing is Believing (Picture 5.1)



Malnutrition (Picture 5.2)



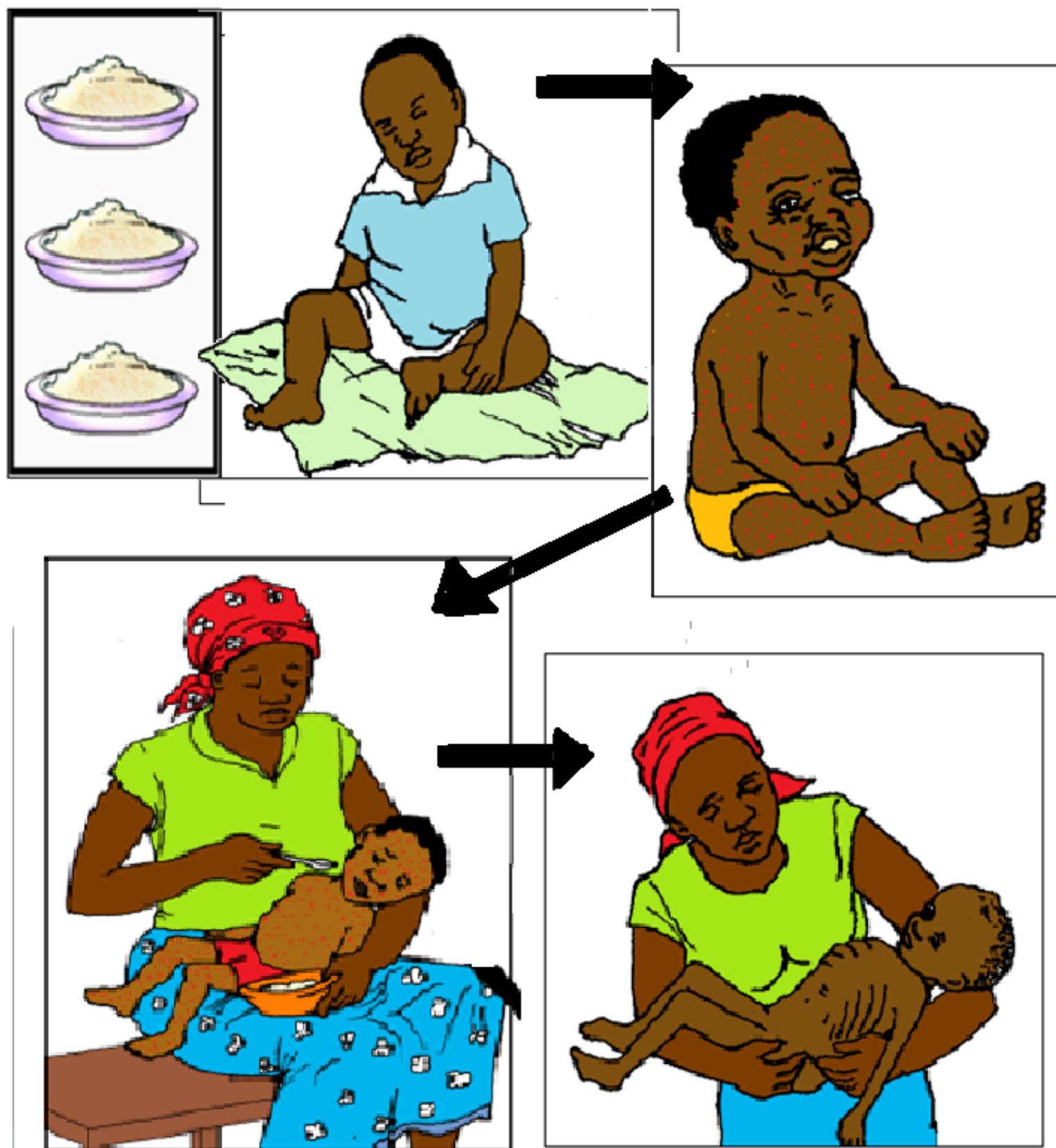
? What do you see in these pictures?

- In the first picture we see that every meal is the same for the child. His food does not contain high-nutrient foods like beans, or peas or plantain. The sickness was brought on because his body was not strong enough to fight off sickness and disease.
- Nutrient poor foods made him more vulnerable to sickness.
- Sickness and disease make a child less hungry and eager to eat.
- The child begins to lose more weight. His body continues to have trouble fighting disease and illness. He continues to be sick and eat little.
- In the final stages he is extremely ill and in danger of death.
- Poor nutrition has caused him to lose so much weight and be in danger.

? Do you think the mother should change the way she feeds her children? Why?

- The child's life is of great value and worth.
- The actions that she takes can save his life from death.

Malnutrition (Picture 5.2)



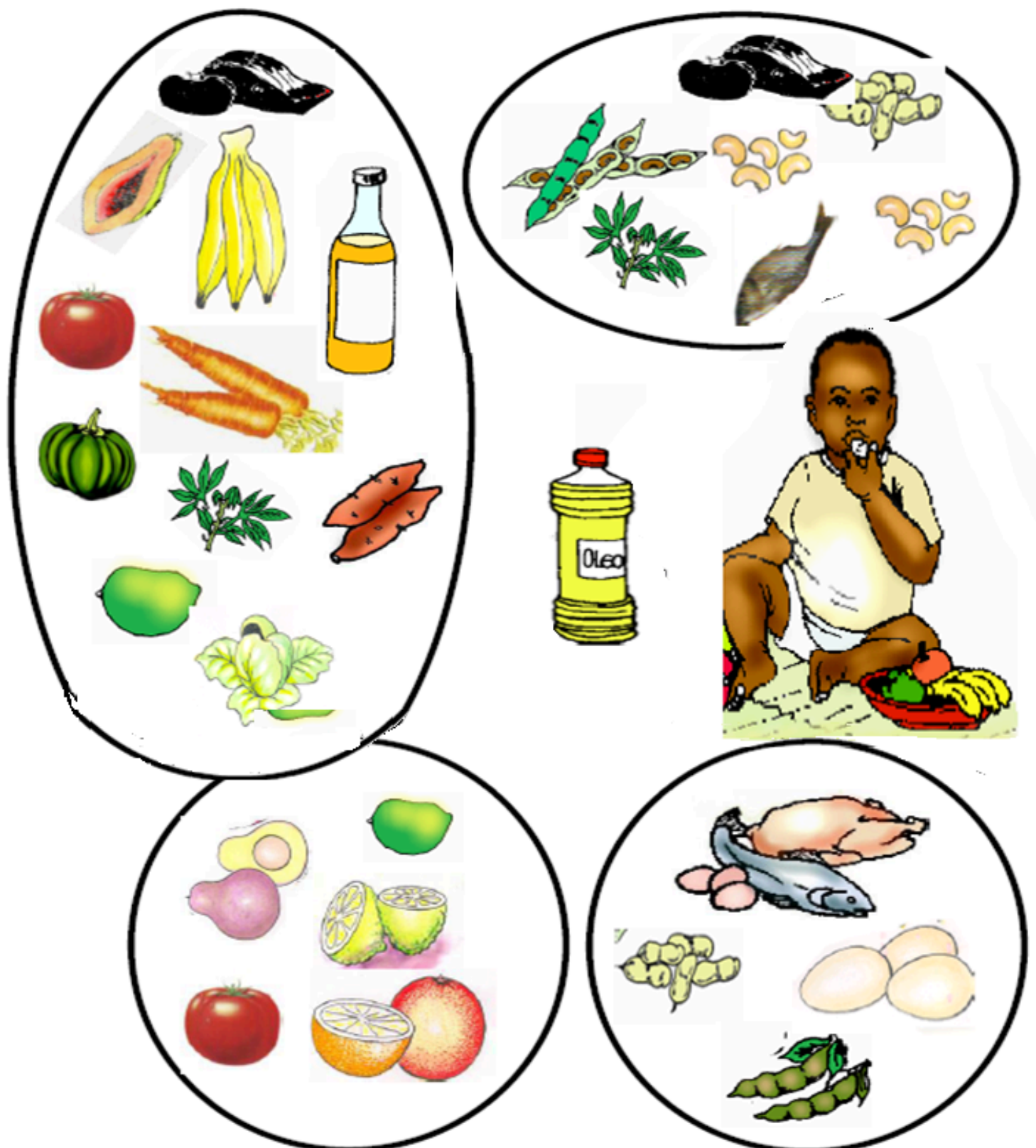
Nutrient Rich Foods for Children Ages 12 to 23 Months (Picture 5.3)



? What do you see in these pictures?

- Give children foods from EACH circle at family meal. If you can't use all of the circles in one meal, add the missing foods in the snacks that you give. This will help keep your children healthy and well nourished.
- Foods that are in more than one circle have many ingredients. If you use one of these foods, you do not have to include other nutrients from this circle.
- For example, kidney is rich in vitamin A and iron. Fish are rich in protein, vitamin A and iron. Dark green leafy vegetables have vitamin A and iron. Mangos have vitamin A and vitamin C.
- Children do not need sugary drinks like coffee, tea, soft drinks or cocoa.
- These drinks do not contain nutrients and should not be given to children.

Nutrient Rich Foods for Children Ages 12 to 23 Months (Picture 5.3)



Nutrient-Rich Meal Recipe (Picture 5.4)



? What do you see in these pictures?

- These foods help children to prevent anemia and give children strong blood.
- These foods help the body to absorb iron.
- These foods help to protect children from sickness and blindness.
- These foods help children's bodies to grow and recover after illness.
- Iodized salt to help prevent iodine deficiency.
- Oils increase the child's energy.
- Mothers' breast milk is still an important source of nutrition.
- If the mother eats good nutritious foods and gets iron supplements (if available) these will not only help her to stay healthy while breastfeeding, but also ensure that her breast milk is full of nutrients.
- These extra nutrients also help the mother to stay healthy while breastfeeding.
- In addition to nutritious foods, mothers should breastfeed whenever the child demands for two years or more.



Activity: Preparing a Day's Worth of Food

		Practice and Coaching		
Probe	Inform		Request	Examine

Nutrient-Rich Meal Recipe (Picture 5.4)

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Lesson 6: Growth Monitoring

Four Children of the Same Age (Picture 6.1)



? What do you see in these pictures?

In the afternoon some of the village children were playing together. One of the neighbors noticed that although all of the children were the same age, they had grown to be very different sizes. Of Great Worth was tall and stocky, the other children were smaller or thinner. Hardship looked healthy, but was much shorter than Of Great Worth. The neighbor turned to his friend and said, "See how God has designed our children. Our children shall be forever short and thin. Only Mary's child shall be tall and strong."⁷

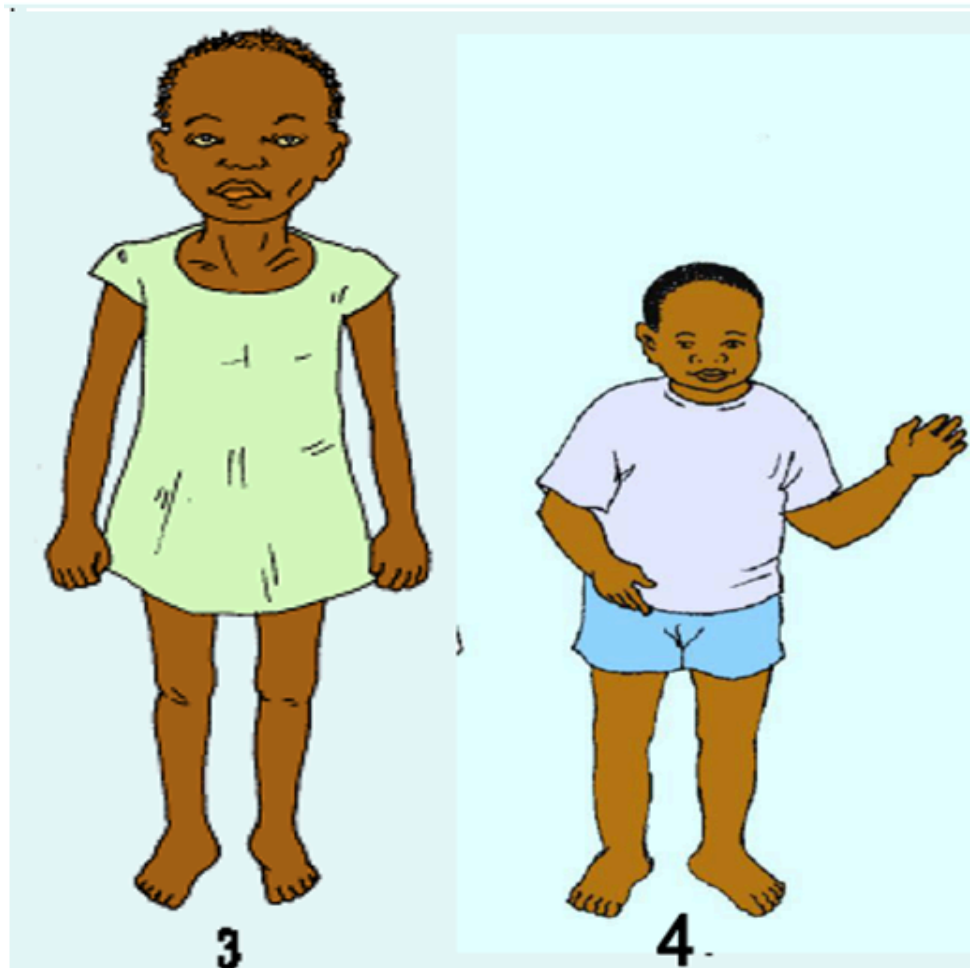
- Mary's boy is tall and looks healthy and heavier than the middle two boys.
- The second and third boy is very thin. Hardship is short, but looks healthy.



- ? Why do you think the boys are so different in size and weight? Do you believe that God made them this way?
- ? Do you think Hardship's father can make a difference in the life and health of his child?

⁷ This story emphasizes Ruth's husband's **perceived divine will**, a behavior determinant found in Barrier Analysis. He believes that his actions don't matter, and that it is God, "the gods," or "fate" chooses who will be thin and who will be fat and who will be healthy, etc. Use this story and lesson to show how caregiver's actions can make a difference. Also discuss faith teachings that show that God wants all to be healthy. He gives us knowledge and insight so that we can to overcome malnutrition. Increase their confidence in God's desire to see all children grow and thrive in life.

Four Children of the Same Age (Picture 6.1)



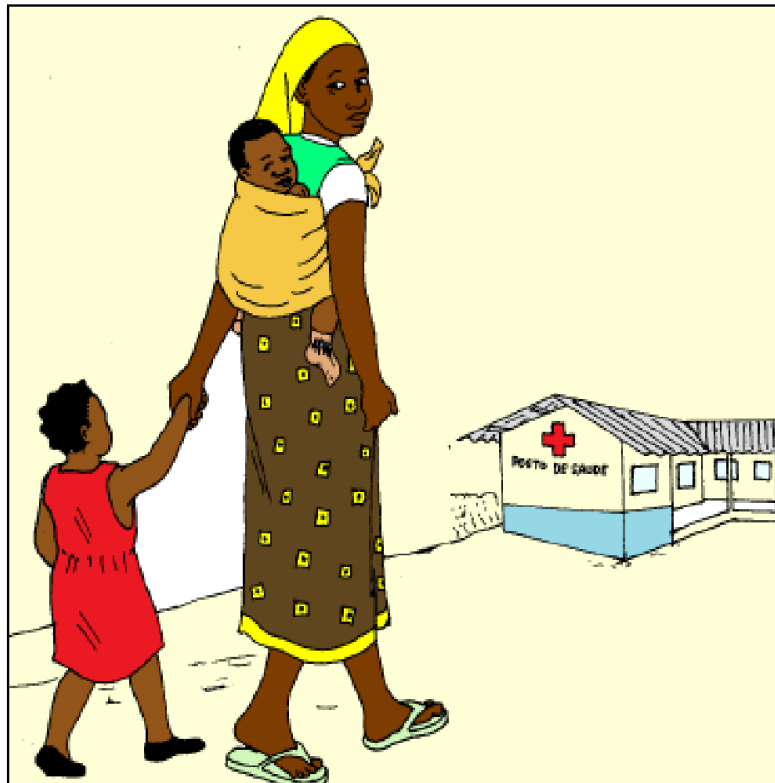
Growth Monitoring Activities (Picture 6.2)

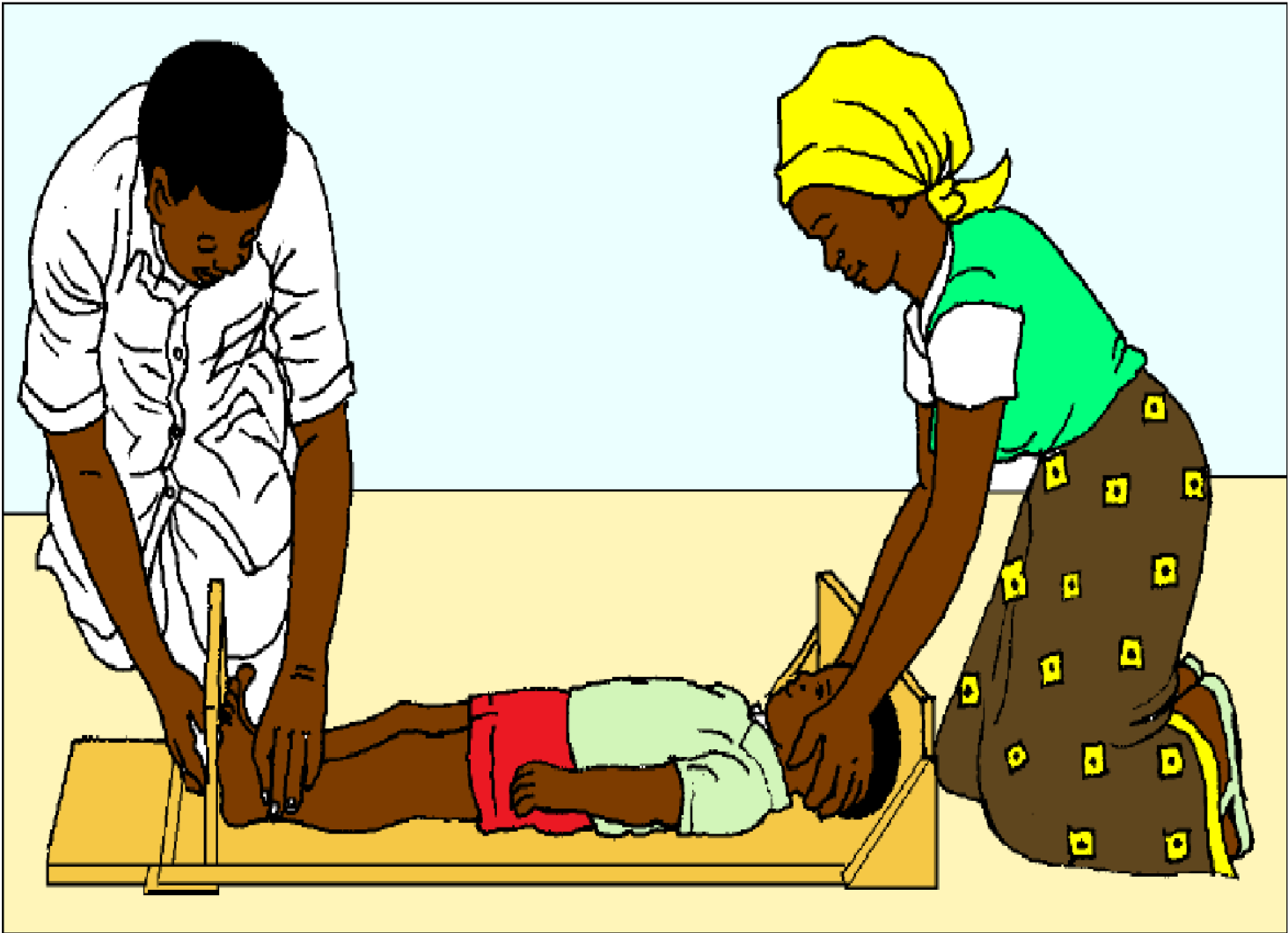


? What do you see in these pictures?

- Caregivers regularly go to the health post to monitor the growth of their children under age five.
- For children ages birth to 23 months, Mary takes them for growth monitoring every month.
- For children ages 24 to 60 months, Mary takes them for growth monitoring every three months.
- After the child is weighed and measured the health worker will tell the caregiver if the child is growing well.
- The health worker gives Mary advice on things she should do and she asks questions so that she knows exactly what she should do.
- The nutrition of children during the first five years of life greatly affects their growth and health for the rest of their life.
- It is true that God creates people of different sizes and shapes. However, all children should make big changes in height and weight during the first five years of life. If the children stop growing or lose a lot of weight, then something is wrong.
- Caregivers can intervene when children become sick and do things to help them survive.
- Caregivers have been given the ability by God/gods/fate to make a difference in the lives of their children.

Growth Monitoring Activities (Picture 6.2)





Growth Charts (Picture 6.3)



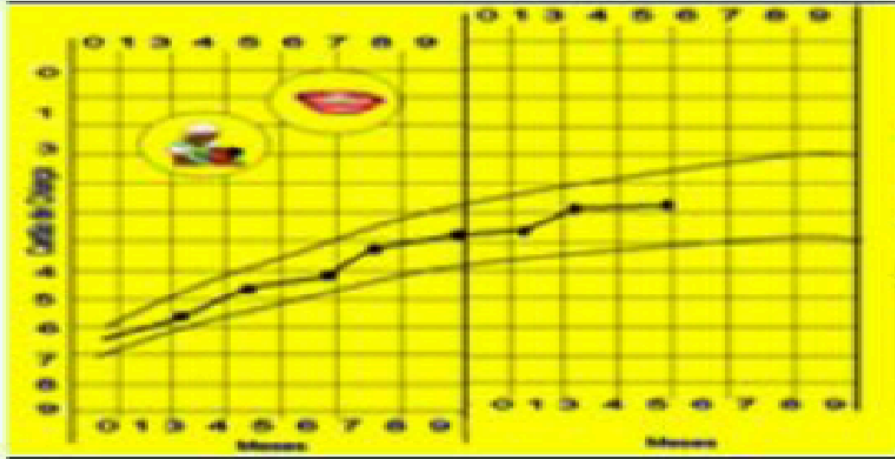
? What do you see in these pictures?

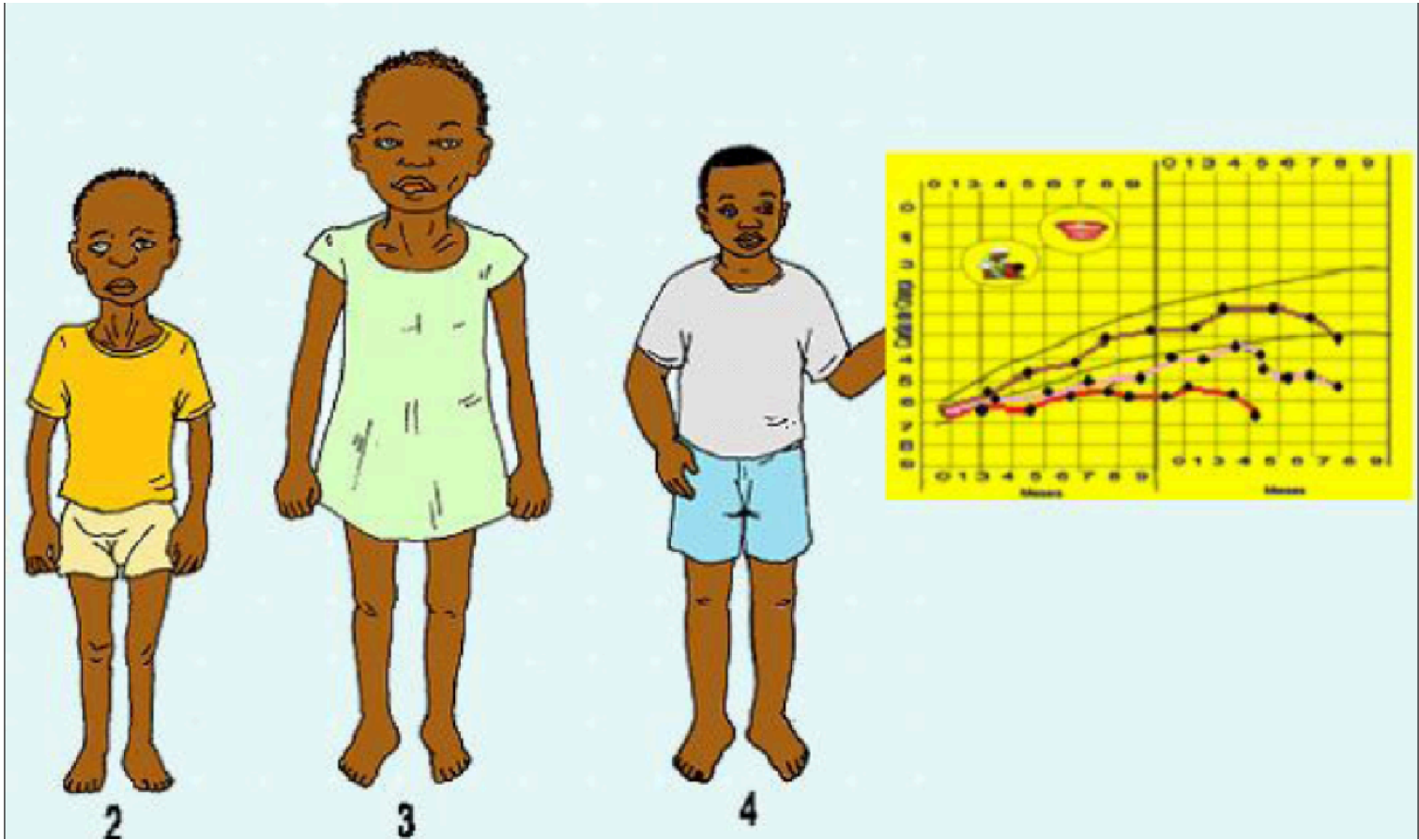
- The growth of the child is monitored by the nurse on a chart.
- The nurse puts a dot on the chart for each measurement. After every month, the nurse draws a line between the dots showing the growth of the child.
- There is a road that shows how children should grow that stretches across the page.
- The lines for the children should stay within the road and move up each time the child is measured.
- If the line goes up this means the child is gaining weight.
- If the line stays the same for more than a month or if the line goes down, the child is not growing well and the mother needs to take action quickly.
- The three children at the bottom have lines that go down or are too far below the road. This shows their families that they are not growing well.
- When a child is not growing well, the nurse will give counsel as to how to increase growth and help the children improve.

? If your child is sick, or has an illness that you don't know how to treat, what should you do?

- Ask the health workers for advice. Health workers can give medicines and advice to improve the health of the child.
- Health workers can also help you to know which foods are best for feeding your child.
- Very sick children will be given a referral to a place where they can go to improve their health.
-

Growth Charts (Picture 6.3)





More Activities (Picture 6.4) – 5 minutes



? What do you see in these pictures?

- Other health services are also available at the growth monitoring station.
- If vaccinations are needed, the health worker will give the children the needed vaccinations.
- If deworming medicines are needed, the health worker will give these pills.
- If a woman is pregnant or breastfeeding the doctor is able to provide vitamin supplements.
- The health worker will also talk to each mother about the growth of her children giving advice to help the mother improve the growth of her children.
- The doctors can also give advice to caregivers to help prevent child illness and care for sick children.

More Activities (Picture 6.4)



Our Responsibility (Picture 6.5)



? What do you see in these pictures?

- Children ages birth to 23 months should be taken for growth monitoring every month.
- Children ages birth to 24 to 60 months should be taken for growth monitoring every three months.
- Caregivers can help by holding the child's head in place, reassuring the child and helping the hold the child when the nurse gives a vaccination.
- This is your time to ask questions and find answers to questions you have about the health of your infants or children.
- It is important not only to ask questions, but to also listen to the advice that is given.
- By going regularly for the growth monitoring Caregivers are able to make sure that their growth is good compared to other children.
- If the children begin to falter, the health worker gives Mary advice on things she should do to improve.



Activity: Role Playing

		Practice and Coaching		
Probe	Inform		Request	Examine

Our Responsibility (Picture 6.5)

