

Nutrition and Hygiene for Orphans and Vulnerable Children in Nigeria:

A Training Guide for Community-Based
Organisations

Module 4: Activities for Adolescents 12–17 Years



About SPRING

The Strengthening Partnerships, Results, and Innovations in Nutrition Globally (SPRING) project is a six-year USAID-funded cooperative agreement to strengthen global and country efforts to scale up high-impact nutrition practices and policies and improve maternal and child nutrition outcomes. The project is managed by JSI Research & Training Institute, Inc., with partners Helen Keller International, The Manoff Group, Save the Children, and the International Food Policy Research Institute.

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Disclaimer

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We have created what we hope is a useful curriculum for projects, CSOs, and community volunteers working with orphans and vulnerable children in Nigeria. We hope this will serve as a guide for further adaptations to different national, state, and community contexts in the future.

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All components of the *Nutrition and Hygiene for Orphans and Vulnerable Children in Nigeria Training Package* may be found on the SPRING website: <https://www.spring-nutrition.org/countries/nigeria>.

Contents Chart

Session	Content and Objectives	Page	Duration (Min.)	Required Materials
1	<p>Nutrition and Care Needs</p> <ul style="list-style-type: none"> Understand the nutrition and care factors that contribute to their growth 	1	45	<p>Flipchart paper or A4 paper</p> <p>Illustrations</p> <ul style="list-style-type: none"> Growing Child Taxi and Motorcycle with Petrol <p>Flipcharts</p> <ul style="list-style-type: none"> Flipchart 11a: The Role of Food in Growth Flipchart 11b: The Role of Water in Growth Flipchart 11c: The Role of Hygiene in Growth Flipchart 12: Questions about the Importance of Food, Water, and Hygiene in Our Daily Lives
2	<p>Food Functions and Dietary Diversity</p> <ul style="list-style-type: none"> Practise the Move, Grow, and Shine system to help distinguish nutritionally adequate meals from less nutritionally adequate meals 	7	40	<p>3 buckets (optional)</p> <p>Flipchart paper (optional)</p> <p>Illustrations</p> <ul style="list-style-type: none"> Healthy Plate—Full Healthy Plate—Blank Move Foods Grow Foods Shine Foods Move Food cards Grow Food cards Shine Food cards
3	<p>When to Eat and How Much</p> <ul style="list-style-type: none"> Explain why they need to eat meals at different times during the course of a day Understand the appropriate meal frequency intervals for teens and younger siblings Understand the risk of overweight if they choose too many unhealthy Move foods (such as sweet, starchy, fatty foods) Understand Move foods versus Grow foods (legumes, meat, fish, dairy, eggs) and Shine foods (fruits and vegetables) 	13	90	<ul style="list-style-type: none"> 2 bottles (500 mL and 250 mL) Basin Water/sand to fill bottles Bag filled with stones (5 kg) <p>Illustrations</p> <ul style="list-style-type: none"> Taxi and Motorcycle with Petrol Healthy Plate—Full Healthy Plate—Blank
4	<p>Nutrition over the Life Cycle</p>	25	110	Illustrations

Session	Content and Objectives	Page	Duration (Min.)	Required Materials
	<ul style="list-style-type: none"> Understand that nutrition needs change throughout the life cycle Understand the particular iron needs of adolescent girls and young women Understand the benefits to delaying pregnancy for adolescent girls Understand the nutritional needs of pregnant women and adolescent girls 			<ul style="list-style-type: none"> Nutrition throughout the Life Cycle Move Food cards Grow Food cards Shine Food cards Handouts <ul style="list-style-type: none"> Text for Anaemia Session Text for Adolescent Pregnancy Session
5	Water, Sanitation, and Hygiene <ul style="list-style-type: none"> Understand that handwashing removes harmful germs to prevent foodborne and waterborne infections and help keep us healthy Understand and practise the appropriate duration of handwashing, with the appropriate materials and recommended method Describe the critical time points when they should wash their hands Understand the importance of proper disposal of waste and keeping the home and play environment clean 	39	90	<ul style="list-style-type: none"> Bottle Bottom of a plastic bottle with holes poked through Matches Nail Needle String Bar of soap Pins Chalk dust/flour/charcoal dust/dirt Basin/bowl Toilet roll/kitchen roll (if available) Illustrations <ul style="list-style-type: none"> Handwashing Steps Handwashing Times Faecal-Oral Route

<p>6</p>	<p>Water Safety</p> <ul style="list-style-type: none"> • Understand how water in the home is kept safe and the importance of clean water to health 	<p>53</p>	<p>30</p>	<ul style="list-style-type: none"> • “Clean” (clear) water in a glass • Clean boiled water in a glass • Dirty water in a glass • Plastic water container with cover • 1 clean cup <p>Illustration</p> <ul style="list-style-type: none"> • Faecal-Oral Route
<p>7</p>	<p>Importance of Eating When Sick</p> <ul style="list-style-type: none"> • Understand what happens to their bodies during illness • Understand that they need to continue eating and drinking, even though they may not feel like it when they are sick • Understand what foods they need to eat meet the increased nutritional needs during illness • Understand HIV-food interactions 	<p>57</p>	<p>85</p>	<ul style="list-style-type: none"> • 2 plastic bottles • Basin • Nail (to pierce bottles with) <p>Illustrations</p> <ul style="list-style-type: none"> • Healthy Plate—Full • Healthy Plate—Blank • Move Foods • Grow Foods • Shine Foods <p>Handout</p> <ul style="list-style-type: none"> • HIV/Drug Effects and Actions to Take <p>Flipchart</p> <ul style="list-style-type: none"> • Flipchart 13: HIV/Drug Effects and Actions to Take

Session 1: Nutrition and Care Needs

Session Objectives

By the end of the session participants will be able to:

- Understand the nutrition and care factors that contribute to their growth

Activity No.	Activity	Time (Min.)
1.1	Growth and Development	45

Activity 1.1 Growth and Development

Time: 45 minutes

Illustrations

- Taxi and Motorcycle with Petrol
- Growing Child

Flipcharts

Prepare in advance:

- Flipchart 11a: The Role of Food in Growth
- Flipchart 11b: The Role of Water in Growth
- Flipchart 11c: The Role of Hygiene in Growth
- Flipchart 12: Questions About the Importance of Food, Water, and Hygiene in Our Daily Lives (*Advance preparation is optional; questions can also be written out onto a blackboard.*)

Before the Activity

The facilitator should prepare the room for the activity. The facilitator should review the activity plan carefully and be comfortable presenting the material.

The facilitator will put out food pictures for the adolescents to look at, using the Move, Grow, and Shine Foods illustrations.

Activity Plan

Icebreaker

Show adolescents the Growing Child illustration.

Point at each stage of growth illustrated and ask the adolescents guiding questions.

1. How many of you have a small baby in your home, or have seen a small baby?
2. What do you think helped you grow from being that small baby to the young man or woman that you are now?

Discussion

Lead the participants in a guided discussion. The facilitator may use this outline as a potential script for facilitating the discussion. Directions, cues, and prompts are in italics.

*From the discussion generated above, highlight the categories of **Food, Water, and Hygiene and Protection From Disease**. If the adolescents do not mention them, please introduce them yourself.*

On three different flipchart sheets, the facilitator will write down the questions below.

Flipchart 11a: The Role of Food in Growth

Food

1. How does food help us develop and grow?
2. Why do we need to eat a variety of foods?
3. What happens if we do not get enough food?

Flipchart 11b: The Role of Water in Growth

Water

1. How does water help us develop and grow?
2. How does the quality of the water we use affect us?
3. What happens if we do not get enough water?

Flipchart 11c: The Role of Hygiene in Growth

Hygiene and Protection from Disease

1. How do good hygiene and cleanliness help us develop and grow?
2. What kinds of actions do we do to maintain hygiene for ourselves and our families?
3. How do we protect ourselves from disease?

Divide the class into three groups, and assign each group to one of the three headings (i.e. food, water, the role of hygiene in growth). Ask each group to think about the answers to the above questions and write them down on a separate sheet of flipchart paper or A4 paper. As groups discuss the questions, walk around the room and help them reach the desired conclusions. Each group can present their answers to the group and the group can deepen discussion with their own ideas.

Food

If the class has an active discussion and understanding of the need for food in their daily lives, then the facilitator may move on to the group presentation on water. The following may be read if the classroom does not generate discussion.

For our bodies to grow strong and healthy, we need food to eat. But not just one type of food, we need different types of foods that work in specific ways in our bodies. From small children we grow taller and gain weight and we call this growth. But there are also many changes happening in our bodies as well, that we do not, and the food that we eat is very important for those changes that happen inside our bodies. The change occurring inside our bodies is called DEVELOPMENT. This is because these different parts of our body grow in size, though not always, but they also become better at the work they do and function even better and faster. Many of the foods that we eat work specifically for that function of development.

As we go from day to day, we have to move around, play, and learn. To do all these things, we need ENERGY, and even when we are sleeping. And energy comes from food. Food is to the body what petrol is to a car or motorbike.

The facilitator shows the Taxi and Motorcycle with Petrol illustration.

Water

If the class has an active discussion and understanding of the need for water in their daily lives, then the facilitator may move on to the discussion on hygiene and protection from disease. The following may be read if the classroom does not generate discussion.

[Water works inside the body very much like it works outside our bodies.

In our daily lives, we use water to wash and clean. In a way, our bodies use water in a similar way. The body works very hard. In all its hard work, the body makes waste that needs to be cleaned away. So water works to clean that waste away from the inside.

That is how we get tears—they wash out our eyes.

That is why you have mucus in your nose, so you can blow your nose and take out anything that can make you sick.

That is why you pass urine, because the water you drink washes the body from the inside, and then what is washed out comes out as urine.

The water your drink also helps keep your body cool while you are playing, and on hot days this is seen as sweat on the body.

Also, faeces are partly made up of water; that is, the water still trapped in the food that our bodies cannot use.

So as we drink water our body is able to work as is needed so that the body can grow.]

Hygiene and Protection from Disease

If the class has an active discussion and understanding of the need for hygiene and protection from disease in their daily lives, then move on to the next discussion. The following may be read if the classroom does not generate discussion.

[When we are sick, we don't feel like our normal self, which is joyful, strong, playful, and hungry. This is because sickness changes what is going on in our bodies, and it also causes our food to be moved away from the work of helping us grow and develop. If we are sick long enough or this happens too many times, then we run the risk of slowing down our growing. So it pays to be clean.

When we do fall sick, our parents take us to the nurse or doctor at the clinic. The medicine we take helps take away what is making us sick. That way, the body is able to use the food we eat for the work of growing.

Another way is for us to have injections that prevent us from being sick. This is called **vaccination**. How many of you have a small brother or sister, or how many of your five-year-old siblings have been taken to the clinic to get a vaccination injection? When we are vaccinated, the medicine in the vaccine stops us from getting sick in the first place, which then helps our body keep growing because the food in our body is not used to fight off sickness.]

The facilitator will recap the main points of the session's discussion using the guidelines given below if time allows. This section of the activity can be used for revision and recap purposes as well.

From the discussion generated above, highlight the following terminology:

Fuel for the Body (Energy)

Growth and Development

Preventing and Fighting Sickness

If the adolescents do not mention them, please introduce them yourself.

On a piece of flipchart paper write down the following questions. If paper is not available, the facilitator can guide the activity as a plenary group discussion.

Flipchart 12: Questions about the Importance of Food, Water, and Hygiene in Our Daily Lives (*Advance preparation is optimal; questions can also be written out onto a blackboard. Prepare additional flipchart pages for water and hygiene using the same questions.*)

How important is food in our daily lives?

Are there times in a person's life when a person needs more food? What are they?

What foods do you think provide:

- **Energy to move?**
- **Building blocks for growth?**
- **Protection to the body to help it stay healthy?**

What are the terms that your science/biology teacher uses for the groups of foods that provide:

- **Energy to move?**
- **Building blocks for growth?**
- **Protection to the body to help it stay healthy?**

In plenary, ask the group to discuss their thoughts about these questions. Allow time for the group to offer their thoughts and show their knowledge. Use this time to facilitate discussion but also to observe and gauge the level of discussion that is possible for nutrition for the following food modules, and adapt as necessary.

Note: *Link food group terms in nutrition science with Move, Grow, and Shine terms.*

Wrap-up

Ask the adolescents if they have any questions about the discussion and activities. Thank them for their participation.

Session 2: Food Functions and Dietary Diversity

Session Objective

By the end of the session participants will be able to:

- Practise the Move, Grow, and Shine system to help distinguish nutritionally adequate meals from less nutritionally adequate meals.

Activity No.	Activity	Time (Min.)
2.1	Introducing Move, Grow, and Shine	40

Activity 2.1 Introducing Move, Grow, and Shine

Time: 40 minutes

Illustrations

- Healthy Plate—Full
- Healthy Plate—Blank
- Move Foods
- Grow Foods
- Shine Foods
- Move Food cards
- Grow Food cards
- Shine Food cards

Before the Activity

The facilitator should prepare the room for the activity. The facilitator should review the activity plan carefully and be comfortable presenting the material.

This activity will introduce the Move, Grow, and Shine categories. The facilitator will lead the participants in a guided activity. The facilitator may use this outline for facilitating the activity. When selecting food matching cards for this activity, be sure that these foods are eaten in the local community, and ideally also appear on the Move, Grow, and Shine Foods illustrations.

Show the Healthy Plate—Blank illustration to the adolescents and explain that they are to use the plate illustrated for this activity. Alternatively, the facilitator will place three buckets (one labelled with the Move Foods illustration, one labelled with the Grow Foods illustration, and one labelled with the Shine Foods illustration) on a table in the centre of the room.

Activity Plan

Icebreaker

Some of you may have taken biology classes or even food and nutrition as subject topics in science in school. In this session, we will provide you with a practical way to apply those scientific concepts that your teacher has taught you in class.

Today we will discuss how different foods do different work in the body. It is important to eat different foods so that your body has what it needs to do all the things it does for us. I will explain three different categories of food, and how they help us to Move, Grow, and Shine! You may have heard of other food categories, and these are just a new, fun way of thinking about those same categories.

Discussion

Lead the participants in a guided discussion. The facilitator may use this outline as a potential script for facilitating the discussion. Directions, cues, and prompts are in italics.

Reference the Move, Grow, and Shine Foods, Healthy Plate–Full, and Healthy Plate–Blank illustrations in the following discussion.

Move Foods

The first type of food is one that provides fuel and helps us move and be active. These we will call MOVE foods, because they give us energy and make us Move. Examples of Move foods include bread, rice, cassava, cereals, and potato. These foods are more commonly known as sources of **carbohydrates**. Other foods in the Move group include **fats and oils**. These foods give our muscles fuel to run, swim, jump, and work, and our brain fuel to concentrate. If we don't eat enough Move foods, then we can feel tired and won't have enough fuel to get through the day. It's important to include Move foods at all meals and especially breakfast, so that our body and brain can get ready for the busy school day ahead.

Look at these pictures with me; can any of you name one MOVE food each for me?

Select volunteers and guide them to identify five foods on the Move Foods illustration. Ask the adolescents to name other Move foods not on the illustration.

Let's think for a bit. If we didn't have Move foods in our diets, we would be too tired to do anything, and we wouldn't have the energy to dance, work, or play!

Can anyone show me one way you can move your body? It can be a dance or a silly movement. Once you teach us, we can all stand up and do it together.

Choose one or two volunteers to demonstrate a movement, and then all adolescents should mimic that movement and try it themselves. Thank the adolescents for participating.

Grow Foods

Next, we have Grow foods. Grow Foods help our body grow bigger and stronger. Grow foods help build our body's bones, teeth and muscles. Examples of Grow foods include chicken, meat, fish, eggs, beans and milk, cheese and yoghurt. All of these foods help to keep us feeling full so that we don't get hungry straight away. **Grow foods contain protein**. Grow foods also help keep our brain focused, so it is important to eat Grow foods at breakfast, to get ready for the day. If we don't eat enough Grow foods, our bodies won't have the right building blocks to make us taller and stronger.

Look at these pictures with me. Can five of you name one GROW food each for me?

Select volunteers and guide them to identify five foods on the Grow Foods illustration.

Would anyone like to share something that they would like to do when they are adults?

Prompt with appropriate suggestions, like become parents, get married, become a teacher, drive a car, etc.

Shine Foods

Now, we have Shine foods. These foods are full of **vitamins and minerals** to keep our skin, hair, and eyes bright and shining. They also keep our immune system strong so that we don't fall sick easily. Examples of Shine foods include all fruits and vegetables. Brightly coloured fruits and vegetables are full of vitamins and minerals, and we need to eat different types every day. Try and eat fruits and vegetables from every colour of the rainbow to make sure you're getting enough Shine foods.

Look at these pictures with me. Can five of you name one Shine food each for me?

Select volunteers and guide them to identify five foods on the Shine Foods illustration.

Vitamin A–Rich and Iron-Rich Foods

Point out several Shine Foods that are rich in Vitamin A and some that are rich in iron.

Vitamin A–rich foods include orange-flesh sweet potato, mango, pawpaw (papaya), pumpkin, carrots, and dark, leafy greens. Vitamin A foods are important to keep us from getting sick, and they also help our eyesight.

Iron-rich foods include dark green, leafy vegetables. Iron-rich foods are important to keep our blood strong and to keep us able to play, work, and learn. Foods like oranges, lemons, papaya, and mango help improve the uptake and the use of iron in the body.

Lead the adolescents to identify each food written on the flipchart or mentioned as a Move, Grow, or Shine food. If one category of food is missing, help the adolescents identify a food that could make a complete meal, using the foods illustrations to guide the adolescents.

Let's put this into practice. Who can tell me what foods you ate yesterday for dinner?

If available, write down the answers on flipchart paper—alternatively, a blackboard if available or an exercise book. Continue to write down the names of foods called out by adolescents until you have a list of at least five or six different food ingredients. Where dishes are named, ask the adolescents to name the different names of the foods used to make up the dishes. Count along with the adolescents how many foods have been named.

So we see that we have all eaten different types of foods. These foods taste different from each other. Some are sweet, sour, bitter, and salty. Some feel different in the mouth and on the hands. Some are crunchy, soft, hard, smooth, do they pull (slimy), or watery. Some are different colours. We already learned that our bodies need many different foods. We can use the Healthy Plate to make sure we are eating many different foods in our meals. For each meal, we should try to eat at least one Move food, one Grow food, and one Shine food. Fruits and vegetables are Shine foods, and the more of these you can add, the healthier the plate!

Now, let us practise with more foods and do a matching exercise.

Give the adolescents three to five pictures each to match to the corresponding category on the Healthy Plate—Blank, or on a flipchart paper with the Healthy Plate—Blank drawn on it, or to place in labelled bucket. This activity will recap grouping of Move, Grow, and Shine foods.

Modification to activity: *If there are no Healthy Plate—Full and Healthy Plate—Blank illustrations available, modify the activity as described in the section below.*

Flipchart Option:

Draw an empty Healthy Plate onto a flipchart sheet if available, or onto a blackboard/whiteboard, and write down the answers in the Move, Grow, or Shine section.

Now, let's think about what we might like to have for dinner tonight! Pretend you're in charge of making dinner! What meal would you like to prepare? Remember, we'd like to have our meal to have at least ONE Move food, ONE Grow food, and ONE Shine food. After that, if we want to add more foods, especially Shine foods, we should!

In interactive plenary (or in pairs if resources allow), adolescents will create meals on their plates with Move, Grow, and Shine foods, with assistance from the facilitator.

Wrap-up

Ask the adolescents if they have any questions about the discussion and activities. Thank them for their participation.

Session 3: When to Eat and How Much

Session Objectives

By the end of this session participants will be able to:

- Explain why they need to eat meals at different times during the course of a day
- Understand the appropriate meal frequency intervals for teens and younger siblings
- Understand the risk of overweight if they choose too many unhealthy Move foods (such as sweet, starchy, fatty foods)
- Understand Move foods versus Grow foods (legumes, meat, fish, dairy, eggs) and Shine foods (fruits and vegetables)

Activity No.	Activity	Time (Min.)
3.1	Meal Frequency	60
3.2	Healthy and Unhealthy Snacks	30

Activity 3.1 Meal Frequency

Time: 60 Minutes

Supplies

- 2 bottles (500 mL and 250 mL)
- Basin
- Water/sand to fill bottles

Illustrations

- Taxi and Motorcycle with Petrol
- Healthy Plate—Blank
- Move Food card
- Grow Food card
- Shine Food card

Before the Activity

The facilitator should prepare the room for the activity. The facilitator should review the activity plan carefully and be comfortable presenting the material.

Activity Plan

Discussion

Lead the participants in a guided discussion. The facilitator may use this outline as a potential script for facilitating the discussion. Directions, cues, and prompts are in italics.

When we eat and drink, food and liquid move through our body and is used up to help us Move, Grow, and Shine. What our bodies cannot use leaves our body as waste when we visit the bathroom.

Our stomach empties with time as our body uses our food to keep us healthy, strong, and growing. How do you know when your stomach is nearly empty?

Anticipated answers: We feel hungry and thirsty. We yawn, we feel tired.

Those are very good answers! When our stomachs are empty, they signal us to eat or drink with feelings of hunger and thirst. That's the body's way of telling us that we need to refuel. Just like when a car needs petrol to keep going, we need to refuel with food to keep moving, growing, and protected and shining. Look at this illustration with me.

Show the Taxi and Motorcycle with Petrol illustration.

For people to get enough food throughout the day, they need to eat at different times of the day. We need three meals a day but they need to add in snacks if a person is feeling sick, is very active, or is growing. In these cases, snacks should be added between meals to ensure that the person has enough energy to get better or to work.

Food Frequency

The facilitator will lead the adolescents in **an interactive discussion**, where they will decide together the general answers to the questions below. Adolescents should be encouraged to share their experiences and decide what the average for the group is.

- How many meals do you have?
- How many meals do you think a person your age should have?
- Do you have any healthy snacks during the day?
- If yes, then how many?
- What do you snack on?

While every person is different, in general, each day, adolescents your age should be eating three meals with one or two **HEALTHY** snacks.

(Tell the group that you will be covering the topic of **SNACKS** in a subsequent section.)

Facilitator asks the group: Can anybody tell me what the first meal of the day is called?

Suggested answer: Yes, it is called breakfast.

Facilitator asks the group: Why is it important to eat breakfast at the start of the day?

Suggested answer: Because the period of time between the evening/night meal and the first meal of the day is usually the longest time in between meals that we have. Therefore it is important to refuel the body with the energy and nutrients it needs to continue the process of growth, development, repair, and protection. This also prepares you for the activities of the day.

- A. Breakfast is the first meal that we eat each day. It is important that you have a healthy breakfast so that your stomach is full of food that will give you energy to concentrate in school and not feel tired because you are hungry.

Facilitator asks the group: How soon after eating breakfast should we eat again? Is this a main meal or not? Why or why not?

Suggested answer: Young people are very energetic and are still growing, therefore they need a small amount of food before the midday meal to maintain their energy levels so that they can sustain their levels of activity at home and at school. This next meal can be three to four hours after the first meal, if this is not at the same time as the midday meal. This small amount of food should preferably be a Shine or Grow food. (e.g. mango, yoghurt [nono], carrot, tomato; garden egg and peanut butter, moi moi, or akara).

- B. Because young people are very energetic and are growing, it is good to have a small snack a few hours after breakfast so that their energy levels do not fall too much.

Facilitator asks the group: What is the name of the meal in the middle of the day?

Suggested answer: Afternoon meal/lunch.

- C. The next main meal of the day is the afternoon meal that we also call lunch. Lunch is used to refill us at the middle of the day, to make up for the energy and food that we have used up that morning. It is important that your lunch meal also has the Move, Grow, and Shine foods so that you can keep going during the day at school and at home.

Facilitator asks the group: Is there need to eat after lunch before the evening meal?

Suggested answer: For very energetic young people, maybe sports people, or if they walk to and from school or they do heavy work when they get home, or even to give the body energy to concentrate when starting to do homework, a young person may need to eat a small quantity of food before the evening/night meal. This small meal is called a snack and can be a Grow or a Shine food, such as a palm-size piece of pawpaw, one banana, a cup of milk, or a handful of groundnuts.

- D. It is important to keep energy levels up between lunch and dinner, so a snack can be given to the child when they come home from school. This often can be a fruit.

Facilitator asks the group: Now it is evening, why do we need to eat?

Suggested answers: So we do not get hungry in the night. To refill or body for all the work it has done during the day.

After the midafternoon snack, the next main meal is the evening/night meal. This meal is usually to sustain the child throughout the night before they sleep, so it's important that the meal is full of Move, Grow, and Shine foods.

We have talked about the intervals when to eat our meals and during these intervals we talked about snacks.

Facilitator asks the group: Who can tell me what a snack is?

Suggested answer: A snack is a small meal that you eat between your main meals. You can eat it if you don't have time to eat or are low on energy.

Facilitator asks the group: Are all snacks beneficial and healthy to the body? Yes or no?

Which ones do you think are NOT beneficial?

Which ones do you think are beneficial?

Healthy Snacks

We practised having three meals. Could we have added snacks to the meal pattern?

Ask the adolescents this question to reinforce concept of healthy snacks:

What are healthy snacks?

Then guide adolescents with examples of healthy snacks, e.g. fruit, vegetables, boiled eggs, yoghurt, roasted corn, groundnuts (boiled or roasted).

Ask why others aren't healthy, e.g. chin chin.

Use this explanation to explain why these fast foods are not a healthy option.

Chin chin, puff puff, samosa, meat pies, sodas or soft drinks, and so on are tasty but they are not healthy snacks because they have high quantities of Move foods (i.e. sugars, carbohydrates, fats, and oils). If these foods are eaten too frequently, they go beyond the amount our body needs and our body cannot use this extra quantity up. The result is that this extra ends up being stored as fat in the body and this makes you add on more weight than is healthy for our bodies. These kinds of snacks that you can have once in a while, let us call them "sometimes foods" because you don't need to eat them every day or even every week. Maybe once or twice a month is enough to have a "sometimes food". So if you are in the habit of snacking on chin chin, puff puff, and such foods replace them with healthy choices like groundnuts, yoghurt, mango, boiled egg, roasted corn with Ube.

Facilitator asks the group: Now we have talked about what to eat during the day. What about what to drink when you are thirsty? What do you drink when you are thirsty?

Possible answers: Juice, soft drink, water, milk.

When you are thirsty the best options for you are to drink are milk, yoghurt, or boiled or treated water. For you to get the maximum benefit of nutrients from your meals, do NOT drink tea, coffee, mineral drinks, or soda/soft drinks at mealtime. During your meal, it is best to drink water, that helps keep us hydrated and feeling refreshed. Alternatively, you can drink milk. Milk is a Grow food, which our body can use. Minerals and tea do not help our bodies. Like the “sometimes foods” we talked about, minerals/soft drinks and tea should be “sometimes drinks”, as they are not very beneficial to the growth of your body.

If adolescents ask about fruit juice, let them know that fresh, natural fruit juices are okay, but they should make sure that these are actual juices and not flavoured sugary drinks. Even some fruit juices have added sugars and should be avoided.

Activities

A. Food Frequency for Younger People

Before we move on with our activity, I want to show you a short demonstration about food frequency for babies and young children. This is important to consider for those of you who have younger siblings or young children in your family, as well as for when you are older and have a family of your own.

Facilitator asks the group: Younger children need to eat more frequently and need to be sure to have healthy snacks between meals. Does anyone know why this is?

Possible answer: To make the body grow and get stronger.

Let’s do an activity to understand why.

Bring out two empty bottles. The bottles should be of different sizes (e.g. one 500-mL bottle and one 250-mL bottle) but should have the same size opening. The facilitator will also have some water and a basin to collect the water. You can also use beans, rice, sand, or something else to fill the bottles.

Imagine these two bottles are stomachs. This large bottle is an adolescent’s stomach, and this small one is like a young child’s stomach. In reality, a young child’s stomach is even smaller than this. It’s only about the size of the child’s fist. Now imagine it is mealtime. An adolescent can eat a full meal, but with such a small stomach, do you think a young child can eat the same amount of food? No, the child will feel full much faster. These full bottles will represent our stomachs filled up with food.

Fill each all the way, making sure one is much smaller than the other.

Now, like we discussed earlier, our bodies are using up the food we eat as fuel for energy and other benefits. To represent this, I will turn the bottles over and spill out the contents which represent the body using the food for energy.

Empty the bottles out completely over the basin, pouring the contents out at the same rate. The facilitator can ask for two volunteers to count how long it took to empty out the larger and smaller bottle. The facilitator will guide a discussion among the class on the questions below.

Facilitator asks the group: How many counts did the smaller bottle take to empty? How many counts did the larger bottle take to empty?

Which one emptied faster? That’s right, the smaller bottle, that represents the young child’s stomach, emptied faster. What do you think that means for young children?

Possible answer: Smaller children have smaller stomachs, which will empty out more quickly.

Facilitator asks the group: Should they eat more frequently, or less frequently?

Possible answer: They should eat more frequently.

If a young child ate at the same schedule as an older person, do you think he or she would get enough food? Why or why not?

Possible answer: The young child would not get enough food.

So for a younger child, maybe younger than five years old, it is good to give them smaller meals but more times during the day. For example, four meals and three healthy snacks, plus milk and water after meals.

Does your family eat from a shared plate in your home?

Note: For the individuals who answer yes, outline the answer below.

From this session we see that it is good to let smaller children eat first till satisfied; because they will eat less compared to the older children and be finished earlier.

B. Adolescent Meal Frequency

Let's talk about how food frequency might look for you as adolescents. I will need the class to split up into two groups.

Divide the class into two groups. This activity needs a lot of space for the facilitator to define a "track", such as in an empty classroom, down the sides of the classroom, or better yet a field. Alternatively, a "track" can be made around the building where the class is being held. Each group is given a set of food cards, which are preselected to have an even number of Move, Grow, and Shine foods.

Use the numbered explanation below to come up with a meal plan for a full day. The groups must make each meal and then "use up" the energy by running a lap around the track.

1. Divide the group in to two.
2. Set up two judging tables at the top of the class, place a Healthy Plate—Blank illustration on the table.
3. Set the Move, Grow, and Shine cards at the judging desk.
4. Each group is set up on one side of the room.
5. The game starts when a representative from each group picks up the food cards.
6. For the first meal, ask each group to create a breakfast meal, with one each of Move, Grow, and Shine foods.
7. Then one person must present these foods and set them on the Healthy Plate for the judge to check if it is correct; once it is judged correct the child will run the track and return.
8. While the person is running, the other people in the team **may not touch** the remaining food cards.
9. Upon the runner's return, the group will work together to come up with a Move, Grow, and Shine lunch.
10. A second group member presents the plate to the judge before they run the track.
11. Finally, an evening meal is made and a new person presents the meal to judge and once correct, they will run the track.
12. The first group that completes all three meals and runs the track wins.

If time allows, snacks can be included in the race. Following the activity, gather the class together and hold a discussion about meal frequency. The following are prompting questions that the participants can use to begin discussion:

What do you think was the purpose of this activity that we just did?

Do you understand why you needed to come back to prepare a new meal after preparing each meal?

This running activity represents the activities that we do during the day that use up the food we eat. The cards that we are matching up represent the meals that we eat in the morning, in the afternoon, and in the evening. This activity helps us understand how to put together the Move, Grow, and Shine foods in a meal. Additionally, we practise what we have learned about our need to eat at different times of the day.

Level of Physical Activity (Exercise/Football/Manual Labour)

If you are very physically active, then you will need an extra serving of Move, Grow, and Shine foods as an extra snack straight after you are active.

Possible question: If I am a person who sits down from morning to night, do I need extra foods?

Answer: No, you do not need extra foods if you are not very active. You may need more foods if you are at puberty or experiencing maturation/presence of a growth spurt or if you are very physically active.

When you are going through a growth spurt during puberty, then you may need extra snacks to meet the increased needs. You may notice you are going through a growth spurt when you feel hungrier than usual and want to eat more frequently or want to sleep more. This is your body's way of telling you that you need more food. Also when you work harder than usual, you will get hungrier sooner and want to eat more frequently.

Wrap-up

Ask the adolescents if they have any questions about the discussion and activities. Thank them for their participation.

Activity 3.2 Healthy and Unhealthy Snacks

Time: 30 minutes

Supplies

- Bag of stones or sand (5 kg)
- 2 chairs stacked on each other (if bag of sand not available)

Illustration

- Taxi and Motorcycle with Petrol

Before the Activity

The facilitator should prepare the room for the activity. The facilitator should review the activity plan carefully and be comfortable presenting the material.

The facilitator will lead the participants in a guided discussion. The facilitator will bring out the bag of stones/sand. Two chairs stacked on one another can be used if the bag of sand/stones is not available.

Activity Plan

Discussion

Lead the participants in a guided discussion. The facilitator may use this outline as a potential script for facilitating the discussion. Directions, cues, and prompts are in italics.

Healthy and Unhealthy Choices

The foods we eat have different functions in the body. Your body knows how to use Move, Shine, and Grow foods to be healthy and strong. We have learned that Move foods give us energy to play, learn, and work. When we play, learn, and work, the energy that we get from our food is used up. But if we do not move our bodies enough by playing, exercising, or working to use up the food we eat, our bodies start storing the food we have eaten as fat under our skin and inside our body. This is the start of overweight.

When a person carries too much weight on their body, they get tired easily because there is more weight to carry around. There is more work for the bones to do (especially the knees) because there is a greater load to carry. This makes it difficult for a person to run, play, or work. The heart also works harder when we are too heavy for our height or age. The heart has to work much harder than it already is and the result is that the person gets tired and breathless quickly and cannot play or work as much as they used to. The lungs also have to work harder because the body needs more oxygen to help it work. All these kind of changes make it even more difficult for the person to move around so that they can use the energy that they are eating and have stored.

Activity

Now let us have an activity. The purpose of this activity is to help us understand the effects of gaining too much weight on our ability to move and play.

Choose two volunteers.

Choose one volunteer to carry the bag of stones/sand.

The second volunteer will not carry anything.

The two children will stand side by side and race walk to the end of the room and back once.

When they get back they should exchange, the person carrying the chairs or bag of stones/sand will not carry anything this time and the person who did not carry anything will carry the chairs. This activity will need to be done in a spacious room, or can be done down the side of the room or outside of the classroom, or on a field outside.

Now, I want us to have a race. May one person volunteer to carry this bag of stones/sand (chairs)—the load. May another person come and stand next to them. I want both of you to walk as fast you can from the front of the room (the blackboard area) to the back of the room and come back again to the front. Then I want the person carrying the load to give it to the person without load. Then both of you walk again.

After the students complete the activity, congratulate their efforts.

Did it feel different when you were walking when carrying the load to when you did not have a load? How did it feel to carry the load? Which turn made you out of you feel out of breath sooner? Which turn was easier? Which turn was harder? What do you think it would be like if you had to carry this extra weight all the time? Does it help you understand the effects of being overweight?

When a child or adolescent gains too much weight too quickly, that also means that they may not be getting enough Grow and Shine foods to keep their height growing correctly. This is because the child is not getting enough food to grow or develop but they are getting food that makes them store the food as fat. **Remember, our plate should be made up of equal parts of Move foods, Grow foods, and Shine foods (one-third each).**

Activity

The Effects of Empty Foods (“Sometimes Foods”)

In addition to Move, Grow, and Shine foods, there are some foods that we eat (often as treats) that don’t really help the body to Grow, Move or Shine. Remember we talked about unhealthy foods like soda, sweets, crisps, and biscuits, and we called them “sometimes foods”, foods which our bodies can’t use to Grow. If you had a car, which fuel would you use, would it be the best petrol that you can afford that you would use, or dirty water? I think it would be the best quality of petrol, right? If you put in only dirty water instead of petrol, what happens to your car?

Show the Taxi and Motorcycle with Petrol illustration.

Expected answer: It won’t run!

That’s right! It wouldn’t work anymore. Unhealthy snacks are kind of like that dirty water—our bodies don’t know how to use them and then our bodies don’t work as well over time. What other foods in our community can you identify as junk foods (“sometimes foods”)?

Ask if adolescents would like to ask questions.

Explain that you now want to play a game. Have the adolescents stand in the middle of the room. Explain that you will name a food and you want them to run to one side of the room if they think it’s a healthy snack and to the other if they think it’s unhealthy. If people disagree, have them discuss why they think it is healthy or unhealthy. Some examples of unhealthy snacks to call out include sweets, cookies, cake, chin chin, puff puff, and drinking minerals. Healthy snacks should include fruits or vegetables that can be held.

Additionally, you may call out meals consisting of too many Move foods and no Grow or Shine foods, to emphasize the need for a balance of healthy foods as well.

Optional Activity

Have adolescents work in small groups to write a song about choosing healthy foods over unhealthy foods. Have them perform for the whole group.

Sugar in Its Many Disguised Forms in Food Ingredient Lists

The list below is to support the group with more information about the different names used to describe sugar in food ingredient lists in commercially bought food products. As part of making healthy choices, having adequate information to make an informed choice helps encourage choosing healthy snacks and drinks.

The American Heart Association recommends that children do not consume more than 3 teaspoons (i.e. 12–25 grams) of sugar every day. This gives us much to think about, because we are all consuming much more than that recommendation most of the time. The association recommends no more than 9 teaspoons (38 grams) for adult men and no more than 6 teaspoons (25 grams) for adult women¹.

Here is the list of the many names sugar is given in commercially bought food stuffs and drinks. Remember, the food at the top of the list is the most abundant ingredient in the foodstuff and as you progress through the list the quantity of each ingredient decreases.

Sugar has as many as 61 different names.

Wrap-up

Ask the adolescents if they have any questions about the discussion and activities. Answer their questions, and thank them for their participation.

61 Names for Sugar^{2,3}

- Agave nectar
- Barbados sugar
- Barley malt
- Barley malt syrup
- Beet sugar
- Brown sugar
- Buttered syrup
- Cane juice
- Cane juice crystals
- Cane sugar
- Caramel
- Carob syrup
- Castor sugar
- Coconut palm sugar
- Coconut sugar
- Confectioner's sugar
- Corn sweetener
- Corn syrup
- Corn syrup solids
- Date sugar
- Dehydrated cane juice
- Demerara sugar
- Golden sugar
- Golden syrup
- Grape sugar
- HFCS (high-fructose corn syrup)
- Honey
- Icing sugar
- Invert sugar
- Malt syrup
- Maltodextrin
- Maltol
- Maltose
- Mannose
- Maple syrup
- Molasses
- Muscovado
- Palm sugar
- Panocha
- Powdered sugar
- Raw sugar
- Refiner's syrup
- Rice syrup
- Saccharose

¹ http://www.heart.org/HEARTORG/HealthyLiving/HealthyEating/Nutrition/Sugar-101_UCM_306024_Article.jsp#.V_q41IQrLMw

² http://www.sugarscience.org/hidden-in-plain-sight/#.V_q3F1QrLMY

³ http://www.heart.org/HEARTORG/HealthyLiving/HealthyEating/Nutrition/Sugar-101_UCM_306024_Article.jsp#.V_q41IQrLMw

- Dextrin
- Dextrose
- Evaporated cane juice
- Free-flowing brown sugar
- Fructose
- Fruit juice
- Fruit juice concentrate
- Glucose
- Glucose solids

- Sorghum syrup
 - Sucrose
 - Sugar (granulated)
 - Sweet sorghum
 - Syrup
 - Treacle
 - Turbinado sugar
 - Yellow sugar
-

Session 4: Nutrition over the Life Cycle

Session Objectives

By the end of the session participants will be able to:

- Understand that nutrition needs change throughout the life cycle
- Understand the particular iron needs of adolescent girls and young women
- Understand the benefits to delaying pregnancy for adolescent girls
- Understand the nutritional needs of pregnant women and adolescent girls

Activity No.	Activity	Time (Min.)
4.1	Nutrition Changes over the Life Cycle	40
4.2	Iron in the Diet	30
4.3	Pregnancy and Adolescent Girls	40

Activity 4.1 Nutrition Changes over the Life Cycle

Time: 40 minutes

Illustrations

- Nutrition throughout the Life Cycle
- Move Food cards
- Grow Food cards
- Shine Food cards

Before the Activity

The facilitator should prepare the room for the activity. The facilitator should review the activity plan carefully and be comfortable presenting the material, including the information in the Supporting Materials section.

Activity Plan

Small Groups

In this session, the facilitator will go over the changing nutritional needs experienced throughout the life cycle. Please reference the Supporting Materials shown at the end of this section (Activity 4.1). Or use handouts mentioned in the illustrations list.

1. *Divide the group into six small groups; assign each group one life cycle stage.
 - a. *I.e. infants, small children, pre-adolescents, adolescent girls, adolescent boys, and adult women**
2. *The students will be asked to prepare these points in the form of a debate, defending their particular stage of the life cycle. Students will be provided with the Nutrition throughout the Life Cycle handout outlined in the Supporting Materials section to help supplement their arguments.*
3. *Ask the participants to think about growth in that life cycle stage.*
4. *The debate points will be to write three nutritional needs that need to be met at their stage of the life cycle, and then to write three things that can be done to meet the nutritional needs at that stage. The students will have minutes to prepare their arguments.*
5. *The groups will then share their points as a debate, justifying which is the most critical stage of the life cycle. Each group will be allocated two minutes to present their points.*
6. *Once all points have been put forward, the facilitator will guide the discussion, adding points missed by the debaters to emphasize the importance of all the stages of the life cycle.*

Wrap-up

Ask the adolescents if they have any questions about the discussion and activities. Answer any questions asked and thank them for their participation.

Supporting Materials

Meeting and Protecting Nutrition Needs across the Life Cycle—four handouts with the following text:

Infant needs (0–2 years)

Changes occurring in infants:

- Gain in height
- Gain in weight
- Maturation of internal organs
- Brain development
- Strengthening of muscles and bones—crawling and walking
- Increasing activity from complete dependence to sitting up, rolling over, crawling, and walking

Meet needs by:

- Encouraging early initiation of breastfeeding
- Exclusive breastfeeding from birth up to six months
- Encouraging timely introduction of complementary foods at six months, with continuation of breastfeeding up to two years or beyond
 - Note with the introduction of complementary foods it is important to include animal-source foods.
- Feeding different food groups at each serving. For example:
 - MOVE foods: grains such as maize, rice millet, and sorghum, and roots and tubers such as cassava, potatoes
 - MOVE foods: Oil and fat such as oil seeds, margarine, ghee, and butter added to vegetables and other foods will improve the absorption of some vitamins and provide extra energy. Infants only need a very small amount (no more than half a teaspoon per day).
 - GROW foods: Legumes such as beans, lentils, peas, and groundnuts, and seeds such as sesame
 - GROW foods: Animal-source foods such as chicken, fish, liver, and eggs and milk, and milk products
 - SHINE foods: Vitamin A–rich fruits and vegetables such as mango, papaya, passion fruit, oranges, dark-green leaves, carrots, yellow sweet potato and pumpkin, and other fruits and vegetables such as banana, pineapple, watermelon, tomatoes, avocado, eggplant, and cabbage
- Using iodised salt
- Providing multiple micronutrient powders from six months
- Providing vitamin A supplements every six months, from nine months of age to the age of five years
- Feeding sick child frequently for one week after recovery
- Providing de-worming treatment

Young child needs (2–5 years old)

Changes occurring in young children:

- Weight gain of approximately 2.5 kg per year
- Increased physical activity and movement
- First experience of independence from primary caregiver—possible changes in foods fed and frequency of feeding
- First learning experiences

Meet needs by:

- Giving different foods in the right quantities and frequency for the age group (MOVE, GROW, and SHINE foods)
- Providing deworming medicine to kill any worms in the intestines

- Treating illness promptly, finishing all medication prescribed
- Continuing biannual vitamin A supplementation

Preadolescent boy's and girl's needs

Changes occurring/activities of preadolescents:

- Girls' bodies maturing toward puberty: preparation for the menstruation cycle
- Boys' bodies also maturing towards puberty—increased muscle mass and increased bone density
- Growth spurts—increased rate of increase in height
- Physically active—play at home and at school
- At school—learning

Meet needs by:

- Eating more SHINE and GROW foods to provide vitamins and minerals to store in preparation for menstruation
- Eating more GROW foods to help the body meet new growth needs; boys' muscle and bone growth and growth spurts
- Treating illnesses promptly and completing all medicines prescribed.
- Ensuring clean boiled water consumed in the home
- Using a pit latrine; do not ease yourself in the open or in the yard of the house

Adolescent girl needs

Changes occurring in adolescent girl:

Puberty:

- Menstruation—monthly loss of blood—leads to low iron stores (iron is a mineral found in SHINE and GROW foods; e.g. green leafy vegetables and red meats)
- Bone maturation and strengthening
- Growth spurt/gain in height
- Increased activity—responsibilities in the home—chores such as housework, fetching water or firewood, running errands for parents, taking care of younger siblings
- Playing with peers at school
- Walking to and from school

Meet needs by:

Promote appropriate growth by:

- Increasing the food intake
- Encouraging eating SHINE and GROW foods to build up blood supply that she loses with menstruation
- Encouraging eating SHINE and GROW foods to build up her bone strength
- Providing iron and folate supplements from the clinic where necessary (if girl is tired and found to be anaemic—having weak blood)
- Avoiding fatty and sweet foods
- Avoiding intake of coffee/tea with meals
- Encouraging good hygiene practices
- Preventing and seeking early treatment of infections
- Encouraging use of Insecticide-treated nets (ITNs)
- Encouraging parents to give girls and boys equal access to education—undernutrition decreases when girls/women receive more education

- Delaying first pregnancy until at least 18 years of age
- Encouraging families to delay marriage for young girls
- Encouraging support of teenage boys to teenage girls/sisters to help meet their nutritional requirements

Adolescent boy needs

Changes occurring in adolescent boys:

- Increased muscle mass
- Increased bone strength
- Growth spurt—gain in height
- Increased activity—sporting activities in school/community, responsibilities in the home such as tending flocks, cleaning compound, cutting firewood for the home, running errands for parents, taking care of younger siblings
- Playing with peers at school
- Walking to and from school

Meet needs by:

- Increasing protein intake (GROW foods)
- Increasing energy intake (MOVE foods)
- Increasing calcium and magnesium intake (GROW foods)
- Encouraging families to delay marriage for young girls
- Encouraging parents to give girls and boys equal access to education—undernutrition decreases when girls/women receive more education

Adult woman needs

Body changes:

- Menstruation
- Pregnancy
- Childbirth
- Breastfeeding
- Bone loss

Meet needs by:

- Eating MOVE, GROW, and SHINE foods
- Preventing and seeking early treatment of infections
- Encouraging good hygiene practices
- Giving iron/folate supplementation

Meet needs in pregnancy, childbirth, and breastfeeding by:

- Increasing the food intake of women during pregnancy: eat one extra meal or “snack” (food between meals) each day
- During breastfeeding eating two extra meals or “snacks” each day
- Encouraging consumption of MOVE, GROW, and SHINE foods. All foods are safe to eat during pregnancy and while breastfeeding.
- Giving iron/folate supplementation (or other recommended supplements for pregnant women) to the mother as soon as mother knows she is pregnant and continuing for at least three months after delivery of the child
- Giving vitamin A to the mother within six weeks after birth
- Preventing and seeking early treatment of infections:
 - Completing anti-tetanus immunizations for pregnant women (five injections in total)
 - Using of ITNs
 - De-worming and giving antimalarial drugs to pregnant women between four and six months of pregnancy
 - Encouraging good hygiene practices

Activity 4.2 Iron in the Diet

Time: 30 minutes

Illustrations

- Move Food cards
- Grow Food cards
- Shine Food cards

Handout

- Text for Anaemia Activity

Before the Activity

The facilitator should prepare the room for the activity. The facilitator should review the activity plan carefully and be comfortable presenting the material. Place two chairs side by side at the top of the room in readiness for the role-play to be done in this section.

Note: While this activity may be used with both adolescent boys and girls, the facilitator may choose to hold this session only with adolescent girls. The facilitator should review the contents of this activity carefully and consider the community where the session is being held as well as the maturity of the group.

Note regarding substituting this role-play with teenage boys: This section can also serve as an introduction to male involvement by sensitizing teenage boys to the nutritional needs of their teenage sisters or teenage girls in their home, class, or community. Boys can also be at risk of nutritional deficiencies like anaemia if they themselves do not eat Grow and Shine foods in their diet. This role-play can be applied to boys especially if they are from very vulnerable households where the child may take on additional household tasks and manual labour to help meet the financial needs of the home. Remember to substitute the names with boys names applicable in your community.

Activity Plan

Icebreaker

Why Am I So Tired?

In this activity we are going to learn about anaemia; a health problem that affects many people, especially adolescents girls.

Does anyone know what anaemia means?

Wait for a few replies.

Anaemia is a health condition that occurs when the blood does not have enough of one very important nutrient called iron. We get iron from our food. Iron is found in Grow foods like liver and red meat. We can also get iron from Shine foods like Ugu leaf and spinach. When you don't have enough iron in your blood, you are anaemic. There are several different causes of anaemia, but one way that adolescent girls can become anaemic is when they don't eat enough Grow and Shine foods to help build up their stores of iron. Adolescent girls lose blood every month because of their menses; this means that the amount of iron in their blood can become less. When you are anaemic and have too little iron in your blood, you can feel very weak and tired. You can also feel dizzy from time to time. You may also have pale palms, feel breathless, experience

headaches, and may be too weak to do physical work. Adolescent boys can also be at risk of anaemia if their diet contains mostly Move foods and very few Shine or Grow foods. This is because adolescent boys are going through a rapid period of growth where their muscles are getting bigger and that draws on the iron stores of the body. If children live in areas where malaria is a big problem or intestinal worms affect the community, anaemia can also be a danger.

Activity

Ask for two volunteers to do a role-play. Call the volunteers aside to give them instructions about the role-play and a copy of the case scenario Why Am I So Tired? found below. The scene will be two friends; Halima and Blessing who bump into each other at the market. Halima shares with Blessing about how she has been feeling lately. Ask Halima to act out the different symptoms she is feeling. Instruct Blessing to be the friend who listens and asks questions about her friend's health and advises her on what to do. Emphasize that Blessing asks Halima what she is eating to establish that she is NOT receiving enough foods with iron.

Give a signal to start the role-play.

The scene ends when Blessing advises Halima (if boys are doing the role-play, the names could be David and Suleiman) to see a health worker about her symptoms and eat good food sources of iron such as beef, pork, chicken, fish, eggs, beans, groundnuts, and dark green, leafy vegetables (spinach, sweet potato leaves).

Select two volunteers for a sample role-play using the following text.

Halima: Hi, how are you, Blessing?

Blessing: I am fine. How are you?

Halima: I am fine, sort of...

Blessing: What do you mean sort of?

Halima: I am not sick but I am always feeling tired and weak.

Blessing: When did you start feeling like that?

Halima: Oh since about three months ago.

Blessing: I am sorry about that. But tell me how you are feeling exactly.

Halima: In addition to feeling weak and tired all the time, I also feel dizzy from time to time. Oftentimes I feel sleepy.

Blessing: Aah...tell me more.

Halima: I also have severe headaches. I experience fast heartbeats and breathlessness, especially when I am walking or sweeping the house or doing physical education at school. (For boys the activities could be football, cleaning the compound.)

Blessing: Let me see your palms and nail beds.

Halima: [Shows Blessing her palms and nail beds]

Blessing: Oh my....your palms and nail beds look rather pale [asks to look at the eyes, too]. Your eyes look pale as well. I think you may have anaemia.

Halima: So what should I do? Why do I have anaemia?

Blessing: It seems to me that you are NOT receiving foods that are rich in iron. You should start eating good food sources of iron such as red meat (beef), eggs, poultry (chicken), fish, legumes (beans and groundnuts), dark green, leafy vegetables (spinach, sweet potato leaves). Equally important, you should go to the clinic and see the doctor.

[End of scene]

How do you feel about what you saw in the role-play?

Wait for a few replies and give concluding remarks. Emphasize the role of right food choices in preventing anaemia.

Activity

Divide the girls into two groups and give each group a deck of selected food matching cards. Ask each group to arrange all food cards into piles of food from animals and food from plants. When they are finished the piles should look like this:

Food from animals: Liver, beef tripe (stomach)/intestines, beef, chicken, chicken liver and gizzards and heart, fish, egg

Foods from plants: Beans and groundnuts, spinach, Ugu leaf, sweet potato leaves

Menstruation

Adolescent girls who menstruate may need extra servings, particularly of Grow and Shine foods containing iron (dark leafy greens, or meat).

Possible clarification: Girls need extra servings during menstruation because it helps us to recover the blood lost. The facilitator needs to guide the group with the correct examples (e.g. spinach, liver, meat, offal foods)

It is important to eat foods that are rich in iron at every meal. Eating plenty of dark green, leafy vegetables in addition to eating fruits after meals can give you enough iron to keep you strong and healthy. You should also include meat, fish, or eggs added to foods such as beans.

It is important to talk to your doctor for further information if you are experiencing any symptoms we discussed today.

Periods of Faster Growth and Increased Physical Activity in Adolescent Boys and Girls

If adolescent boys and girls are very physically active and are not consuming enough Grow and Shine foods, they can be at risk of developing anaemia (weak blood). Adolescents (boys and girls) who are going through a growth spurt, which is a rapid period of growth, can also be at risk of anaemia if they do not consume sufficient Grow and Shine foods. This is because during very heavy physical activity and in growth spurts the body is using more nutrients than usual and the child's diet may not meet the new requirements. Therefore it is important for adolescents to include Grow foods such as red beans, fish, chicken, red meat, and offal foods (liver, kidney, heart, tripe) in their diet as well Shine foods like green leafy vegetables—e.g. spinach, Ugu leaf, okra leaf—which are good sources of iron. Seasonal fruits such as pawpaw, oranges, and mango are important to eat as well, because fruits (a good source of vitamin C) help the body use the iron from the foods eaten.

Wrap-up

Ask the adolescents if they have any questions about the discussion and activities. Thank them for their participation.

Activity 4.3 Pregnancy and Adolescent Girls

Time: 40 minutes

Illustrations

- Move Food cards
- Grow Food cards
- Shine Food cards

Before the Activity

The facilitator should prepare the room for the activity. The facilitator should review the activity plan carefully and be comfortable presenting the material.

Note: While this activity may be used with both adolescent boys and girls, the facilitator may choose to hold this activity only with adolescent girls. The facilitator should review the contents of this activity carefully and **consider the community context** as well as the **maturity of the group**. The facilitator may also choose to present this activity with older adolescent girls. This activity will also encourage male involvement (among adolescent boys) and to sensitize them about the unique nutritional needs of adolescent pregnancy.

Activity Plan

Discussion

Lead the participants in a guided discussion. The facilitator may use this outline as a potential script for facilitating the discussion. Directions, cues, and prompts are in italics.

Food and Nutrient Needs in Pregnancy

We are now going to discuss food needs during adolescent pregnancy. Remember that nutrients are the parts of food that are good for us, including protein (Grow foods), vitamins, minerals (Shine foods), and carbohydrates (Move foods).

Facilitator asks the group: Do you think pregnant adolescents need more or less Move, Grow, and Shine foods than they would if they were not pregnant?

Possible answers: More of these types of foods

Facilitator asks the group: Which types of foods does a pregnant adolescent need more of?

Possible answers: Grow and Shine foods

An adolescent girl is still growing. Therefore, when she gets pregnant, her body now has to support her growth and also the growth of the unborn baby. Pregnancy during adolescence can be very dangerous for both the mother and the baby. The baby may not be fully developed and may be born unhealthy. Because an adolescent mother is not fully matured, her pelvis (hips) is not fully formed, and this can make giving birth more difficult. If you become pregnant as an adolescent, you will no longer have time to devote to school, hobbies, or your job. This is why it is best to delay pregnancy until a girl is at least 18 years of age.

It is important that a pregnant adolescent girl gets enough of the right kinds of foods during pregnancy to support her growth and her baby's growth (especially Grow and Shine foods). It is important that all women get the right types and amounts of Move, Shine, and Grow foods. Examples of foods that girls need during pregnancy include red meat, chicken, fish, eggs, fruits and vegetables, especially **dark green, leafy vegetables**, and fruits and other vegetables rich in vitamin A, like orange-flesh sweet potato, mango, papaya, pumpkin, and carrots. Additionally, girls need to eat cereal and grain-based Move foods such as rice, millet, and maize.

Do you remember that we talked about meal frequency? In pregnancy, an adolescent girl may need the normal three meals containing Move, Grow, and Shine foods, as well as two or three more snacks with Grow and Shine foods in them. Remember we learned about Halima and Blessing and that Halima needed to see the doctor because she had iron-deficiency anaemia. It is important to protect an adolescent pregnant girl from iron deficiency because that can affect the growth of her baby, her growth and development, and the safety of her delivery. If she has too little iron in her blood during pregnancy, the baby will not grow well and the soon-to-be mother could bleed very seriously during delivery (putting to bed).

Not having enough iron during the first six months of pregnancy can be harmful to the mother and the baby. It can lead to delivery before the date the baby is due to be born, or the baby may be born at a low birthweight.

Who can remember which foods were found to be rich in iron and the groups they belonged to?

Shine foods: Spinach, Ugu leaf, pumpkin leaf

Grow foods: Liver, beef meat, offal, beef intestines, chicken livers and gizzards, eggs

Facilitate a discussion using Move, Grow, and Shine to remind the group of the key messages on healthy food choices.

Like we discussed before, choosing Grow and Shine foods is very important for pregnant adolescents. Remember to increase the amounts Grow and Shine foods so that both the mother and baby grow strong and healthy.

Activity

Divide the group into three smaller groups. Give them decks of food matching cards. Ask them to identify foods which are good for pregnant adolescents. Allow them five minutes to complete the task, then ask them to return as a group and share their responses, giving reasons for the choices. Ask the other girls whether they agree or disagree and give reasons for their answer.

Do you remember the debate we had about the stages of the life cycle? From that debate, can anyone tell me what the key health care needs for pregnant adolescents are?

Wait for a few replies. Guide adolescent girls toward these correct answers if not already highlighted:

- *Attend antenatal care at least four times during pregnancy. These check-ups are important for a pregnant woman to learn about her health and how her baby is growing.*
- *Know your HIV status, attend all the clinic appointments, and take medicines as advised by the health provider.*
- *During pregnancy, eat one extra small meal or "snack" (extra food between meals) each day to provide energy and nutrients for the mother and growing baby.*
- *Take iron-folate tablets to prevent anaemia during pregnancy and for at least three months after the birth of the baby.*
- *Take de-worming tablets as prescribed removes worms from the intestines and helps prevent anaemia.*
- *To prevent malaria, sleep under a long-lasting, insecticide-treated mosquito net and take antimalarial tablets as prescribed.*
- *Avoid drinking coffee and tea during meals.*
- *Avoid sugary drinks during pregnancy.*
- *Drink clean water when you are thirsty.*

- *Eat the best locally available foods, including milk, fresh fruit and vegetables, meat, fish, eggs, grains, peas, and beans.*
- *Take vitamin A tablets immediately after delivery or within six weeks so that the baby receives the vitamin A in the mother's breastmilk to help prevent illness.*
- *Use iodised salt to help the baby's brain and body develop well.*

What are the key health care needs for adolescent mothers?

Wait for a few replies. Guide the adolescent girls to the following correct answers if not already mentioned:

- *Extra care, more food, and more rest than an older mother.*
- *Adolescent mothers need to nourish their own bodies, which are still growing, as well as the growing baby's.*
- *During breastfeeding, adolescent mothers need to eat two extra small meals or "snacks" (extra food between meals, especially Grow and Shine foods) each day to provide energy and nutrients for the mother and the growing baby.*

Activity

Ask for two volunteers to play the role of Stella, a pregnant adolescent, and Aishatou, her friend. Call them aside for a briefing on the role-play. Give them their roles to play as follows.

Stella shares her experiences with Aishatou, saying, "Lately I have been feeling sickly and weak. I often don't eat, as I don't want to grow big so that people will see that I am pregnant. Instead I snack on crisps, soda, and bubble gum. I spend the day at the market, where I keep myself too busy and eat a lot of chips".

Aishatou is to listen and give good advice about healthy eating to her friend Stella **based on the points shared in this session and previous one about the Move, Grow, and Shine foods, as well as about healthy and unhealthy food choices**. Give/refer the volunteer playing Aishatou to a copy of the Nutrition throughout the Life Cycle handout.

In this activity we are going to talk about common eating behaviours in pregnant adolescents.

When they are ready ask both Stella and Aishatou to come forward and role-play. Ask the rest of the girls to be attentive to the role-play. At the end of the role-play, ask the girls:

What did you see and learn from the role-play? Did Aishatou help her friend improve her nutrition? Is there anything Aishatou missed out?

Note: If time allows refer the group to the Practical Approaches to Communicating with Children (Module 1) for tips to use when helping Stella in her situation.

Wait for a few replies.

In the role-play we heard that Stella was pregnant and skipping meals, preferring to snack on foods high in fat or sugar with little nutritional value. Stella was too busy to make good food and ate a lot of fast food. As an adolescent, Stella still needs to learn to take care of herself, let alone the baby growing inside her. As a result

she has not been making healthy food choices and may have a limited available supply of healthy foods and may not know the best ways to prepare these foods.

What are some of the ways that Aishatou tried to help her friend Stella? What kinds of good advice about healthy eating did she give? Is there anything she missed?

Wait for a few replies.

Aishatou tried to teach her friend that she needs to eat enough of the right kinds of food at every meal. She pointed out that pregnant adolescents need to eat healthy because they and the baby are growing. The pregnancy places extra needs on the adolescent's body. To eat the right way, Stella needs to get food from different food groups, making sure to eat staple MOVE, GROW, and SHINE foods to get enough nutrients. Also, Stella needs to know that if she doesn't eat enough iron she may become anaemic, which is a danger to both the girl and her baby. If Stella is losing weight or feeling tired all the time, she should go to the clinic.

Wrap-up

Ask the adolescents if they have any questions about the discussion and activities. Thank them for their participation.

Session 5: Water, Sanitation, and Hygiene

Session Objectives

By the end of the session participants will be able to:

- Understand that handwashing removes harmful germs to prevent foodborne and waterborne infections and help keep us healthy
- Understand and practise the appropriate duration of handwashing, with the appropriate materials and recommended method
- Describe the critical time points when they should wash their hands
- Understand the importance of proper disposal of waste and keeping the home and play environment clean

Activity No.	Activity	Time (Min.)
5.1	Learning to Wash Hands	20
5.2	How to Wash Hands	20
5.3	When to Wash Hands	20
5.4	Keeping Our Environment Clean	30

Activity 5.1 Learning to Wash Hands

Time: 20 minutes

Supplies

- Toilet roll/kitchen roll (where available)
- Pins
- Chalk dust/ flour/charcoal dust/dirt
- Basin

Before the Activity

The facilitator should prepare the room for the activity. The facilitator should review the activity plan carefully and be comfortable presenting the material.

Note: This activity involves using flour to show the spread of germs. In order to reduce mess, you should consider doing this activity outside, or in a place where it will be easy to clean up afterwards.

The facilitator should tell the group the group: I know that some of you may have encountered the topic of cell biology or microbiology in your science lessons. Just like the previous session on nutrition, these following sessions will give you simple practical tips on how these topics are part of everyday life.

Activity Plan

Icebreaker

Ask participants to look at their hands and state whether they think their hands are clean enough to eat with.

Let's do a little experiment: Who here thinks their hands are already clean right now? Raise your hands. How do you know they are clean?

Adolescents give their answers.

Discussion

Lead the participants in a guided discussion. The facilitator may use this outline as a potential script for facilitating the discussion. Directions, cues, and prompts are in italics.

Does anyone know what a germ is? Who can tell the group?

Adolescents will give their answers and the facilitator will highlight the correct responses.

Germs are very small *organisms*—or living things—that can make people get sick. They can cause you to get an upset stomach, diarrhoea, or an infection in a cut on your hand. In fact, germs are SO small we can't see them with our bare eyes. They are even smaller than a **pinpoint**.

Hold up a pin and ask how many adolescents can see the pinpoint from where they are sitting.

Now imagine hundreds and thousands of germs that could all fit on this pinpoint together. Now, that is VERY TINY, invisible really. In fact, to see germs you need a special machine called a **microscope**.

When we are sick, we sometimes go to a clinic to see a doctor, who can use a microscope to find out which germs are making us sick. This is why doctors sometimes ask us to spit in a cup or provide a sample of urine, faeces, or blood.

When they know the cause of the sickness, doctors can give us the right medicine we need to get better. Doctors have medicine in order to fight germs, but every day people like you and me can fight germs and keep them from even entering our bodies and passing them to other people. How do you think we can do that?

The best way to stop from falling sick is to wash your hands with soap and water. Remember, germs are too small to see, so we need to wash our hands regularly, even if we can't see germs on our bodies.

Activity

I want to do a small activity with you all to show you how germs can be spread around, even if we are trying to be very careful. In this bowl, I have some dusty material. We are going to pretend that this is something dirty. It is full of GERMS! Normally we cannot see germs, but in this case, we will be able to see the dusty material on our hands, and we will pretend that those are our germs. Can I have two volunteers who will play in our dirt by dipping their hands in the dusty material and coating them? Remember that we said that germs spread even if we are being careful, so please dip your hands slowly or we will get the dust everywhere.

Choose two volunteers. Ask the volunteers to dip their hands into the bowl and coat both hands.

Okay, now you both have gotten dirty, haven't you? And we can see the "germs" on your hands! We know we don't want any germs on our hands, so let us try to get it all off. Please dust your hands and try to wipe off the dust with a piece of kitchen roll.

Ask the adolescents to look at their hands.

Was all the dusty material wiped off? Are you sure? Spread out your fingers and look between them. Is there any dusty material in there? Or how about under your fingernails? Please raise your hand if you can find any dusty material still on your hands. Okay, let's try this: Touch your upper arm and wipe your finger on your arm. Now take a look at your arm!

Is there dusty material on your arm? What is the best way to get all the dirt off? Now we will learn about the best way to get our hands properly clean.

Wrap-up

Ask the adolescents if they have any questions about the discussion and activities. Thank them for their participation. The facilitator will transition to Activity 5.2.

Activity 5.2 How to Wash Hands

Time: 20 minutes

Supplies

- 1 clean, empty 1-litre bottle with bottle top
- 1 extra bottle (optional)
- 1 small net bag (optional)
- Matches
- Nail
- Pin/needle
- String
- Bar of soap
- Bottom of a plastic bottle with holes poked through to use as a soap dish
- Basin
- Chalk dust/flour/charcoal dust/dirt (optional)
- Kitchen paper/toilet roll
- Clean bucket with a cup on the side hanging from handle and basin
- Covered jug and basin

Illustrations

- Handwashing Steps
- Handwashing Times
- Wetting Hands
- Soaping Hands
- Lathering Hands
- Scrubbing Fingers
- Scrubbing Fingernails
- Washing Thumbs
- Washing Wrists
- Rinsing Hands
- Air-Drying Hands

Before the Activity

The facilitator should prepare the room for the activity. The facilitator should review the activity plan carefully and be comfortable presenting the material.

Have ready or put up the Handwashing Times and Handwashing Steps illustrations.

Set up one or more tippy taps and other handwashing stations (e.g. cup and bucket and basin or jug and basin) for handwashing activity. See instructions for how to make a tippy tap in instructions to the facilitator for this session (See Annex 1). Set bottle in the basin, set soap to the side of the bucket.

Activity Plan

Discussion

Note: If this session is done straight after Activity 5.1, use the following RECAP script to start the session.

Recap: In the previous session two volunteers got their hands dirty using a dusty material. The volunteers showed how we can spread germs, by showing the transfer of the dusty material. The volunteers also showed how difficult it was to remove the dusty material by trying to wipe it off. Now let us learn how to effectively clean the dusty material off our hands.

Question: How do you think you can get your hands clean?

Answer: Wash your hands.

Note: If this session is being done as independent from Activity 5.1, use the script below and do a quick exercise using the dusty material.

Note: It is recommended that Activities 5.1 and 5.2 are done as ONE unit if time permits.

Lead the participants in a guided discussion. The facilitator may use this outline as a potential script for facilitating the discussion.

The dusty material is like germs on your hands. However, can you see germs on your hands?

Can you get sick from germs on your hands?

What is the best way to get germs off your hands?

Wait for responses and start a discussion with the group and thank adolescents for their participation.

Because we cannot see germs, we used the dusty material as an example to show how hands can spread what is on them. Do you remember what happened when we put the dusty material on our hands?

Facilitator asks the group: What happened when you touched your arm, or your face, or somebody else?

Possible answer: The dusty material got onto the part/person that was touched.

Facilitator asks the group: What happened when you wiped the dusty material off with a paper towel?

What happened when you touched somebody after that?

Possible answer: Not all the dusty material was removed. Some of the dusty material got onto the person/part that was touched as well.

Handwashing with soap is the best way to make sure your hands are clean.

Now I will show you how to wash your hands properly.

Activity

Gather the adolescents around the handwashing station.

Call up the volunteers from the flour exercise.

Can I have two volunteers to show me how they usually wash their hands?

*Adolescents will demonstrate their handwashing techniques, **without prompting** from the facilitator.*

After the volunteering example, the facilitator will congratulate adolescents for their efforts.

The facilitator will explain handwashing according to the technique outlined on the illustration—see the Supporting Materials.

Handwashing is important to keep us strong and healthy, because it removes dirt and germs from our hands.

We need **water AND soap** to wash our hands clean.

As we use **water AND soap**, we need to use **clean running water, not** water standing in a basin.

We need to wash **all** the parts of our hands up until our wrists.

Here, let's all practise together in the air using the steps on this illustration. Who can tell me what the first step is?

(Follow the handwashing technique shown in the Handwashing Steps illustration. Students can interpret the steps and demonstrate, as all participants mime the steps in the air. The facilitator should guide the interpretation of the steps and highlight important points, such as using running water, using soap, washing between fingers, washing wrists and thumbs, and under fingernails, rinsing thoroughly, and air-drying.)

*Remember that the only steps that have to be in sequence are wetting the hands and soaping the hands and rinsing and air-drying your hands. For the steps in between the most important thing to remember is that using the steps you have been shown ensures that you reach **ALL** the parts of your hands when you wash your hands.*

Activity

Excellent! Now that we are handwashing experts, let's try to do the steps with a real handwashing station.

Choose two volunteers. Guide each adolescent through the steps. Use the tippy tap/handwashing station for this activity. Encourage the adolescents to gather around to watch the steps being practised. Encourage the adolescent to count 20 as they wash their hands, only starting to rinse their hands when they reach 20 counts.

There is one more tip I have for you that can be useful. When we wash our hands, we should make sure we are washing our hands **for 15–20 seconds**. One way people ensure they do this is by having a handwashing song to sing. A song like this will help remind us how long we should be washing our hands to make sure they are clean and wash away the germs that make us sick. There are many handwashing songs out there, but today, you are going to create your own. You can use the tune of a popular song you know, or if you'd like, you can invent a new tune. It's also a good idea to include some handwashing steps in your lyrics to help to remind you of the right way.

Activity

Making a Tippy Tap

Now we will practise making a tippy tap. Refer to the instructions that you have been given.

Note: Share amongst the group the handout *Constructing a Tippy Tap*, found in Annex 1 the end of this module (Module 4).

Once the activity is complete, congratulate the group on their efforts.

Well done for all your efforts! For those of us that may have some difficulties making the tippy tap, remember that practise makes perfect. So do not lose hope, keep working at it and improving.

I hope you are all able to make good use of your new tippy taps at home.

Now that we have made tippy taps, what other ideas for handwashing points may be easier to access in your community. Please give me some examples.

Possible answers:

Jug and basin and soap dish

Ladle/cup with open handle and bucket (cup or ladle hanging over the lip of the bucket) and a basin to drain water into

Activity

Split the class into groups of three or four and have them work together to develop a song. Groups can perform the songs for the class while demonstrating the handwashing steps, and the class can vote on what they like the best (optional). Remind groups that the songs should be 15–20 seconds. If they are not, advise the groups to sing the song twice. Assign five minutes for the groups to come up with a song. Give each small group one minute to sing the song to the whole group.

Let's review what we've learned today: Do you know why is it important to use soap when we wash our hands, and not just water alone?

We will now talk about why we need soap to wash our hands. Soap has special properties to kill germs and get them off our hands. So when we rub soap on our hands and rub them very well together, all the germs that are stuck to our skin or hiding in dirt on our hands are rubbed off and rinsed away when we rinse our hands with clean water. That is why it is important to use soap and water when we wash our hands, and to make sure we get to **all parts** of our hands, including between our fingers, wrists, thumbs, fingertips, and under our fingernails.

Can anyone demonstrate all the steps of handwashing?

Guide the adolescents through the steps one more time.

Wrap-up

Ask the adolescents if they have any questions about the discussion and activities. Thank them for their participation.

Activity 5.3 When to Wash Hands

Time: 20 minutes

Illustrations

- Handwashing Steps
- Handwashing Times

Before the Activity

The facilitator should prepare the room for the activity. The facilitator should review the activity plan carefully and be comfortable presenting the material.

Activity Plan

Discussion

Lead the participants in a guided discussion. The facilitator may use this outline as a potential script for facilitating the discussion. Directions, cues, and prompts are in italics.

To start the session, the facilitator will remind participants about the handwashing session previously done.

In the previous session, we learned about the correct way to wash hands. Now that we know **HOW** to wash hands, who can tell me **WHEN** we should wash our hands?

*Ask what times do the adolescents think they should wash their hands? Acknowledge the adolescents' responses, as all of those times are important, and it is always a good idea to wash hands. Then highlight that there are **five most critical times** that everyone can use as a guide for handwashing, showing the Handwashing Times illustration.*

Put up the critical Handwashing Steps illustration.

1. *Go through the illustration with the adolescents, naming each of the stages.*
2. *Ask the adolescents what kind of things can get on their hands at each of the stages.*

*Use the explanation below to **guide** discussions:*

1. Before preparing food or cooking.
 - a. This can help make sure that your foods don't get dirty before you eat them.
2. Before eating or before feeding a small child.
3. After using the latrine or relieving themselves.
 - a. You may have gotten faeces or urine on your hands, or touched something that has faeces or urine on it.
4. After helping a sibling or young child to clean up after relieving themselves.
 - a. You may have gotten faeces or urine on your hands, or touched something that has faeces or urine on it.
5. After touching or playing with animals (or their faeces) or working outside: Wash your hands after you touch something that could be dirty, whether a pet dog, the goat, the lamb, or the calf at home,

because you may have gotten their waste from their fur, or other bugs and germs from their fur. If they lick your hands you can get their germs and that can make you sick, too.

Generate a discussion about the handwashing times, allowing adolescents to express their opinions on the information provided, as well as strategies to remember and incorporate these habits in their lives. Also remind adolescents that they should help others, especially younger family members, to adopt these practices as well and teach good handwashing practices to them.

Activity

*As a final activity, divide the class into groups of three or four and instruct groups to develop and put on a short play that demonstrates about when or how or why you should wash hands. The way they do this is open-ended, and **it is up to the groups to find a story** and develop a play.*

Possible ideas: Allow the group to try before offering these ideas below. **Only** if groups are having trouble coming up with an idea, give these suggestions:

- Reinforce the five critical times for handwashing.
- Role-play where one person skips handwashing and others need to convince him/her why handwashing is important.
- Reinforce the proper handwashing steps in a creative way.
- Group members role-play as germs who are plotting to get a person sick but are defeated by handwashing.

Wrap-up

Ask the adolescents if they have any questions about the discussion and activities. Thank them for their participation.

Activity 5.4 Keeping Our Environment Clean

Time: 30 minutes

Illustrations

- Faecal-Oral Route

Before the Activity

The facilitator should prepare the room for the activity. The facilitator should review the Activity Plan and supporting materials and carefully be comfortable presenting the material.

Activity Plan

Discussion

Lead the participants in a guided discussion. The facilitator may use this outline as a potential script for facilitating the discussion. Directions, cues, and prompts are in italics.

Earlier today, we discussed how important handwashing is, because it can make sure we remove any dirt and germs from our hands before they can get in and make us sick. One other way to do that is to make sure that the areas around us do not have dirty things where germs can live. In other words, we can work hard to keep a clean space in and around our homes. How do you feel when you are in a very clean place?

Yes! Now, let's think about this and discuss. What do you all think you can do to keep your home clean?

Participants will give their answers. If they do not mention faeces/poo, ask about it specifically. Thank the adolescents for their participation.

I want to talk about faecal waste a little bit more. Our faeces and the faeces of animals are very dirty. They are smelly, and unclean, and they are full of germs. If we do not take the time to properly get rid of our faecal waste, the germs in faeces can make their way into our bodies and make us sick! Who can think of ways in which the germs in our world can get in our bodies?

Discuss the above question with the group, and guide them to think about the pathways of germs into our bodies. Use the Faecal-Oral Route illustration to guide the discussions.

Remember our activity with the dusty materials on our hands? It works like that. Let's imagine that there are some animal faeces on the ground outside our house and a goat wanders around and rolls around, and gets faeces on itself. Later on, someone in our household is tending to the goats, and touches the goat. That person now has faeces and germs on her hand. Now let's imagine that that person helps to prepare our lunch that day. She starts without washing her hands. The faeces then get into our meal! We won't taste any germs, but they can then get inside our bodies when we eat the food, and those germs can make us sick!

Let's try another example: When you relieve yourself and don't wash your hands or if you use the water in the stream near where you defecated, you still have faeces on your hands and that will make you sick.

Refer to the Faecal-Oral Route illustration and highlight the pathways discussed.

We talked earlier about handwashing, right? If we washed our hands at the correct times, then maybe we could avoid getting sick. BUT, what if we took the time to remove all faeces from our living area? Would the goat have gotten faeces on itself? Would our household member touch the faeces? Would it get in our food? Would we end up eating the germs with our food? No!

To prevent falling sick we should be careful with all our waste, including poo and even rubbish.

1. If you have something to throw away, throw it away in the rubbish bin in the house or compound rubbish pit.
2. It is best to ease yourself in a toilet or pit latrine and wash your hands.
3. If you ease yourself in the yard, throw it in the pit latrine. Wash your hands after you relieve yourself and dispose of the faeces
4. Help your family and caretakers to bury rubbish in a hole at the edge of the compound.
5. If you find any animal waste in the play space in the yard, make sure it is removed, with an adult's help, and put in the pit latrine, making sure to wash your hands afterwards.

Note: While it is common practice to bury faecal waste if one does not use a pit latrine, global guidelines discourage the practice. Therefore as part of the training, the facilitator should also discourage the practice, as being only necessary in very urgent or desperate situations, when there is no other alternative AT ALL. Impose on the group the importance of using a well-constructed pit latrine as the recommended practice. It is important to use a pit latrine so as to prevent the spread of faecal waste in period of flooding where flood waters come and wash away buried waste and contaminate the community's water supply, leading to diarrhoeal disease.

Wrap-up

Ask the adolescents if they have any questions about the discussion and activities. Thank them for their participation.

Supporting Materials

*Use the Faecal-Oral Route illustration to explain how their hands can become soiled with dirt and germs and how these spread to others and hurt the children themselves. Many of the germs that make them sick come from faeces. **Make the session interactive** by asking the group what they see and selecting different volunteers to explain the various parts of the Faecal-Oral Route illustration. As facilitator, your role will be to clarify the scenarios at the end.*

1. *Use the top-left flow in the illustration, showing movement of faeces from the goat to the plant and their food to illustrate that if they do not wash their hands after playing outside with the livestock they can get sick because the germs will be on their hands.*
2. *Use the top-right flow in the illustration to show how open defecation puts the children, their family, and the community at risk. Following open defecation that is not buried in a hole or thrown away in a pit latrine:*
 - a. *Flies get onto the faeces and then perch on you and on your food, so you end up eating faeces.*
 - b. *Faeces can get in the family water supply. Anybody who drinks the water that is fetched from that stream and drinks it, if it is not boiled, can get very sick.*
3. *When you relieve yourself and do not wash your hands or even use the water in the stream near where you defecated, you still have faeces on your hands and that will make you sick.*

Remember, it is best to use a pit latrine, not to relieve oneself in the open.

Session 6: Water Safety

Session Objective

By the end of the session participants will be able to:

- Understand how water in the home is kept safe and the importance of clean water to health

Activity No.	Activity	Time (Min.)
6.1	Clean and Unclean Water	30

Activity 6.1 Clean and Unclean Water

Time: 45 minutes

Supplies

- "Clean" (clear) water in a glass (can be from a tap)
- Clean boiled water in a glass (or a sealed bottle of commercially bottled water if available)
- Dirty water in a glass (add impurities to show the effect, e.g. flour from the handwashing exercise or chalk dust)
- Plastic water container with cover
- 1 clean cup

Illustration

- Faecal-Oral Route

Before the Activity

The facilitator should prepare the room for the activity. The facilitator should review the activity plan carefully and be comfortable presenting the material.

Prepare demonstration materials.

Activity Plan

Activity

Put out three glasses of water.

1. *Dirty water*
2. *"Clean" unboiled water*
3. *Clean and boiled water/commercially bottled water*

Start with background prompts and recap: Use the example below:

Before, we learned that drinking water is good for you. Who can remember why is drinking water good for you?

Which of these glasses has water you would be willing to drink?

Note: *This should eliminate the "dirty" water.*

Facilitator asks the group: From the two you have chosen which one of them has clean, drinkable water in it? Can you tell which one?

Correct answer: No.

Give a recap about germs.

Use the following explanation:

Germs are very small. So that even in this water, we cannot see them.
What is the best way to get rid of germs—does anybody know?

The facilitator will lead the group in a discussion of water purification methods. If any are mentioned, highlight them. Then refer to the following list and discuss any that were not identified by the group. The facilitator will focus discussion on filtering and boiling water.

Suggested Water Treatment

There are a number of making water clean and safe to drink. For our situation we will focus on two methods. These are:

- Filtering—for this you can use a sieve or a muslin cloth, but it is not enough to kill germs. It is important to first filter the impurities out of the water, that way we take out the dirt we can see, and then use another method to kill germs in the water.
- Boiling (cooking the water) is the best way to make water safe because the heat from the fire when you cook or boil water kills the germs. Once the dirt we can see has been filtered out of the water, then the water can be boiled to kill the germs. For water to be made safe (kill all the germs) by boiling, all you need is to boil the water in a clean pot and for all the water in the pot to be at a **rolling boil (that means there are bubbles throughout the whole pot)** for at least one minute.

Remember, we can remove dirt we can see, using filtering methods.

Germs we cannot see, we have to kill by boiling the water. Store the boiled water covered till it cools.

Who can tell me what they use to store drinking water in their home?

The best place to store water is a **cool place**, in a **clean, dry** container **with a lid**, and ideally a tap.

Refer to the Faecal-Oral Route illustration and explain how water can be contaminated by flies and germs and can create a breeding ground for mosquitoes, if it's not covered.

When you are thirsty, how do you get a drink of water from this container?

The ideal way is to pour it into the cup you want to drink from and then cover the container again. If you are not able to, ask an adult or older brother or sister to help you.

If the container has a tap, that is even better, because you can keep the container covered and all you do is open the tap.

To reinforce the message, carry out a demonstration scenario: Put out one clean cup, one half-full water container (plastic with a cover). Explain to the participants that the water from this container was just taken from the well.

The activity for this session is for the adolescents to spot and correct water safety mistakes.

Demonstration scenario mistakes:

1. *Leave the water container uncovered.*
2. *Alternative—drop the cover on the floor before covering the water container.*
3. *Scoop water out of the container with intended drinking cup.*
4. *When scooping water, dip your hand in the water as well.*

Ask the adolescents what was done correctly or incorrectly, and to correct some of the actions.

Ask a volunteer to stand up and correctly show the correct way to do it.

Corrections:

1. *Cover the water bottle and water container.*
2. *Clean the cover before it is placed on the water container.*
3. *Pour out the water from the container into the cup.*
4. *Boil or treat the water next time to be sure that it is clean.*

Congratulate the adolescents for the effort they have put into the session.

Wrap-up

Ask the adolescents if they have any questions about the discussion and activities. Thank them for their participation.

Session 7: Importance of Eating When Sick

Session Objectives

By the end of the session participants will able to:

- Understand what happens to their bodies during illness
- Understand that they need to continue eating and drinking, even though may not feel like it when they are sick
- Understand what foods they need to eat meet the increased nutritional needs during illness
- Understand HIV-food interactions

Activity No.	Activity	Time (Min.)
7.1	Eating When Sick	40
7.2	Diet and HIV	45

Activity 7.1 Eating When Sick

Time: 60 minutes

Supplies

- 2 plastic bottles
- Basin
- Needle/nail (to pierce bottles with)

Before the Activity

The facilitator should prepare the room for the activity. The facilitator should review the activity plan carefully and be comfortable presenting the material. Prepare the bottles for the activity as follows.

Take one bottle and pierce it with two holes in the bottom; this bottle represents the healthy body. Take the second bottle and pierce it with up to 15 holes in the bottom. This bottle represents the sick body. Fill up the bottles with water while standing them in a basin, to see which one empties faster.

Activity Plan

Discussion

Lead the participants in a guided discussion. The facilitator may use this outline as a potential script for facilitating the discussion. Directions, cues, and prompts are in italics.

We have learned that germs cause us to be sick. What are some of the ways we can keep from getting sick?

Anticipated answers: Handwashing, vaccines, eating Shine foods

Yes, handwashing is the best way to prevent us from getting sick. But when we do fall sick there are changes that happen in our bodies that affect what happens to the food we eat.

One of things that happens when we fall sick, especially when we experience stooling or vomiting, is that our bodies don't have time absorb the good things in food that we need to have energy and protect ourselves from diseases.

We often lose our appetite or eat less than usual because we don't feel like it, food does not taste nice to us, or sometimes if we have sores in our mouth or throat, and it just hurts to eat. Have you ever experienced this? Who took care of you? What did they do? Did they give you extra water to cool off from fever or special foods if you were stooling? Did you sleep a lot?

Discuss the participants' answers to the questions above.

Remember, we said that the body is like a car that needs petrol to move. When we are sick our body burns the food faster than usual. That is because it is working extra hard to fight the germs that are making us sick. While the body is going through all of this, the body still needs to grow and develop as it should so that you grow up strong and healthy.

I think you will agree with me that the body has much to deal with during periods of illness!

Activity

Note: The purpose of this activity is to show the group how the body loses energy and nutrients during sickness and therefore we need to replace the lost food more frequently. The bottle with the many holes represents the sick body and the bottle with one hole is the health body.

Activity instruction: Empty the two bottles of the water (prepared ahead of time) into a basin, counting along with the adolescents how long it takes to empty the bottles. Note which bottle empties first. Then refill the bottles again. Leave the bottles standing in the basin and see which bottle empties faster.

Now I want to show you how much faster your body uses the food. Look at these two bottles. The bottle with many holes is an example of the sick body. The holes represent the many ways that the body loses nutrients during periods of illness, for example, by vomiting, diarrhoea, and sweating—and at many times when you sick you may not want to eat. The bottle with two holes is an example of the healthy body, because it is an example that the food leaves the body two ways mainly. Let us fill these bottles with water. Which bottle do you think will be easier to fill up? Which bottle do you think will empty first? Look at all the places that the water empties from the bottle with many holes.

Expected answer: *The one with many holes*

The activity with these bottles helps us understand a bit better why it's so important to drink and eat when you are sick and to take rest. It is important to eat and drink, even if you don't feel like it. It is important to eat healthy foods we talked about that help us Move, Grow, and Shine. Remember, we said that when our body needs more food we can also add one or two healthy snacks such as mango, papaya, boiled egg, roasted or boiled groundnuts, boiled or roasted corn.

Activity

Choose two adolescents to role-play, having one act as the sick child and one as the older sibling. The older sibling should check on the younger child, prepare food for him/her (wash those hands first!), and then try to get the sick child to eat. The facilitator should help to prompt the adolescents towards the desired result (the sick child should eat extra food). The facilitator should encourage role-players to demonstrate responsive feeding practices, that is, showing love, kindness, and patience during feeding. The group should discuss what happened, acknowledging that it isn't easy but it's important to eat when sick.

*Guidelines to help **prompting during responsive feeding** actions in the role-play include: showing kindness and patience during feeding; facing the child being fed and talking gently to them; helping the child where they need help; and encouraging them with smiles and enthusiasm.*

Wrap-up

Ask the adolescents if they have any questions about the discussion and activities. Thank them for their participation.

Activity 7.2 Diet and HIV

Time: 45 minutes

Illustrations

- Healthy Plate—Full
- Healthy Plate—Blank
- Move Foods
- Grow Foods
- Shine Foods

Handout

- HIV/Drug Effects and Actions to Take

Flipcharts

Prepare in advance:

- Flipchart 13: HIV/Drugs Effects and Actions to Take

Before the Activity

The facilitator should prepare the room for the activity. The facilitator should review the activity plan carefully and be comfortable presenting the material, including information from the Supporting Materials.

Activity Plan

Discussion

Lead the participants in a guided discussion. The facilitator may use this outline as a potential script for facilitating the discussion. Directions, cues, and prompts are in italics.

Use Move, Grow, and Shine Foods illustrations to illustrate how to meet increased nutrition needs that adolescents have arising from illness or HIV.

Recap the effects of infection on the body and how continued feeding meets these needs.

Today, we are going to discuss nutrition and HIV. Many of us may know someone who has HIV, or we may have HIV infection ourselves. Therefore, it is important for everyone to be aware of the ways to properly care for people with HIV infection.

HIV is a serious disease. When a person is infected, HIV attacks a person's immune system, which is the body's defense against disease. When this system is weakened, a person is more likely to get sick, and diseases that may not normally be very dangerous may have serious effects for a person with HIV. While HIV infection cannot be completely cured at this time, there are medications that a person may take in order to manage the disease and lead a long, full life. These drugs often cause a person to feel weak or experience side effects as they fight the disease, so we will also discuss ways we can use nutrition to minimise these effects as much as possible.

If anyone has more questions about HIV infection, prevention, or treatment, then we can find additional resources after today's session. Today we are only going to focus on nutrition during HIV infection and treatment.

We have previously discussed what happens to a person's body when they have an illness, and how we need to continue to nourish our bodies so that it can remain strong enough to fight disease and get better. These lessons also apply to a person with HIV.

Who can name some of the effects from HIV infection?

Possible answers:

- *Diarrhoea*
- *Vomiting*
- *Nausea/loss of appetite*
- *Weight loss*
- *Tiredness*

Confirm correct answers and provide information to correct misinformation.

Thank you! Now, does anyone know some of the effects on nutritional status arising from taking drugs for HIV?

Possible answers:

- *Diarrhoea*
- *Vomiting*
- *Nausea/loss of appetite*
- *Poor absorption of food/weight loss*
- *Tiredness/anaemia*
- *Change in body shape*

HIV damages the immune system. We learned that the immune system is important for protecting the health of the body.

Before an individual starts taking medication to manage the disease, HIV affects both types of the immune system in the body in a number of different ways.

HIV hides inside the immune cells of the body and then takes over the immune cells and starts multiplying itself inside the body, damaging the immune system and weakening the person and their ability to fight other diseases. This makes the person more vulnerable to infections like:

- Colds and flu
- Tuberculosis
- Diarrhoea

The skin and the membranes in the mouth, digestive system, and nose are the body's first line of defense. HIV affects this line of defense and presents symptoms like:

- Skins sores
- Sores in the mouth, on the tongue, or in the throat, making it even more difficult to eat
- Loss of appetite
- Vomiting and diarrhoea

For the medication to work well, **the body needs food to help it work**. As we learned earlier, being sick means that more food is needed to help the body get stronger so that it can heal. When a person takes medication, the body needs to work to use the medication, but also the body then needs to clean out the products that are made after the medication works. That means that we need to eat foods that help our body repair itself, so we need to increase the intake of SHINE foods and GROW foods. To keep energy levels up, the MOVE food consumption needs to be increased as well.

HIV infection is managed using drug combinations that the doctor decides. The doctor decides on the combination of drugs after they check the patient's blood. The doctor should also give recommendations for proper nutrition to keep the body strong against the effects of the disease and the medications.

We discussed earlier how it can be difficult to eat enough food during illness, and that is true also for people with HIV, who can feel unwell both from the disease itself and from the medications used for it. We have also learned how important it is to maintain proper nutrition during illness. I have a short activity for our discussion. We have spent a lot of time learning about the different functions of foods in our Move, Grow, and Shine lessons, and I think we may be able to use this knowledge to find ways to use food to help manage the negative side effects of HIV medications.

Flipchart 13: HIV/Drug Effects and Actions to Take

"Put up Flipchart 13: HIV/Drug Effects and Actions to Take. Distribute the worksheet form of the handout titled HIV/Drug Effects and Actions to Take for each adolescent to fill in. The left-hand column will be titled "Drug Effect", and list the various drug effects. The right-hand column will only have the title "Actions to Take" filled in. Instead, the facilitator will get the group to discuss what they think are likely answers. The facilitator will write the suggested answer on the flipchart sheet and use the answer sheet to help guide discussion (see Supporting Materials)."

It is important that even in the presence of these effects, patients should continue to take their medications as advised by the doctor. When a person sticks with their drug regimen, this is called "adherence".

When a person with HIV adheres to the combination of drugs that the doctor has recommended, they have the best chance of having the drug combination work most effectively.

Wrap-up

*Ask the adolescents if they have any questions about the discussion and activities.
Thank them for their participation.*

Supporting Materials

Flipchart 13: HIV/Drug Effects and Actions to Take (also available in handout form)

HIV/Drug Effects	Actions to Take
Bone strength and development can be negatively affected.	
Diarrhoea and vomiting:	
Sore mouth and throat:	
Fever:	
Decreased appetite:	
Lactose intolerance:	
Fat and cholesterol storage may be increased in the body.	

Answer sheet for facilitator: HIV/Drug Effects and Actions to Take

HIV/Drug Effects	Actions to Take
Bone strength and development can be negatively affected.	<ul style="list-style-type: none"> • Consume a diet rich in dairy foods (GROW foods), e.g. milk, yogurt, cheese. • Consume a diet rich in dark, leafy greens (SHINE foods).
Diarrhoea and vomiting:	<ul style="list-style-type: none"> • Eat smaller meals more frequently. • Add MOVE and GROW foods to the diet (e.g. peanuts, rice, millet pap, bean cakes). • Drink more liquids (clean boiled water)/give oral rehydration solution (ORS). • Reduce oil in food.
Sore mouth and throat:	<ul style="list-style-type: none"> • Eat soft, moist foods. • Avoid acidic foods, such as oranges and pineapples. • Use a straw for drinking, • Rinse mouth with warm water.
Fever:	<ul style="list-style-type: none"> • Drink plenty of liquids, sipping liquids almost hourly. • Eat small, frequent meals; use ORS if fever is accompanied by dehydration.
Decreased appetite:	<ul style="list-style-type: none"> • Eat small amounts of favourite foods. • Use energy-dense Move foods.
Lactose intolerance:	<ul style="list-style-type: none"> • Limit intake of dairy, e.g. milk, yoghurt, cheese. • Increase consumption of dark green, leafy vegetables to ensure bone strength.
Fat and cholesterol storage may be increased in the body.	<ul style="list-style-type: none"> • Minimise sweet and fatty food consumption. • Consume more fruits and vegetables (SHINE foods) and low-fat protein foods (GROW foods). • Increase physical activity levels to help build muscles and utilise fat stored in the abdomen of body.

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Annex 1: Constructing a Tippy Tap

Materials Required

- 1 clean, empty 1-litre bottle with a bottle top
- Set of matches
- 3 lengths of string, 30 cm each
- Clean nail (only the facilitator should handle this)
- Clean needle
- Bar soap
- 1 extra bottle (optional)
- 1 small net bag (optional)
- Bottom end of a small plastic bottle.

Instructions

1. Mark the clean 1-litre bottle 2 cm from the bottom of the bottle.
2. Light a match and heat up the needle tip,
3. Use the heated needle tip to make a small hole at the mark on the bottle.
4. Light another match and heat up the nail tip.
5. Make the first small hole wider using the head of the heated nail by inserting the nail in the hole made by the needle.
6. Fill the bottle with water and then close the bottle with the bottle top.
7. Tie one end of the string round the neck of the bottle and the other end of the string to the place of the handwashing point. The bottle should be secured by the string, and hanging from the wall or post, so that it is accessible to people washing their hands and not resting on the ground. If the bottle is hanging loose and may spin, be sure to put a mark on the side of the bottle where the hole of the tap is to guide the users of the tippy tap.
8. Alternatively, tie the bottle to a wall or a post with the hole facing outward for ease of use.
9. Fill the bottle with water and tightly close the bottle with the bottle top. Water should not flow out of the hole near the bottom of the bottle when the top is tightly secured.
10. Soap option 1: Place the bar of soap in a small net bag, and tie the bag to a post or a nail in the wall next to the tippy tap, so that it is accessible to people washing their hands and not resting on the ground.
11. Soap option 2: Alternatively, you can place pieces of the bar of soap (or even use soap powder) inside a different bottle. Using the heated nail, make a hole in the bottle top. Add some water to the bottle and shake to dissolve the soap to make liquid soap. Secure the bottle top, and tie one end of the string round the neck of the soap bottle and the other end of the string to the place of the handwashing point. The soap bottle should be secured by the string, and hanging from the wall or post, so that it is accessible to people washing their hands and not resting on the ground. The liquid soap can be poured into a person's hand through the hole in the bottle top.
12. Soap option 3: Pierce the bottom of a small bottle that has been cut off a small bottle to use a soap dish.
13. Your tippy tap is ready for use.

14. Open the bottle top slightly until water flows out of the hole in the bottom of the bottle.
To stop the flow of water, close the bottle top.
15. Remember to refill the tippy tap each time it is empty, and replace the soap when it is used up.

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