

HIV Prevention, Treatment Care and Support - A Training Package for Community Volunteers

Module 6



NUTRITION

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Field testing of the modules

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Introduction

Module Six: Nutrition aims to provide CBVs with skills and knowledge regarding how to assist clients and their families to live positively and maintain good nutrition through the exploration of the following topics.

- How CBVs Can Support Client Nutrition
- How HIV and AIDS Affect Nutrition
- Special Considerations for Nutrition and HIV
- Positive Living

Materials to be used in this module:

1. Module Six: Nutrition (this module)
2. Participants Handbook
3. Facilitator's Guide
4. Evaluation Tools Manual

Training time for this module is approximately 13 hours.

For a detailed discussion on the training methodology, evaluation techniques and glossary of important terms used for this module, facilitators should refer to the Facilitator's Guide.

The evaluation tools used in this module include:

Evaluation of Module Content

1. Participants Evaluation
2. Facilitator Evaluation

Participant Evaluation Tools:

1. Pre and Post Test Questionnaire
2. Demonstration of Core Skills

Upon completion of this module, participants should demonstrate the following core skills:

1. Help clients to develop a set of nutritional goals to live by. **Session One; Tool 4**
2. Impart knowledge on the '5 Easy Steps to Food Safety' to individuals who do the cooking in client households. **Session 1; Tool 6**
3. Describe to clients how HIV and AIDS affect nutrition in a manner that is easily understood **Session Two; Tool 3**
4. Refer client households to services that support food security in your community **Session Two; Tool 4**
5. Develop strategies with clients to follow dietary recommendations of medications, including ART **Session Two; Tool 5**
6. Provide information to client households on how to manage symptoms of HIV through Diet. **Session Three: Tool 2**
7. Provide appropriate support to HIV positive mothers with child nutrition. **Session Four; Tool 2**
8. Develop an exercise schedule with clients that suits their health and needs. **Session Five; Tool 1.**

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1

Session One: How CBVs can support client nutrition.

Purpose: The purpose of this session is to provide an introduction to ways in which CBVs can support clients to maintain good nutrition.

Objectives:

By the end of this session, CBVs should be able to:

1. Describe ways that CBVs can help their clients to maintain good nutrition.
2. Demonstrate knowledge of locally available foods that make up a healthy diet.
3. Provide information to clients about ways they can increase their uptake of micronutrients (locally available foods, cooking methods, supplements)
4. Help clients to develop a set of nutritional goals to live by.
5. Identify local conditions that may compromise food safety and possible solutions.
6. Impart knowledge on the '5 Easy Steps to Food Safety' to individuals who do the cooking in client households.

Duration: 4 hours 30 minutes

Required Materials: Flipchart, markers

Recommended Preparation:

- Make copies of Handout 6-1 Eating a Health Diet for distribution in Tool Two.
- Make copies of the Benefits and Source of Micronutrients Handout 6-2 for distribution in Tool 3.
- Make copies of Handout 6-3 Nutritional Goals for PLWHA for distribution at the beginning of section four.
- Make copies of Handout 6-4 Five Easy Steps to Food Safety for distribution in Tool 6

Objective	Content	Time	Methodology
Describe ways that CBVs can help their clients to maintain good nutrition.	1. How CBVs Can support client's nutrition	30 minutes	Mini Lecture Tool One (A): Group Discussion
Demonstrate knowledge of locally available foods that make up a healthy diet	2. What is a healthy diet?	50 minutes	Mini Lecture Tool Two (K): Group Activity
Provide information to clients about ways they can increase their uptake of micronutrients	3. Vitamins and Minerals— Micronutrients	1 hour	Mini Lecture Tool Three (ST): Group Activity and Role Play
Help clients to develop a set of nutritional goals to live by	4. Nutritional Goals for PLWHA	1 hour	Mini Lecture Tool Four (ST): Case Study and Role Play
Identify local conditions that may compromise food safety and possible solutions.	5. Food Safety	1 hour	Mini Lecture Tool Five (PS): Group Activity
Impart knowledge on the '5 Easy Steps to Food Safety' to individuals who do the cooking in client households.			Tool Six (ST): Role Play

1. How CBVs can support client's nutrition.

(30 minutes with tool 1)

The purpose of this module is to assist CBVs with methods to help their clients to maintain proper nutrition, with an emphasis on local foods and the importance of nutrition while on ART.



Tool 1: CBVs Assisting Clients With Nutrition

Pose the following question to participants and write answers provided on a flipchart entitled 'Role of CBVs in Nutrition':

1. What is the role of CBVs in helping clients with nutrition?
2. From the list developed, what do participants think the **most important** role for CBVs is in helping clients with nutrition? (Providing accurate information and helping clients understand how to maintain proper nutrition so they can care for themselves).
3. Are there any other ways you feel CBVs can and should help clients maintain nutrition that have not been listed?
4. What are some challenges you think you might face trying to assist clients with proper nutrition in your community? (I.e., food availability, financial struggles of clients, inability to be with clients during every meal).

Facilitator's Note: Compare answers provided by participants with the list provided below and probe participants on items not mentioned.

Ways that CBVs can assist their clients to maintain proper nutrition include:

- Help clients including PLWHA to set **nutritional goals**
- To help clients to eat a **healthy and balanced diet** using locally available foods
- To assist clients in ensuring they maintain a **healthy intake of vitamins and minerals** using locally available foods
- To help clients understand **how HIV and AIDS can affect nutrition** and the causes of poor nutrition in PLWHA
- To explain to clients what **malnutrition** is and refer clients to organisations in your community that can assist with **food security**
- Assist clients with ways to **manage HIV-related symptoms** with locally available food
- Help clients understand the **importance of nutrition** and ART during treatment preparation and adherence counselling
- Educate clients on the importance of knowing the **specific food interactions** of each of the medications they are taking (both ARVs and medication for other opportunistic infections such as TB)
- Help to ensure the client **follows the dietary recommendations** of medications by including them as part of their treatment plan
- Pay close attention to **what side effects a client may have** to ARVs and consider how these may affect his/her nutrition
- Explaining the role of **physical activity** in maintaining good nutrition
- Help clients with **food safety** to ensure the food they eat does not make them sick



2. What is a Healthy Diet? (50 Minutes)

To have a healthy and balanced diet means eating a variety of foods that supply nutrients that are important for your body. Eating a healthy diet does not mean eating expensive food. The nutrients a person's body needs to stay strong and fight infection can be found in many cheap and locally available foods.

Eating a health diet involves:

1. Eating staple foods with every meal
2. Eating legumes if possible every day
3. Eating animal and milk products if possible every day
4. Eating vegetables and fruits every day
5. Eating fats and oils as well as sugar and sugary foods in moderation
6. Drinking plenty of clean and safe water

1) Staple Foods (5 minutes)

Staple foods are types of food eaten commonly/routinely by a given community which are in most cases grains and tubers that provide lots of energy and some protein.

Staple foods can be found in three main types:

- 1) **Grains** maize, wheat, millet, sorghum, rice and barley
- 2) **Tubers** potato, sweet potato and cassava.
- 3) **Starchy Fruits** - plantains

Quick facts about staple foods:

- People should eat staple foods with every meal
- Staple foods should make up the biggest part of the meal
- Whole grain starches are the best because they provide not only energy but also some vitamins and minerals
- Staple foods do not contain all the nutrients a body needs and should be eaten with other foods that provide protein, vitamins and minerals.

2) Legumes (5 minutes)

Legumes are foods such as beans, peas, lentils and nuts that provide the body with proteins needed to build and repair the body and build strong muscles.

Quick facts about legumes:

Legumes are an affordable way to eat protein which is normally gained from meat which is often unavailable or expensive

- In addition to providing protein, legumes are also a good source of vitamins and minerals.

3) Meat and animal products (5 minutes)

Meat includes fish, poultry, beef, pork, insects (caterpillars, worms or locusts) and other culturally accepted forms of animal protein.

Animal products include eggs, milk, yoghurt, cheese and other products that come from animals.

Quick facts about meat and animal products:

- Meat and animal products provide good quality protein, energy, vitamins and minerals
- Meat and animal products help to strengthen muscles and keep the immune system strong
- It is very important to store and cook meat properly to prevent getting sick
- If meat or animal products are either unavailable or too expensive, people should eat lots of legumes for protein.

4) Fruits and Vegetables (5 minutes)

Fruits and vegetables supply vitamins and minerals that keep the body functioning and the immune system strong.

Vegetables include:

- Green leafy vegetables such as pumpkin leaves, lettuce, spinach, rape,
- Cabbage, pumpkin, tomato, butternut, squash, green beans, peas and avocado pears.

Fruits include:

- Mango, orange, apple, guava, banana, peach, pineapple, lemon, plum, passion fruit,
- Mulberries and wild fruits that are in season

Quick facts about fruits and vegetables:

- Fruits and vegetables should be eaten at every meal
- It is important to eat different types of vegetables and fruits. A good way to remember is to try and eat different types (leaves, fruits and roots) and colours (green, red, yellow, orange) of fruit and vegetable each day

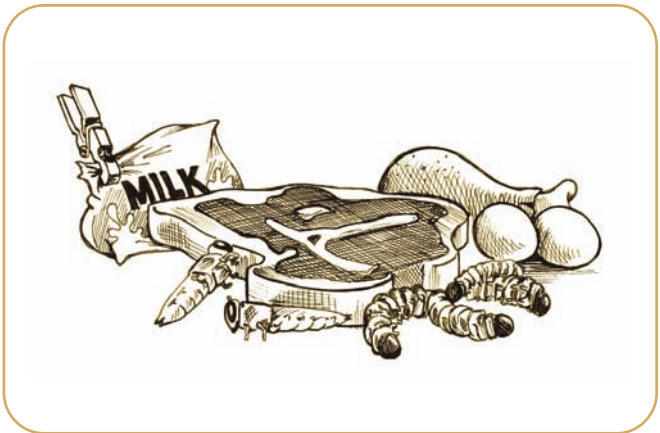


5) Fats, oils, sugar and sugary foods (5 minutes)

Fats, oils, sugar and sugary foods should be eaten in moderate amounts because they provide the body with extra energy. 'Moderate' means sensible or appropriate, as eating too much fat or sugar can be unhealthy.

Quick facts about fats, oils and sugar:

- Fats and oils include butter, lard, margarine, cooking oil (vegetable, coconut and palm oil), cream and coconut cream. They are also found in avocados oilseeds (sunflower, groundnut and sesame), fatty meat and fish, curds and cheese.
- Sugars and sugary foods include honey, jam, table sugar, cakes and biscuits.
- Although fats and sugars are good sources of energy, they are not rich in other nutrients. They should therefore be eaten in addition to other foods, not in place of them.



6) Water (30 minutes with Tool 2)

Although it is not considered to be a 'food', water is a very important part of a healthy and balanced diet. Water helps keep the body functioning well and replace fluid loss when sick with a fever or diarrhoea.

Quick facts about water:

- People should make sure water is clean and safe before drinking
- If possible, people should drink at least 2 litres or 8 cups of water each day
- When it is very hot, while working, sweating or suffering from diarrhoea, vomiting or fever, a person needs to drink even more to replace the water that has been lost.
- Avoid drinking alcohol or 'fizzy drinks' because they act to dehydrate, or take water from the body. Alcohol can also interfere with the ability of medications, such as ARVs, to do their job.
- Drinking fresh fruit juice and eating home-made soup are good ways to increase your water intake.

Avoid harmful drinking and illicit drug use:

- Everyone should avoid excessive alcohol or non prescribed drugs, not only people with HIV.
- Alcohol use costs money which would be better spent on good food.
- Alcohol and non prescribed drugs often affect your judgement. It is harder to remember your ART regime or to have safer sex if you are high on alcohol or drugs.
- Alcohol and non prescribed drugs often reduce appetite.
- Alcohol and non prescribed drugs can affect your liver.

Tool 2: Helping Clients to Eat a Healthy, Balanced Diet

Now that participants have been provided with an overview of a healthy diet, it is important that they are able to assist their clients to eat a healthy diet through locally available foods. Distribute the 'Eating a Healthy Diet' Handout 6-1. As a group, review each aspect of a healthy diet and have participants fill in the space for locally available foods for each category. Ask participants to find a partner and briefly practice explaining to a client how to eat a healthy diet using locally available foods. Develop strategies for explaining this information in a simplified manner.

3. Vitamins and Minerals: Micronutrients (35minutes)

a) What are Micronutrients? (5 minutes)

Micronutrients are vitamins and minerals in food that play a special role in keeping people healthy. Different micronutrients have different functions in the body, but as a whole, micronutrients are important for building a strong immune system and fighting infection.

b) How can PLWHA improve their Intake of Micronutrients? (30 minutes with tool 3)

Fruits and vegetables are the most important sources of vitamins and minerals (micronutrients).



The best way for PLWHA to improve their intake of micronutrients is to **eat at least 5 portions or pieces of fruit or vegetable each day**. A portion is a glass of pure orange juice, one apple or a serving of spinach.

The way that vegetables are cooked can influence the amount of vitamins and minerals in the food.

CBVs can instruct their clients to cook vegetables to preserve vitamins and minerals. Such methods include:

- **Cooking or frying vegetables for a short time only** (boiling or frying vegetables for too long destroys vitamins)
- **Eating raw vegetables as salads** make sure to wash all vegetables carefully before eating them raw
- **Adding vegetables to a small amount of boiling water** to reduce the cooking time
- **Cook vegetables** in the steam of boiling water or microwave vegetables if **possible**
- Vegetable 'skins' store a large amount of vitamins and minerals.
- **Cooking or baking vegetables with skins** (such as potatoes and carrots) without peeling the skins off
- **Avoiding using copper utensils** as these destroy Vitamin C
- **Do not add baking soda or baking powder to vegetables** as this also destroys Vitamin C.

Benefit and Source of Important Vitamins and Minerals in HIV Infection

	Benefit	Sources	Local
	<ul style="list-style-type: none"> ▪ Making white blood cells ▪ Vision ▪ Healthy skin 	<ul style="list-style-type: none"> ▪ All yellow and orange Vegetables ▪ Green leafy vegetables ▪ Liver ▪ Oily fish ▪ Dairy products ▪ Garlic 	
	<ul style="list-style-type: none"> ▪ Helps the body produce energy from Food 	<ul style="list-style-type: none"> ▪ Milk ▪ Meat ▪ Whole grain cereals ▪ Beans 	
Vitamin B₆	<ul style="list-style-type: none"> ▪ Helps the body digest Food 	<ul style="list-style-type: none"> ▪ Beans ▪ Sweet Potato ▪ Avocado ▪ Cabbage ▪ Whole grain cereals ▪ Nuts ▪ Eggs 	
	<ul style="list-style-type: none"> ▪ Increases body's resistance to infection 	<ul style="list-style-type: none"> ▪ Fruits (baobab, guava, orange, l 	
	<ul style="list-style-type: none"> ▪ Protects cell structure ▪ Helps build resistance to disease 		
Selenium	<ul style="list-style-type: none"> ▪ Garlic ▪ Meat, liver, seafood ▪ Vegetables (carrots and mushrooms) ▪ Whole grain cereals 	<ul style="list-style-type: none"> ▪ Protects the heart from impairment ▪ Prevents breakdown of Fat and other body cells 	
	<ul style="list-style-type: none"> ▪ Mea 	<ul style="list-style-type: none"> ▪ Protects the i 	

[illegible]

Tool 3: Helping Clients with Their Intake of Micronutrients

PART A

Identifying Local Sources of Micronutrients

Distribute copies of the 'Benefits and Source of Vitamins and Minerals in HIV Infection' Handout 6-2.

As you discuss each micronutrient in the table, ask participants to identify locally available micronutrients covered. Emphasise that participants should consider what sources are realistically available and affordable for their clients.

PART B:

Helping Clients to Improve Their Intake of Micronutrients

Divide participants into two groups:

1. Locally available sources of micronutrients.
2. Ways to cook food to improve intake of micronutrients.

Have each group provide a presentation on how they would explain their topic to a client and their family. After each presentation, have participants identify topics that might be difficult for client households to understand,

4) Nutritional goals for PLWHA

a) What are Nutritional Goals? (20 minutes)

Nutritional Goals are specific ways in which PLWHA can prevent malnutrition and promote a healthy and active lifestyle with food.

Distribute the '7 Nutritional Goals for PLWHA' Handout 6-3 to participants and review as a group.

7 Nutritional Goals for PLWHA

Goal One

Be aware of the importance of good nutrition if you are HIV positive

Goal Two

Eat a healthy and balanced diet to keep your immune system strong

Goal Three

Adjust food intake to deal with HIV related symptoms

Goal Four

Prevent food-borne illnesses by practicing good hygiene and food and water safety

Goal Five

Manage the symptoms of HIV and AIDS that can affect food intake by getting early treatment for opportunistic infections

Goal Six

Keep a healthy weight

Goal Seven

Understand the ways that any medications you are taking (including ARVs) may affect your nutrition.

b) How CBVs can help PLWHA set nutritional goals (40 minutes with Tool 4)

There are many 'strategies' for helping PLWHA to meet their nutritional needs. The most important role for CBVs in helping their clients to meet their nutritional goals is to provide them with the information and support they need to eat a healthy and balanced diet.

The remainder of this module will provide CBVs with specific ways they can help PLWHA to eat well, understand how medications affect nutrition, and use food as a means of fighting the symptoms of HIV and AIDS.



Tool 4: Assisting Clients to Set Nutritional Goals

PART A: Read the following case study aloud, replacing X with an appropriate local name.

Your client X, is a 40 year old man living with HIV. He lives with his wife and daughter. He works long hours in a physically demanding job. In an effort to help X ensure a healthy diet, you have asked him to keep a record of his food intake for the past three days.

Analyse the following meal diary in pairs and present as a role play how you would assist X to improve his diet. Please take into consideration his family, and others who might be preparing food for the household in your discussion.

Facilitator's Note: Recreate the meal diary below on a flipchart where all participants can see. Make changes to this list if necessary to capture appropriate foods in your community.

	MONDAY	TUESDAY	WEDNESDAY
Breakfast	- doughnut	-skipped breakfast	-small serving of porridge -cup of tea
Lunch	- packet of chips - fizzy drink	- chicken and rice	-skipped lunch
Dinner	- boiled vegetables - steak - baked potatoes - 2 beer	- pasta with tomato sauce and mushrooms - bread and butter	- boiled cabbage - rice - dried fish - 1 beer

During role-plays ensure that the following points are taken into consideration:

- Adequate water intake
- Dehydrating effects of alcohol
- Cooking methods to preserve nutrients
- Oil and sugar intake
- Amount of fruits, vegetables and legumes
- Elements of a healthy diet

PART B: In the same pairs role play how CBVs would use the 'Nutritional Goals for Clients' handout to assist client X from Part A with the development of nutritional goals.

Facilitator's Note: Ensure that role-plays include the following information:

- Encouraging X to identify **specific strategies** for reaching nutritional goals taking local conditions or challenges into account.
- Including the person who provides daily care for the client/does cooking in the home in the development of nutritional goals.
- Helping the client to develop specific ways to assess whether they are reaching their nutritional goals. (For example, record keeping).

For Core Skill Assessment: Facilitators should use each checklist to assess the participants ability to help clients set nutritional goals.

5. Food Safety (40 Minutes With Tool 5 & 6)

Tool 5 : Local Conditions And Food Safety



Divide participants into three groups. Ask each group to make a list of local conditions that may compromise food safety and the possible solutions.

Review group answers as you go through each topic area, asking where additional safety issues could arise.

5 Easy Steps to Food Safety

1. Personal hygiene

Personal hygiene involves ensuring that people who are touching and handling food take proper care to ensure they do not pass on bacteria or viruses.

CBVs, PLWHA and their caregivers can maintain personal hygiene by:

- Always washing their hands after using the toilet, before preparing food and before eating. Clean water with soap or ashes should always be used to wash hands.
- Washing hands with just water is not enough to kill germs
- Wash hands carefully after changing a baby's nappy, or helping a child use the toilet
- Keep nails short and clean. Wash under the nails each time you wash your hands
- If you have a wound on your hand, cover it up with a bandage so that any infection in the wound is not passed on to food during preparation and handling.
- Hands should be washed under flowing water and not still water in a basin.

2. Hygiene in the House



Hygiene in the house can be maintained by:

- Always using a latrine or toilet. Keep the toilet and its surroundings clean and free from flies
- Keep animals out of the house
- Wash soiled linen with hot water and soap. After washing, soak in water with bleach (1 cup bleach to 10 cups of water)
- Keep garbage in a covered bin and empty regularly
- Household vegetable gardens should not be grown near bathroom exits, garbage or open sewage.

3. Drinking Water

PLWHA can ensure the water they drink is safe by:

- Only using drinking water from a protected well or tap if one is available
- If water comes from an unprotected well

- or river, boil water for at least 10 minutes before drinking it.
- Water in both rural and urban areas should be boiled
- Storing drinking water in a clean and covered container
- Not dipping hands into a container meant as drinking water

4. Food preparation

CBVs, PLWHA and their caregivers can ensure safe food preparation by:

- Making sure all food preparation surfaces and utensils are clean
- Cleaning vegetables with running water (from a tap or poured from a cup or container) rather than soaking them in a bowl
- Making sure food is cooked 'all the way through' and not pink or bloody in the middle
- Hard boiling eggs, people should not eat eggs with runny yolks or uncooked foods prepared with raw eggs
- Washing cutting boards and knives well before using them on other food (especially after cutting meat like chicken, fish or pork)
- Do not use wooden cutting boards for cutting meat, use plastic boards or plates
- Serve food immediately after cooking
- Do not keep food for a long period of time, particularly if you do not have a fridge or cooler
- Eat food while it is still warm
- Food leftover from the night before should be kept in a fridge and eaten
- Cover food when not eating
- Food should be reheated only once after it has been cooked.

5. Food storage

CBVs, PLWHA and their caregivers can ensure food is safely stored by:

- Covering and storing foods away from insects and pests
- Fruits and vegetables should be checked regularly to see if they are 'over-ripe'. Soft or decaying pieces should be removed from the bunch to prevent further spoiling
- Foods such as milk and eggs that absorb odours should be kept away from foods that give off odours, such as fish, onions and leeks
- Store food according to the 'first in' 'first out' method to ensure that the oldest foods are used first
- Prevent blood from raw meat from dripping on other foods
- Do not thaw and then re-freeze what you have not eaten. Pack meat into smaller daily food portions before freezing to prevent wasting food
- Thaw frozen meat inside a fridge rather than at room temperature,
- Food leftover from the night before should be kept in a fridge and eaten within 24 hrs. Those without a fridge should eat leftovers the same day.
- All leftovers should be re-heated thoroughly before serving
- Leftover chicken and fish should be avoided.





Tool 6: How CBVs Can Assist With Food Safety

Distribute copies of the '5 Easy Steps to Food Safety' in Handout 6-4. Divide participants into pairs and have CBVs role play how they would review the handout with the person who cooks in their client household.

CBVs are encouraged to write out or make additional copies of the '5 Easy Steps to Food Safety' and provide the handout to client households to post in an area of the home where food is prepared.

Facilitator's Note: For assessing this core skill at the end of the module, have participants use the handout to describe food safety to you as though during a client visit. In assessing this skill, ensure clients address local conditions that may compromise food safety.

2

Session Two: How HIV and AIDS Affect Nutrition

Purpose: The purpose of Session Two is to provide an introduction to how HIV and AIDS can affect nutrition including how medication can influence nutrition.

Objectives:

By the end of this session, CBVs should be able to:

1. Demonstrate knowledge on the cyclical relationship between nutrition and HIV.
2. Identify specific conditions in your community that may reduce the intake of food in client households.
3. Describe to clients how HIV and AIDS affect nutrition in a manner that is easily understood.
4. Refer client households to services that support food security in your community.
5. Develop strategies with clients to follow the dietary recommendations of medication, including ART.

Duration: 3 hours

Required Materials: Flipchart, markers, sheets of paper

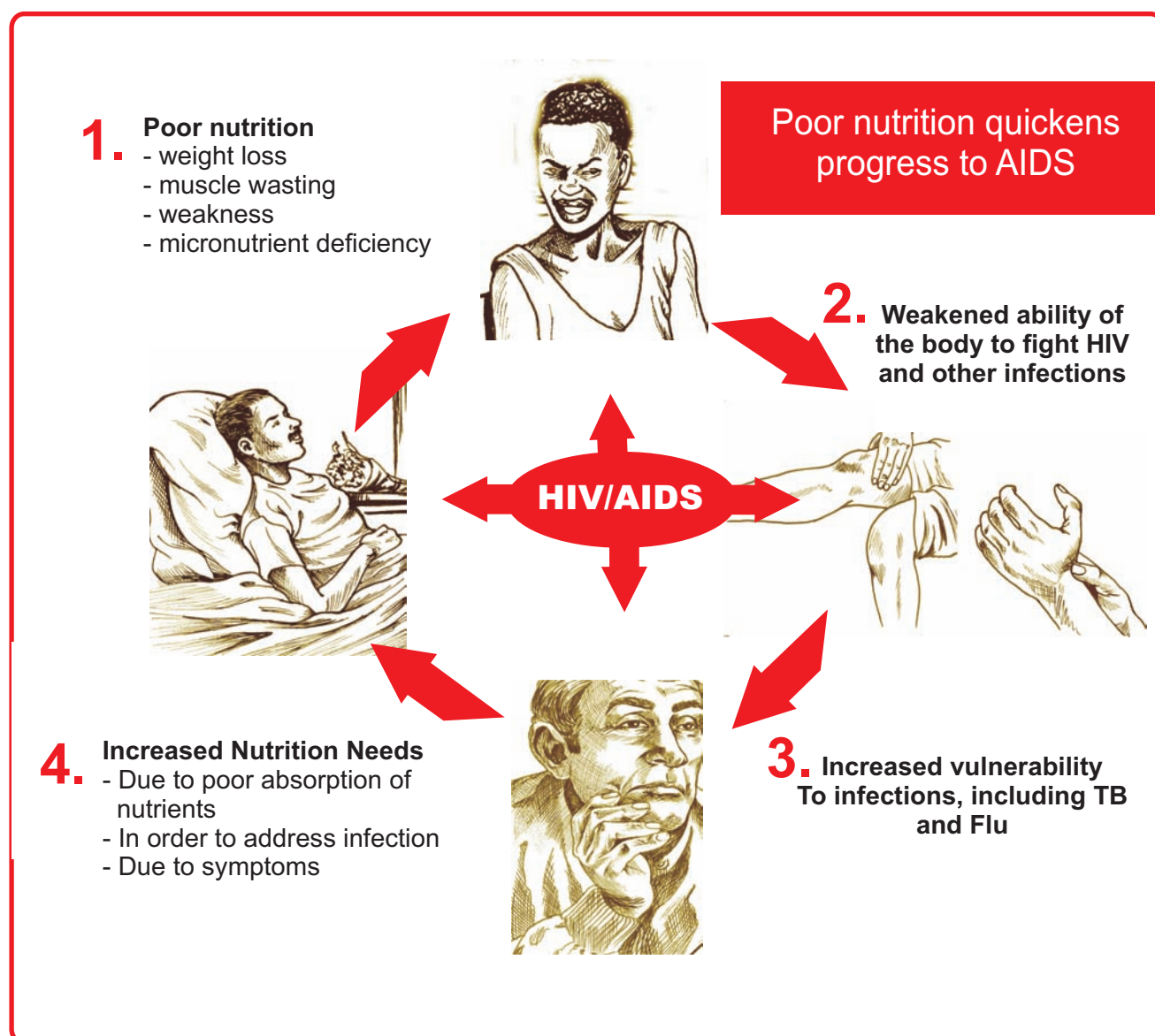
Objective	Content	Time	Methodology
Demonstrate knowledge on the cyclical relationship between nutrition and HIV.	1. How HIV and AIDS Affect Nutrition	20 minutes	Mini Lecture Tool One (K): Group Activity
Identify specific conditions in your community that may reduce the intake of food in client households	2. Causes of Poor Nutrition in PLWHA	50 minutes	Mini Lecture Tool Two (K): Group Discussion
Describe to clients how HIV and AIDS affect nutrition in a manner that is easily understood			Tool Three (ST): Group Role Play
Refer client households to services that support food security in your community	3. How HIV and AIDS Affect Food Security	45 minutes	Tool Four (ST): Group Activity and Role Play
Develop strategies with clients to follow the dietary recommendations of medication, including ART	4. Importance of Diet on ART	1 hour	Tool Five (ST): Case Study and Role Play

1. How HIV and AIDS Affect Nutrition (20 minutes with Tool 1)

The effects of HIV and AIDS upon nutrition have what is called a **cyclical relationship**, where one problem causes or worsens the other in a way that they are all linked.

Poor nutritional status leads to a weakened immune system. This leads to an increased vulnerability to infections which means we will need better food to fight the disease.

This cycle between health and good nutrition cannot be over-emphasized. We will look more closely at why this is so.



Tool 1: Understanding the Relationship Between HIV and Nutrition



On a flipchart draw the cycle diagram showing the relationship between HIV and Nutrition.

Discuss how each factor in the cycle might contribute to poor nutrition until the cycle is broken. For example, PLWHA eat a healthy diet that meets their nutritional needs, poor nutrition will decrease, their ability to fight HIV and other infections will increase and they will be at a lesser risk of developing new infections.

2. Causes of Poor Nutrition in PLWHA (50 minutes)

HIV/AIDS can cause poor nutrition in PLWHA in three main ways:

- 1) HIV increases energy needs
- 2) HIV Can Lower Food Intake
- 3) HIV Reduces the Absorption of Food

Nutrients are the substances we absorb from food that we need for growth, energy, to build our bodies and to stay strong.

1) HIV and AIDS Increase Energy Needs (10 minutes)

HIV lowers the body's ability to fight off infection by weakening the immune system. When the immune system is weakened infection and fever occur and this situation increases the energy needs of the body. To generate the additional energy the body needs more energy and nutrients that come from food to help it fight an infection and stay strong.

Ways that HIV Increases Energy Needs:

- The body's response to fight HIV uses more energy and nutrients than normal
- When the immune system is weakened, **opportunistic infections** occur. With every new infection, the body's need for nutrients and energy increases

2) HIV and AIDS Lower Food Intake (20 minutes with Tool 2)

HIV and AIDS have many effects upon individuals and households that can reduce food intake.

Problems that reduce food intake in PLWHA:

- Infections and illness lead to poor appetite
- Inability to eat or swallow because of painful infections in the mouth or throat
- Side effects of medicines such as ARVs can cause nausea, loss of appetite, a bad taste in the mouth or poor sense of taste, diarrhoea, vomiting or stomach cramps
- Dealing with HIV and AIDS can cause depression, tiredness or other changes in a person's mental outlook that reduce hunger.

Ways that HIV and AIDS can affect the food intake of households:

- Inability to work or reduced income due to HIV and AIDS can reduce the amount or quality of food in a household
- Eating is often a social event. The social isolation of PLWHA will affect the way a family eats.

Tool 2: How HIV and AIDS May Lower Food Intake in Your Community



As a group, discuss any other ways that HIV and AIDS may lower food intake in PLWHA. Try and think about specific conditions in your community that may reduce the intake of food in PLWHA and their families.

3) HIV and AIDS Reduce the Absorption of Food (20 minutes with Tool 3)

HIV can cause problems in the body that change the way it uses and absorbs food. If food is not 'taken in' or absorbed properly, the loss of nutrients can lead to poor nutrition.

Ways that HIV and AIDS can reduce the absorption of food:

- The lining of the gut can deteriorate due to HIV and other infections, affecting the digestion and absorption of food (**mal-absorption**)
- PLWHA often experience diarrhoea, which causes food to be passed through the gut so quickly that water and nutrients cannot be absorbed.
- Reduced food intake and absorption can lead to weight loss



Tool 3: How HIV and AIDS Affect Nutrition

Understanding how HIV and AIDS affect nutrition will help clients and their families to feel motivated to maintain good nutrition. Divide participants into three groups and create a separate flipchart with each heading:

1. HIV and AIDS Increases Energy Needs
2. HIV and AIDS Reduce Food Intake
3. HIV and AIDS Reduce Absorption of Food

Provide each group with a marker and cards. 'Cards' are pieces of paper or board on which one idea is written so that each can be presented separately. Ask each group member to write down one way that HIV and AIDS affect this aspect of nutrition. Have group members present their answers by sticking their card under the appropriate heading and provide an explanation of their topic as they would to a client during a home visit.

After each presentation ask remaining participants to make a decision on whether clients would understand each explanation. Develop a simplified way to explain each aspect if necessary. Finally, refer to the bullet points under each heading to ensure each aspect has been covered.

Facilitator's Note: Facilitators should use the content of this section and simplified explanations developed during this exercise in assessing this core skill at the end of the module.

3. How HIV and AIDS Affect Food Security (45 minutes)

As discussed briefly in the previous section, HIV and AIDS not only affect the way that PLWHA body's deal with food, but the ability of HIV and AIDS affected households to access food.

HIV and AIDS can impact the **food security** of individuals, households, nations and continents. Food security can be defined as the ability of people to access and afford enough food to meet their nutritional needs and live a healthy and productive life.

a) Unique ways in which HIV and AIDS Affect Food Security (15 minutes)

Compared to other 'shocks' that can cause food insecurity such as drought, floods or conflict, the effects of HIV and AIDS have a unique and lasting impact on food security.

Ways that HIV and AIDS uniquely affect food security:

- HIV and AIDS has been shown to affect men and women who are in their most 'productive years' of work, weakening a society's ability to produce food and income.
- Unlike other food security shocks (such as drought or floods), that may only last a year or season, HIV and AIDS affect households and societies for many years.
- HIV and AIDS create additional nutritional needs among PLWHA
- Stigma attached to HIV and AIDS may discourage affected households to seek assistance and may hurt efforts made by communities to assist PLWHA and their families
- The impact of HIV and AIDS upon food security is larger than with other food security shocks, and affects countries and entire regions where HIV prevalence is high.

b) Referring Clients to Services that Support Food Security

(30 minutes with Tool 4)

Services that address food security and livelihoods in your community may include:

- **Food Aid Programmes** programmes that seek to provide food assistance to households in need. Food aid programmes can be run by organisations such as the World Food Programme (WFP), Non-Governmental Organisations (NGOs), Community Based Organisations (CBOs), Faith Based Organisations (FBOs) or government programmes and Red Cross and Red Crescent National Societies.
- **Food Security or Livelihoods Programmes** programmes that seek to assist in household food production such as nutritional gardens, or become involved in activities that assist households to meet basic needs such as income-generating activities.



Tool 4: Referring Clients to Services that Support Food Security



PART A: As a group identify all programmes and services in your community that support food security. Make a list of all services identified on a flipchart and encourage CBVs to write down each of these services on a piece of paper that they can carry with them to client households.

PART B: Divide participants into pairs and have each pair role-play how they would refer clients to services that support household food security based on the list created in Part A. Ensure that each role-play includes CBVs involving other members of the client household in discussions of food security.

Facilitator's Note: Facilitators should keep a record of all community services identified to use for assessing this core skill at the end of the module.

4. Importance of Diet on ART (40 minutes)

The interaction between medications such as ARVs and nutrition is a very important part of health for PLWHA. The most important thing to remember about the relationship between ART and Nutrition is that they are equal partners in the fight against HIV.

An HIV positive person who is malnourished will experience negative effects on their health no matter what medications they are taking. For medicine to treat HIV and AIDS to “do its job”, PLWHA must have good nutrition.



Medications affect nutrition through their side effects, and nutrition affects the ability of some medications to do their job.

a) Relationship between Nutrition and ART (10 minutes)

The relationship between medications and nutrition is very important. As ARVs are medicines that specifically act to help manage the progression of HIV infection to AIDS, nutrition becomes important for PLWHA on ART.

Ways how ART can affect nutrition:

- Side effects of ART may reduce the intake of food in PLWHA. Side effects of ART that may reduce food intake include nausea, diarrhoea and change in taste
- If taken properly, ART can improve nutrition by decreasing some of the HIV-related symptoms that can damage nutrition (mouth sores, nausea and vomiting, diarrhoea, weight loss, digestive problems or lack of appetite).

Ways how Nutrition can affect ART:

- For ARVs to work, PLWHA must try and maintain good nutrition
- PLWHA can minimize some side effects of ARVs through their diets (refer back to 'Treating Symptoms with Food' in Session Three)
- It is very important that PLWHA follow the dietary recommendations for all drugs that are part of their ART regimen.

Facilitator's Note: It is important to note that many first line ARV regimens do not have dietary restrictions but do have side-effects that can affect nutrition

b) How CBVs can support the nutrition of clients on ART (30 minutes with Tool 5)

CBVs play an important role in helping their clients to maintain good nutrition while on ART by helping to ensure clients are aware of any dietary recommendations of medications they are taking and helping clients to develop a schedule of when and how to take their ARVs.



Tool 5: Helping Clients Follow Dietary Recommendations of Medication

Read the following case study aloud and write down each dietary recommendation on a flipchart for all participants to see. The name “Mary” can be replaced with a commonly used local name.

Your client, “Mary” has recently begun taking ARVs. The clinic advised her:

- Take 1 hour before or two hours after meals.
- Avoid alcohol
- High-fat meals should be avoided

How will you help “Mary” to follow the dietary recommendations of her ART regimen?

Divide participants into pairs, have each pair role play how they would help “Mary” to follow the dietary recommendations of her ART regimen. Ensure each role-play includes the following aspects:

- A review of “Mary’s” lifestyle to see if it will cause any barriers to following the Dietary recommendations of her ART regimen (i.e., does “Mary” drink alcohol, does “Mary” eat a high-fat diet, will work or any other aspect of “Mary’s” life interfere with her ability to take her medications as prescribed?)
- If barriers to her dietary recommendations are identified, help “Mary” to develop strategies for overcoming these barriers (i.e., avoid drinking alcohol, foods that can be used to replace high-fat foods that “Mary” likes, agreeing on a strategy for how “Mary” will remind herself to take her medication 1 hour before or two hours after meals).
- Sharing the strategy for following the dietary recommendations of “Mary’s” ARV regimen with her family and/or treatment supporter.

Facilitator's Note: To assess this core skill at the end of the module, provide the same case study to participants and use the checklist above to measure success at this skill.

3 Session Three: Managing Symptoms with Food

Purpose: The purpose of Session Three is to provide participants with knowledge and skills to discuss the management of symptoms with food with clients.

Objectives:

By the end of this session, CBVs should be able to:

1. Provide information to client households on how to manage symptoms of HIV through diet.

Duration: 2 hours

Required Materials: Flipchart, markers.

Recommended Preparation:

- Make copies of the Symptom Management Handout 2-3 if participants have not already been provided with one during training in Module Two. Distribute copies at the beginning of Section Two.
- Make copies of the 'Preparing an Oral Rehydration' Handout 6-5 for distribution in discussion of 2 a) Diarrhoea.
- Bring ingredients for SSS to the class for demonstration in tool one.

Objective	Content	Time	Methodology
	1. Dietary Management of HIV and AIDS	20 minutes	Mini Lecture
Provide information to client households on how to manage symptoms of HIV	2. Managing Symptoms with Food	1 hour 40 minutes	Mini Lecture Tool One (ST): Role Play Role Play Tool Two (ST): Role Play

1. Dietary Management of HIV and AIDS (20 minutes)

a) What is the Dietary Management of HIV and AIDS? (5 minutes)

The **Dietary Management of Symptoms** involves using food and nutritional practices to help manage HIV and AIDS related illnesses. Dietary management involves adjusting food intake to help people cope with the complications of HIV and opportunistic infections.

b) What are the advantages of dietary management of HIV-related illness? (20 minutes)

The best part about the dietary management of HIV-related symptoms is that it allows PLWHA, their families and caregivers to take control over HIV through eating habits. The goal of dietary management of HIV and AIDS related symptoms is to prevent malnutrition and improve the nutritional status and health of PLWHA, thereby slowing the progression of the disease.

Dietary management in NO WAY replaces the benefits of ART, but in combination with ART, works as an effective method of managing HIV and AIDS-related symptoms.

Additional advantages of dietary management for PLWHA include:

- It encourages PLWHA to **eat a variety of food**, including foods with many flavours, eating small but frequent meals and eating food in a texture that can be easily eaten
- **Increases comfort and reduces pain** while eating
- Provides **extra nutrients**
- **Prevents dehydration** during diarrhoea or fever
- Complements and **strengthens medical treatment** such as ART
- **Reduces the severity of HIV-related symptoms** and strengthens the immune system.

2. Managing Symptoms with Food (1 hour 40 minutes)

Distribute copies of the Symptom Management Handout 2-3 if participants have not already received it from Module Two: Treatment Literacy. Have participants refer to the handout as you review each symptom.

a) Diarrhoea (30 minutes with Tool 1)

Diarrhoea is a condition in which watery stools are passed three or more times a day. Diarrhoea is the body's response to remove poisonous materials from the gut, but can lead to the loss of water and important nutrients from food. If PLWHA have diarrhoea for more than three days, develop a fever in addition to having diarrhoea or see blood in their stool, they should seek medical attention as soon as possible.

Distribute copies of the instructions for preparing an oral rehydration drink in Handout 6-5

Preparing An Oral Rehydration Drink Recommended:



From packets

Follow the instructions and dissolve contents of the packet in the amount of clean water that is stated on the packet

Oral Rehydration Drinks If Packets are Unavailable



With sugar and salt

to one litre of clean water, add half a teaspoon of salt and eight teaspoons of sugar. Stir or shake well. The water should taste no more salty than tears.



With powdered cereals

To one litre of clean water, add half a teaspoon of salt and eight teaspoons of powdered cereals. Rice is best, but fine ground wheat flour, maize, sorghum or cooked mashed potatoes can also be used. Boil for five to seven minutes to make a liquid soup or watery porridge. Cool the drink quickly.

If not prepared properly, oral rehydration drinks mixed in the home can be harmful to the health of clients. For this reason, whenever possible, clients should use packets. It is important to use water that has been boiled and cooled for mixing ORS.

If ORS packets are not available in your community, it is very important that CBVs educate clients and family members on how to properly mix oral rehydration drinks using Sugar Salt Solution (SSS) or other mixtures.



Tool 1: Demonstrating SSS in the home.

PART A:

Provide a brief demonstration on how to mix an oral rehydration drink using the Sugar Salt Solution, emphasising the importance of ensuring correct quantities of sugar, salt and clean water.

Ask: What are some possible reasons why people in the community may not mix SSS properly?

Possible Answers:

- Clients may not understand the metric quantities provided (litres, teaspoons) or may not have the required utensils to correctly measure.
- Clients may have a different knowledge of amounts required for SSS and not want to change this system even though it may be harmful.

Facilitator's Note: Emphasise that for these reasons, it is important for CBVs to always encourage and support clients to use the packets of ORS solution. Identify where these packets can be obtained by clients, and how much they cost (if there is a fee). If/when these packets are unavailable, it is very important that CBVs educate clients on how to correctly mix SSS.

PART B:

Divide participants into pairs. Ask each pair to role-play how they would discuss with a client why they should use packets when mixing ORS. Ask participants to also discuss the importance of following the correct mixture of sugar and salt when packets are unavailable, addressing some of the problems identified in Part A.

Ways that PLHWA can adapt their diet to treat diarrhoea:

Ways that PLHWA can adapt their diet to treat diarrhoea:

- Drink at least 8 cups of water a day to replace fluids lost through diarrhoea and prevent dehydration
- Drink **Oral Rehydration Solution (ORS)** to help prevent dehydration by mixing a half teaspoon of salt with 8 teaspoons of sugar in **1 litre** of water
- Eat soft, mashed, moist foods such as porridge, stews, soft boiled vegetables (pumpkin, squash or carrots) and soft fruits (banana, mango, papaya, watermelon)
- Eat foods that can be easily digested such as rice, bread, maize, pasta or crackers
- Eat small, frequent meals
- Avoid fatty foods as they make diarrhoea worse. Reduce cooking oil, boil rather than fry food and remove visible fat from meat
- Do not eat foods that may irritate the stomach such as spicy foods, unripe or acidic vegetables or strong citrus fruits (orange or lemon).

b) Sore Mouth (5 minutes)

PLHWA often experience soreness in their mouth caused by infections. When a person's mouth is sore he/she may not feel like eating, but require more nutrients to fight the infection. If PLHWA are malnourished, mouth sores will not heal.

Ways that PLHWA can adapt their diet to treat a sore mouth:

Food to eat:

- Eat soft mashed food or moist food such as porridge, home made soup, yogurt, sour milk, pasta
- Eat soft fruits such as avocado, papaya or boiled vegetables.
- Use a straw to drink from
- Eat and drink food that is warm, not very hot or very cold.

Foods not to eat:

- Very spicy or salty food
- Acidic or sour foods such as lemons, vinegar or pineapple.
- Very hot or cold drinks or food
- Foods that require a lot of chewing
- Foods that are sticky.

How to relieve pain and help healing:

- Rinse your mouth with garlic tea or cinnamon tea
- Chew on small pieces of unripe mango or papaya to relieve pain
- Rinse your mouth with bicarbonate of soda after eating to clean use a soft toothbrush to clean gums, roof of mouth (palate) and tongue. If using a toothbrush is too painful, use a piece of soft cloth.

c) Nausea and Vomiting (5 minutes)

Ways PLWHA can reduce or treat nausea and vomiting:

- Sit up straight when eating and try not to lie down until one or two hours after eating
- Eat small and frequent meals
- Drink plenty of fluids after meals
- Ask someone else to cook for you as the smell of food cooking may make nausea worse
- Eat dry and lightly salty foods such as crackers, toast or popcorn to calm the stomach
- The smell of fresh orange or lemon peel may relieve nausea.
- Squeeze the peel or drink lemon juice in hot water.
- Avoid foods that make nausea worse such as fatty and sweet food, or alcohol.
- After vomiting, slowly drink half a glass of water, diluted soup or diluted fruit juice. Take sips every 15 minutes until the glass is finished.

d) Lack of Appetite (5 minutes)

Not feeling hungry is one of the most common problems in PLWHA. Even though their bodies require more nutrients, PLWHA may always feel full. It is very important that PLWHA continue to eat, even if they do not feel hungry.

Ways PLWHA can continue eating when appetite is low:

- Remember that the best way to regain appetite when you don't feel hungry is to eat
- Eat foods that you normally enjoy or try new foods that interest you
- Do light exercise such as walking or household chores before meals
- Eat with family and friends. PLWHA who must stay in bed can ask people to join them
- Eat small, frequent meals. Eat when you feel you have an appetite rather than waiting for meal times
- Sit up straight when eating to remove pressure on the stomach that might make you feel full
- Use spices that you like to enhance the flavour and smell of food.
- Avoid foods that can give you gas and make you feel bloated and full, such as fizzy drinks, beer, cabbage and beans
- When you do feel hungry, avoid eating junk food, but eat food that is nutritious and healthy to replace lost nutrients.

e) Weight Loss (5 minutes)

When the body needs extra energy to fight infection and it is not receiving enough nutrients, it will use stored fat. If a person has used all his/her fat stores, the body will then use protein stores in the form of muscle to get energy.

- Weight loss is a common problem with PLWHA and can happen without a person being aware of it. Because infections increase the body's need for energy, early treatment of infections is an important way to avoid weight loss in PLWHA.

Ways PLWHA can gain weight with food:

- Eat more starchy foods such as maize, rice, bread, millet and Pasta
- Increase the intake of legumes like beans and lentils
- Increase your protein intake with fish, meat and eggs if they are available and/or affordable
- Increase the number of meals you eat and eat healthy snacks between meals. Healthy snacks include fruit, seeds (pumpkin, sunflower), nuts, boiled eggs, avocado and yoghurt.

f) Digestive Problems (5 minutes)

PLWHA can experience digestive problems such as bloating or constipation from infections or medications they are taking. Digestive problems are caused by damage to natural bacteria in the stomach that help digest food.

Ways PLWHA can avoid and treat digestive problems:

- Chew food well before swallowing
- If constipated, eat foods that are high in fibre such as whole wheat bread, green vegetables, maize and washed fruit with the peel
- Drink lots of fluids
- Avoid foods that can cause diarrhoea like fatty foods
- Avoid gas-forming foods that can make you feel bloated (unnaturally full) like onions, beans and cabbage.

g) Changes in Taste (5 minutes)

A common side effect of ARVs is a change in taste (either a loss of taste or abnormal taste in the mouth). Changes in taste can cause a lack of appetite.

Ways PLWHA can deal with changes in taste:

- Use flavour enhancers like salt, spices, herbs and lemon.
- Try eating sour foods such as orange or pineapple
- When chewing food, move it around in the mouth to stimulate taste receptors
- Always follow instructions about eating when taking medications, but if possible take medications after meals.

h) Colds, Flu, Coughs and Fever (5 minutes)

Ways PLWHA can deal with coughs, Flu, colds, and fever:

Colds and flu:

- Drink plenty of water (at least 8 cups per day)
- Increase your intake of vitamin C through fluids such as freshly squeezed orange juice
- Drink herbal teas with ginger, cinnamon, thyme or garlic.

Coughs:

- Breathe in hot vapours to loosen sputum. Cover your head with a towel and lean over a bowl of hot, steaming water. Breathe in vapours deeply. Add herbs such as mint, eucalyptus or thyme to the hot water if you wish.

Cough syrup recipe the ingredients should be:-

- One part honey
- one part lemon juice
- one part cane spirit (40%)
- shake well and drink one teaspoon to soothe throat when needed
- Drink herbal teas with ginger, cinnamon, thyme or garlic.

Fever: Drink a minimum of 2 litres of water a day

- Drink tea from lemon, guava, honey or gum tree
- Continue to eat small, frequent meals if you are able to.

i) Skin Problems (30 minutes with Tool Two)

PLWHA may experience rashes and itchy skin as a result of malnourishment or from infection. Foods rich in Vitamin's A and B help skin conditions.

Ways clients can deal with skin problems

Foods rich in vitamin A include liver, egg yolk, orange, vegetables and fruit such as carrot, papaya, pumpkin, spinach and garlic, and fruits. Foods rich in vitamin B are whole grain cereals, seeds, nuts, beans, bananas, figs and green leafy vegetables.

Tool 2: Managing Symptoms with Food



Divide participants into pairs and assign each pair with one of the following symptoms (if there are fewer participants than symptoms, assign additional symptoms to the same pair):

- 1) Diarrhoea
- 2) Sore Mouth
- 3) Nausea and Vomiting
- 4) Lack of Appetite
- 5) Weight Loss
- 6) Digestive Problems
- 7) Change in Taste
- 8) Cough, Cold or Flu
- 9) Skin Problems

Have each pair role-play how they would assist a client showing their assigned symptom(s).

Facilitator's Note: Ensure each role play does not only focus on CBVs educating clients on how to treat symptoms as they are presented, but provided the information to client households in a manner that can be used by clients and their family members to manage symptoms between home visits.

*When assessing this core skill at the end of the module, choose one or two symptoms and have participants how they would counsel clients and their family on managing symptoms with food.

4 Session Four: Special Considerations for Nutrition and HIV

Purpose: The purpose of Session Four is to provide participants with knowledge and skills regarding special considerations for HIV positive women and their children.

Objectives:

By the end of this session, CBVs should be able to:

1. Demonstrate an awareness of the available feeding alternatives for HIV positive women in your community.
2. Provide appropriate support to HIV positive mothers with child nutrition.

Duration: 1 hour 30 minutes

Required Materials: Flipchart, markers.

Recommended Preparation:

- Discuss with the local health facility the most commonly used infant feeding option in the community and why.

Objective	Content	Time	Methodology
	1. Nutrition for Pregnant and Lactating HIV Positive Women	20 minutes	Mini Lecture
Demonstrate an awareness of the available feeding alternatives for HIV positive women in your community	2. Children Born to HIV Positive Mothers and Nutrition	1 hour 10 minutes	Mini Lecture Tool One (K): Group Discussion
Provide appropriate support to HIV positive mothers with child nutrition.			Mini Lecture Tool Two (ST): Group Role Play

1. Nutrition for Pregnant and Lactating HIV Positive Women

(20 minutes)

Good nutrition for pregnant and breast feeding (lactating) HIV mothers is important for the survival and well being of the developing baby. An HIV positive mother's nutrition before, during and after pregnancy can influence her own health and the risk of transmitting HIV to her child. HIV positive mothers are at higher risk of malnutrition and illness while pregnant and breast feeding.

During pregnancy and lactation, a mother's need for energy through food must increase to meet the demands of:

- Weight gain due to pregnancy
- Development of the baby
- Milk production



As discussed in Session Two, the nutrition of HIV positive mothers will also be affected by :

- Increasing nutritional needs
- Lowering food intake
- Reducing the absorption of food

Therefore, in order to maintain good health, HIV positive mothers need additional food to meet the extra energy needs associated with HIV, pregnancy and lactating. Pregnant women who are HIV positive should always be encouraged to discuss the use of ARVs to prevent mother to child transmission of HIV during pregnancy, birth or breast feeding as per country protocols with a health professional.

CBVs should encourage HIV positive pregnant or lactating mothers to:

1. Monitor their weight gain during pregnancy. If a client feels they are not gaining weight appropriately, or losing weight, they should consult the clinical team.
2. Eat a healthy diet and eat foods rich in energy, and get additional rest, particularly in the last three months of pregnancy. (see Session Two)
3. Ensure food safety to avoid illness.
4. Link clients to health facilities and support regular visits to the local clinic.

2. Children Born to HIV Positive Mothers and Nutrition

(1 hours 10 minutes)

It is important that the CBVs tell their clients that not all HIV positive women transmit HIV to their babies.

a) Two Recommended Feeding Alternatives for HIV Positive Mothers

(30 minutes with Tool 1)

1. **Exclusive Breastfeeding** when a mother ONLY feeds her baby breast milk for the first months of life. Only breast milk means no water, juices, soups, food, formula, cow's milk or medication unless advised to by a doctor.
2. **Exclusive Replacement Feeding** when a mother ONLY feeds her baby alternative feeds such as formula but NO BREAST MILK from birth.

The role of CBVs in supporting HIV POSITIVE mothers is NOT to determine what feeding alternative clients should use, but to support the feeding choices of clients and link clients with health facilities.



Tool 1: Exclusive or Replacement Feeding In Your Community

As a group discuss the pros and cons of the two recommended feeding alternatives for HIV positive mothers, in reference to the situation in your community.

Encourage the group to explore the issues by answering questions such as:

1. Are there any cultural considerations surrounding breastfeeding or alternative feeding in your community that should be discussed?
2. Are replacement feeding alternatives readily available and affordable to women in your community?
3. Given your cultural and community context, which is the most 'realistic' alternative for HIV positive women in your community?
4. Are there any programmes in your community (PMTCT or PPTCT) that CBVs could refer HIV positive mothers to for support?

b) Providing Information on Different Feeding Options 0-6 months (10 minutes)

Whatever the feeding option an HIV positive mother chooses, it is important that CBVs have the knowledge and skills necessary to mothers to feed effectively.

1) Exclusive Breastfeeding

CBVs can help mothers to breastfeed exclusively by:

- Referring mothers with cracked nipples or babies with cuts/sores around the mouth or thrush to a medical facility immediately.
- Providing mothers with information on how to make breastfeeding safer by ensuring proper positioning and attachment of the baby to the breast. Good breastfeeding techniques help reduce the transmission of HIV by reducing the risk of cracked nipples or an infection of the milk ducts (called mastitis by doctors).
- Encouraging mothers to seek medical attention immediately if she has any problems breastfeeding or develops any illness.
- Encouraging mothers to speak openly about their intentions to continue breastfeeding, and providing support to continue exclusive breastfeeding.

Tips for good positioning and attachment while breastfeeding:

- Baby's body should be turned completely towards mother
- Baby's chin should be touching the mother's breast
- Baby's mouth should be wide open
- Both lips should be turned outward
- More nipple should be seen above than below the baby's mouth
- Baby should be taking slow, deep sucks, sometimes pausing
- Baby's swallows should be heard

2) Exclusive Replacement Feeding

A doctor or other health professional will counsel whether or not exclusive replacement feeding is an appropriate feeding alternative for HIV positive mothers.

It is very important for mothers to know that skimmed milk, cereal milk, juices and teas are NOT suitable replacement feeds for children under 6 months of age.

If mothers are using exclusive replacement feeding, CBVs can support them by:

- Identifying any difficulties that a mother may have with exclusive replacement feeding and encourage them to discuss these issues with their doctor or other health professional
- Provide mothers with information on the risks of mixed feeding (mixing replacement feeds with breast milk)
- Support mother or other caregivers with the necessary skills and knowledge to feed the infant with appropriate replacement foods. For example, demonstrating how to prepare, store and feed replacement foods or refer mothers to services that provide this support.
- Encourage the mother or caregiver to seek out immediate medical attention for any feeding problems.

a) Safe transition from exclusive breastfeeding to replacement feeding

Mothers should be supported to make a safe transmission from exclusive feeding. “Safe transition” means introducing other foods besides breast milk in a manner that reduces the likelihood of transmitting HIV to the child. Once a mother has transitioned, the child should no longer be given any breast milk.

While mothers should be counselled on safe transition from exclusive breastfeeding to exclusive replacement feeding on an individual basis, the transition is usually done over a period of a few days to a maximum of three weeks.

Ways that CBVs can help mothers transition from exclusive breastfeeding to replacement feeding include:

- Encouraging mothers who are breastfeeding exclusively to visit their doctor as the child near 6 months of age to discuss the transition
- Providing heated or boiled expressed milk in a cup for her child to drink to teach the child to cup feed and ease the transition *mothers should not feed children expressed milk that has cooled
- Discuss with her doctor appropriate foods for replacement feeding
- Find a regular supply of replacement feeds before the transition
- After stopping breastfeeding, emphasise that the mother should no longer provide breast milk
- After stopping breastfeeding but before lactation stops (the body stops producing milk), encourage her to express and discard some breast milk to ease pressure and increase comfort.



b) Feeding Recommendations from 6 to 36 months (30 minutes with Tool 2)

HIV positive mothers should review their child's diet with a health professional during every visit to ensure appropriate feeding and adequate nutrition. Keeping in touch with medical professionals about the health and diet of their children helps HIV positive mothers to ensure that any growth, nutritional or other health problems are recognised and treated as soon as possible.

Ways that CBVs can help support HIV positive mothers with children 6 months with nutrition:

- Support mothers to stop breastfeeding as decided with clinical team, but let mothers know that babies from 6-24 months will need milk from other sources besides breast milk.
- Encourage the parent or caregiver to feed her child foods rich in protein and nutrients (review the Eating a Healthy Diet and Benefit and Source of Micronutrients handouts for locally available foods if necessary)
- Counsel parents or caregivers to provide babies with mashed fruits and vegetables as often as possible to increase energy and nutrient intake (ripe avocado, banana, boiled pumpkin or sweet potato)
- Encourage parents or caregivers to provide children with small frequent meals, with nutritious snacks between meals.
- Provide parents and caregivers with information on the 5 Easy Steps of Food safety (refer to handout if necessary) when cooking for all members of the household.
- Serve and feed the child from its own plate.
- If the child develops infection or illness, encourage parents or caregivers to seek medical attention immediately.
- Encourage parents or caregivers to discuss the use of a daily multivitamin for their children with a doctor or health professional.
- Refer parents and caregivers to any resources available in the community for assisting with child nutrition or household food security
- Encourage parents to discuss necessary immunisations for growing children with their doctors.

Tool 2:

Supporting HIV Positive Mothers with Child Nutrition



Distribute copies of Handout 6-8 Supporting HIV Positive Mothers Feeding Practices.

Divide participants into four groups:

- 1) Exclusive Breastfeeding
- 2) Exclusive Replacement Feeding
- 3) Safe Transitional Feeding
- 4) Feeding Recommendations 6-36 Months

Have each group develop a role play on how they would provide mothers with information on each stage of child nutrition during a community meeting. Have remaining participants ask each group common questions that may arise in the community from such a presentation.

Facilitator's Note: For the assessment of this core skill, facilitators should choose the MOST COMMON feeding alternative used by HIV positive mothers in your community and have participants role play providing this information. Facilitator's should use the Handout 6-8 as a checklist for information that should be provided.

5

Session Five: Positive Living.

Purpose: The purpose of Session Five is to introduce the concept of nutrition as part of positive living for PLWHA.

Objectives:

By the end of this session, community based volunteers (CBV) should be able to:

1. Develop an exercise schedule with clients that suits their health and needs.

Duration: 1 hour 30 minutes

Objective	Content	Time	Methodology
	1. Nutrition as part of Positive Living.	30 minutes	Mini Lecture Tool One (ST): Group Role Play
	2. Preventing Other Infections	15 minutes	Mini Lecture
Develop an exercise schedule with clients that suit their health and needs.	3. Encourage Physical Activity as Appropriate	45 minutes	Mini Lecture Tool Two (ST): Case Study and Role Play
	4. Support Nutrition	NA	Mini Lecture

1. Nutrition as Part of Positive Living (5 minutes)

As discussed in Module One, **positive living** is a term used to describe steps taken by PLWHA that enhance their lives and increase their health. This module has demonstrated that nutrition is a very important part of positive living. In addition to nutrition, other key components of positive living include:

- Prevention of Other Infections and
- Encouraging Physical Activity as appropriate

Facilitator's Note: If necessary, review Section Three: Positive Living in the Client Education Flipchart as a refresher on aspects of positive living.



2. Preventing Other Infections (15 minutes)

Ask participants: What do we mean by “prevent other infections”? Can you give some examples of infections we might want to prevent? [Possible answers: water-borne infections, sexually transmitted infections, chicken pox, measles, flu, colds.]

Avoiding other infections. If you are HIV+, you already have a damaged immune system and it will become more damaged if you pick up other infections. With a damaged immune system you are more likely to pick up other infections and so should avoid others with such infections.

How can we advise someone to avoid STIs and why is this important? Avoiding STIs can be done in the same way as avoiding HIV infection using condoms, reducing partners, abstinence, being tested and treated. STIs damage the immune system and so are not good news for someone with HIV.

STIs increase the infectivity of someone living with HIV. They also increase the vulnerability to HIV infection if negative.

Protection against malaria. Malaria is a life threatening condition. If you want to stay as well and as healthy as possible, avoiding malaria should be a high priority. Always use insecticide treated bed-nets.

Ask participants: What role does nutrition play in preventing other infections as part of positive living?

Food and personal hygiene: Educating clients about food safety is an important way for CBVs to assist clients to prevent other infections.

Food safety is an important part of nutrition for PLWHA because:

- PLWHA are more likely to become seriously ill from food poisoning because their immune system is weakened and is less able to fight off infection.
- By causing diarrhoea, food poisoning can lead to the loss of nutrients and fluids. It will be more difficult for PLWHA to recover from food poisoning due to their weakened immune system and it could put them at risk for malnutrition or opportunistic infections.

3. Encouraging Physical Activity As Appropriate (40 Minutes With Tool 1)

Exercise is important because:

- It can make the person feel better and maintain muscle tone.
- It stimulates appetite and prevents weight loss:
- It reduces nausea
- It improves functioning of the digestive system
- It strengthens muscles.



To increase exercise, you could advise on how it can improve all our lives, whether we are HIV+ or not. However, it isn't easy to change lifestyle, even when the benefits are well-known. Ways of increasing exercise can be: walking, running, joining a team sport, cycling, being more active in the house, etc. Even walking to the next bus stop will increase the amount of physical activity.

Everyone will have their own level of fitness and so everyone will need a different programme. Help the client develop his or her own programme.

What kind of exercises can PLWHA do?

PLWHA can do any exercise they feel physically able to handle. Exercise does not have to be strenuous. It can simply involve going for a walk with a friend, helping clean the house or collecting firewood or water.

It is important that PLWHA exercise regularly to maintain their health. If the client feels strong enough, **exercises should be done 3-5 times a week for approximately 30 minutes of continuous activity.**

CBVs will have to find out together with the client the best 'exercise schedule' including type of activity (going for a walk, biking, gardening, lifting weights) and duration of exercise.

Relaxation exercises such as yoga and meditation are good choices for PLWHA at any stage of illness as they help a person both mentally and physically, but do not place stress on the body.



Tool 2: Developing an Exercise Plan With Your Client

Helping clients to develop an exercise plan that is realistic and appropriate is a good way for CBVs to help clients improve their overall health, including nutrition.

Read the case study aloud, replacing the name “John” with another common name in your community if desired.

“John” is a client living with HIV. He experienced a period of illness prior to starting ART and lost a lot of weight. While “John's” health has begun to improve since he started ART, he still feels very weak and thin and tells you this affects his confidence as he used to be “big and strong”. “John” lives in a modest home and does not have access to a gym or sports club.

How do you help “John” develop an exercise plan?

Divide participants into pairs and have each participant take turns role-playing how they would help “John” develop an exercise plan. Ensure that each role play addresses the following issues:

Facilitator's Checklist:

- CBVs should explore with “John” physical activities he has engaged in the past and determine whether these would be appropriate for him at this time (for example, if John used to play football/soccer, this might not be appropriate for him now as running requires a large amount of energy that could burn off needed stores).
- Suggest to “John” that strength-building exercises may be most appropriate for him at this time. Encourage “John” to start lifting weights to improve his strength. Emphasise that 'weights' do not need to be fancy equipment but can include a bag of flour or heavy book.
- Develop a schedule for “John” to exercise 3-4 times a week that suits his current lifestyle and situation (before or after work, during cool times of the day). Encourage “John” to change this schedule according to his needs (i.e., less if he is feeling weak, or more if he is feeling strong).
- Encourage John link up with a referral and discuss with his doctor/local health facility.

Facilitator's should use this same checklist and case study for assessing this core skill at the end of the module.

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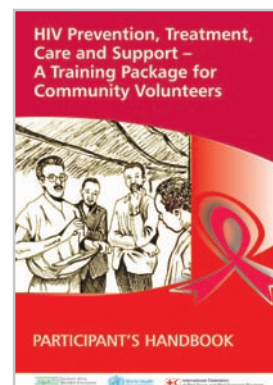
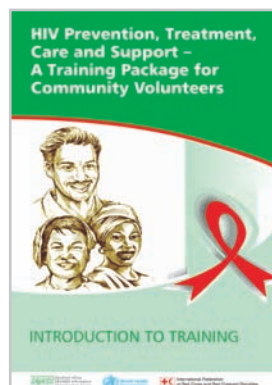
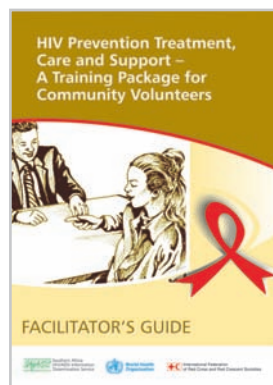
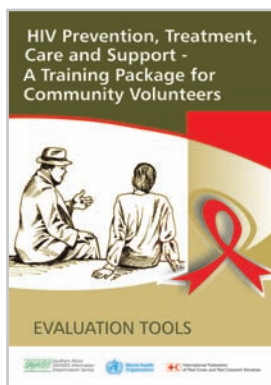
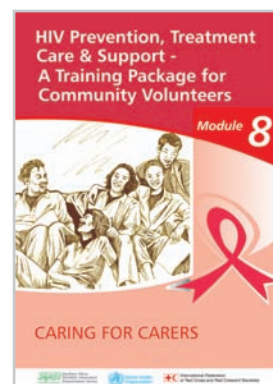
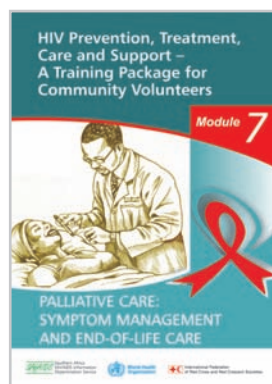
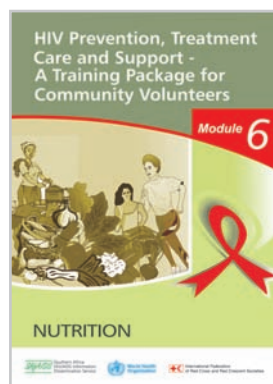
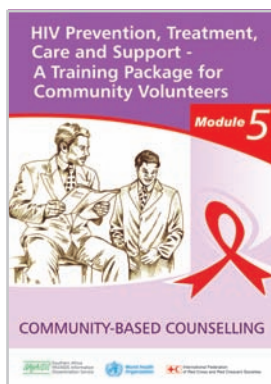
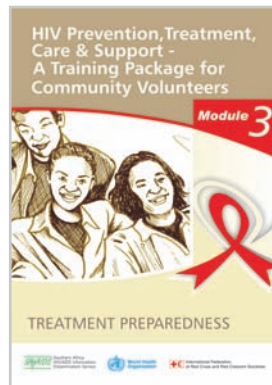
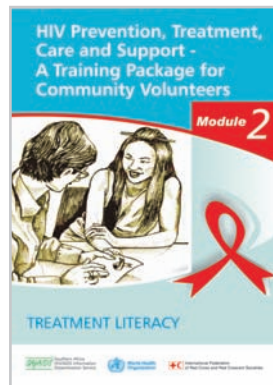
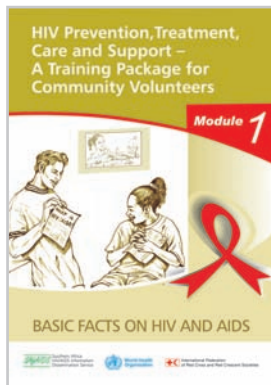
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