



Government of Malawi
Ministry of Health

NUTRITION CARE, SUPPORT, AND TREATMENT (NCST) FOR ADOLESCENTS AND ADULTS

Training for Facility-Based
Service Providers

PARTICIPANT'S MANUAL **Module 1: Introduction to** **Nutrition**



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CONTENTS

ABBREVIATIONS AND ACRONYMS.....	i
REFERENCE 1.1: KEY NUTRITION TERMS	2
REFERENCE 1.2: EXAMPLES OF FOODS FROM THE SIX FOOD GROUPS.....	3
REFERENCE 1.3: NUTRITION REQUIREMENTS FOR HIV-NEGATIVE ADOLESCENTS AND ADULTS	4
EXERCISE 1.1: ENERGY CONTENT OF COMMON FOODS	6
REFERENCE 1.4: NUTRITION REQUIREMENTS FOR HIV-POSITIVE ADOLESCENTS AND ADULTS	7
REFERENCE 1.5: FOOD AND WATER SAFETY AND HYGIENE MESSAGES	9
REFERENCE 1.6: DIETARY MANAGEMENT OF SYMPTOMS.....	11
REFERENCE 1.7: FOOD GUIDANCE FOR HIV MEDICATIONS	13
REFERENCE 1.8: FOOD GUIDANCE FOR TB MEDICATIONS	14
REFERENCE 1.9: NUTRITION INTERVENTIONS THAT CAN BE DELIVERED AT HEALTH FACILITY CONTACT POINTS	15

ABBREVIATIONS AND ACRONYMS

>	greater than
≥	greater than or equal to
<	less than
AIDS	acquired immunodeficiency syndrome
ANC	antenatal care
ART	antiretroviral therapy
ARV	antiretroviral drug
BMI	body mass index
BUN	blood urea nitrogen
cm	centimetre(s)
CMV	combined mineral and vitamin mix
CNA	Critical Nutrition Actions
CMAM	community-based management of acute malnutrition
CSB	corn-soya blend
dL	decilitre(s)
ES/L/FS	economic strengthening/livelihood/food security
FANTA	Food and Nutrition Technical Assistance III Project
FAO	Food and Agriculture Organization of the United Nations
g	gram(s)
Hb	haemoglobin
HIV	human immunodeficiency virus
HTS	HIV Testing Services
IU	international unit(s)
kcal	kilocalorie(s)
kg	kilogram(s)
L	litre(s)
µg	microgram(s)
mL	microlitre(s)
mg	milligram(s)
ml	millilitre(s)
mm	millimetre(s)
MOH	Ministry of Health
MUAC	mid-upper arm circumference
NCST	nutrition care, support, and treatment
OPD	outpatient department
PDSA	plan-do-study-act
PLHIV	person or people living with HIV
PMTCT	prevention of mother-to-child transmission of HIV
QA	quality assurance
QI	quality improvement
RDA	recommended daily allowance
RUTF	ready-to-use therapeutic food
TB	tuberculosis

MODULE 1

Contents and Duration



The **Introduction to Nutrition** module takes about **4 hours** to complete.

#	Description	Duration
1.0	Module Objectives	5 minutes
1.1	Nutrition for Good Health	30 minutes
1.2	The Link between Nutrition and Infection	2.5 hours
1.3	Integrating Service Delivery to Prevent and Manage Malnutrition	45 minutes
1.4	Discussion and Module Evaluation	10 minutes

Learning objectives

By the end of this module, participants will be able to:

1. Explain the importance of nutrition for good health
2. Describe the link between nutrition and infection
3. Explain the keys to food and water safety and good hygiene
4. Assist clients with dietary management of symptoms and ART side effects
5. List interventions that can prevent and manage malnutrition

Reference 1.1: Key Nutrition Terms

Food is anything eaten or drunk that provides the body with nutrients.

The role of food in the body:

- Developing, growing, maintaining, replacing, and repairing cells and tissues
- Resisting and fighting infections
- Producing energy (warmth), movement, and work

Nutrients are chemical substances in food that are released during digestion and provide energy and nourishment to maintain, repair, or build body tissues. The body needs six types of nutrients from food: protein, carbohydrates, fat, fibre, vitamins and minerals, and water. Nutrients are divided into **macronutrients** (carbohydrates, protein, and fat), which are needed in large amounts, and **micronutrients** (vitamins and minerals), which are needed only in small amounts.

Malnutrition occurs when energy and nutrient intake do not match dietary needs. Malnutrition includes both undernutrition and overnutrition.

- **Undernutrition** is the result of taking in an inadequate amount or combination of nutrients to carry out needed body functions.
- **Overnutrition** is the result of taking in more energy than the body needs over time.

Nutrition is important for **good health**.

Good nutrition can:

- Help people feel strong physically and mentally and look healthy
- Strengthen the immune system to fight infection
- Help people stay productive and able to do physical activities
- Help prevent wasting
- Improve drug adherence and effectiveness
- Help manage common symptoms and drug side effects

Poor nutrition can:

- Weaken the immune system
- Increase vulnerability to infections
- Reduce the body's ability to recover from infections

Reference 1.2: Examples of Foods from the Six Food Groups

1. **Vegetables** include green leafy and yellow vegetables, such as *bonongwe*, *chisoso*, *khwanyana*, *mnkhwani*, *kholowa*, *rape*, *mpiru*, *kamganje*, carrots, eggplants, pumpkin, tomatoes, and mushrooms. Vegetables provide the body with vitamins, minerals, water, and dietary fibre.



2. **Fruits** include citrus fruits such as oranges, lemons, baobab, and tangerines; bananas; pineapples; pawpaws; mangoes; *masawu*; *bwemba*; *malambe*; *masuku*; peaches; apples; guavas; and watermelon. Fruits provide the body with vitamins, minerals, water, energy, and dietary fibre.



3. **Legumes and nuts** include groundnuts, soya beans, common beans, peas, cowpeas, ground beans (*nzama*), bambara nuts, and pigeon peas. Legumes and nuts provide protein, fibre, and energy; soya beans and nuts also contain healthy fats.



4. **Animal-source foods** include all foods of animal origin, including meat, eggs, milk products, fish (e.g., *matemba*, *utaka*, *usipa*, *kapenta*, *makakana*, *chambo*), and insects (e.g., *bwasoni*, *ngumbi*, *mafulufute*, *mphalabungu*). They provide the body with important protein, vitamins, and minerals.



5. **Staples** include cereal grains, such as sorghum, millet, and maize; starchy fruits, such as green bananas and plantains; and starchy roots (cassava, sweet potato, and Irish potato). Staples provide carbohydrates and, depending on the food and on how it is processed, protein, fibre, and vitamins, and minerals.



6. **Fats** can be both healthy and unhealthy. Healthy fats are found in vegetable oils, nuts and seeds, avocado, and fatty fish (*batala*), such as lake trout and tuna. Unhealthy fats, such as butter and fat from animal products other than fish, should be eaten sparingly.



Water is considered an essential nutrient because it is necessary for body functions. Adults should drink at least 2 litres, or about 8 cups, of water a day. The water should be safe, clean, and treated if necessary. Tea, *toboa*, soup, milk, juice, and fruit also contain water and can help meet the body's needs.



Reference 1.3: Nutrition Requirements for HIV-Negative Adolescents and Adults

Nutrient needs depend on age, sex, health status, physical changes such as pregnancy and breastfeeding, and level of activity. The table below shows energy requirements of HIV-negative adolescents and adults.

Table 1. Energy Requirements of HIV-Negative Adolescents and Adults

Age group	Requirement (kcal/day)
15–18 years	2,800
Adult (≥ 18 years): Non-pregnant/lactating	2,000–2,580
Pregnant/lactating women (during the first 6 months of lactation)	2,460–2,570

Source: WHO, FAO, and United Nations University (UNU). 2001. *Human Energy Requirements: Report of a Joint WHO/FAO/UNU Expert Consultation, 17–24 October, 2001*. Geneva: WHO.

Nutrition Requirements during Pregnancy and Lactation

Daily energy requirements for pregnant and lactating women are higher than the requirements for other adults. The extra energy is used for growth of the foetus and placenta, to build fat reserves for lactation, and to preserve the woman’s own nutritional status while she provides nutrition to her baby.

Table 2. Nutrition Requirements during Pregnancy and Lactation

First trimester	+85 kcal/day
Second trimester	+285 kcal/day
Third trimester	+475 kcal/day
During the first 6 months of lactation	+505 kcal/day

Protein

Protein should constitute 12%–15% of dietary intake (50–80 g/day or 1 g/kg of ideal body weight).

Table 3. Protein Requirements

Group	Grams per day
Adolescents 15–18 years	Girls: 46
	Boys: 52
Adults 19–70 years	Women: 46
	Men: 56
Pregnant women 14–50 years	71
Lactating women (during the first 6 months post-partum) 14–50 years	105

Source: United States Department of Agriculture. 2011.

Fat

Fat/oil intake should not be more than 35% of total energy needs.

Vitamins and Minerals

Eating a varied diet from the six food groups is the best way to ensure adequate intake of vitamins and minerals.

When dietary intake of vitamins and minerals may not be sufficient to correct nutritional deficiencies or the recommended intakes cannot be achieved, high-risk groups, such as pregnant and lactating women, may need multiple micronutrient supplements.

Pregnant women and lactating women (up to 6 months post-partum)

- 60 mg of elemental iron and 400 µg of folic acid daily throughout pregnancy and lactation (up to 6 months post-partum) to prevent anaemia and twice daily to treat severe anaemia

Exercise 1.1: Energy Content of Common Foods

Estimate how many kilocalories are in each food listed.

Quantity and Name of Common Food	Kilocalories
One cup of whole milk	
One banana	
One avocado	
A handful of groundnuts	
An ear of roasted maize	
Two slices of white bread	
One roasted chicken thigh	
Tablespoon of oil	
One egg	
One potato	
One mandasi/vitumbua (homemade doughnut)	
One medium-size roasted or boiled sweet potato	

Reference 1.4: Nutrition Requirements for HIV-Positive Adolescents and Adults

Nutrient needs depend on age, sex, health status, physical changes, such as pregnancy and breastfeeding, and level of activity. For people living with HIV (PLHIV), energy requirements are influenced by severity of disease state. The nutrient requirements of various groups of people are shown in **Table 1**.

Table 1. Energy Requirements for PLHIV (kcal/day)

Group	Healthy	HIV-infected	
		Asymptomatic	Symptomatic
		10% more energy	20% more energy
Adolescents 15–18 years	2,800	+ 280	+ 560
Adults			
Non-pregnant/ lactating	2,000–2,580	+ 200 to 257	+ 400 to 514
Pregnant/ lactating women (during the first 6 months of lactation)	2,460–2,570*		

* Source: Adapted from WHO 2001.

Protein

Protein should constitute 12%–15% of dietary intake (50–80 g/day or 1 g/kg of ideal body weight).

According to WHO, there is no evidence that PLHIV have different protein requirements than healthy HIV-negative people.

Table 2. Protein Requirements

Group	Grams per day
Adolescents 15–18 years	Girls: 46
	Boys: 52
Adults 19–70 years	Women: 46
	Men: 56
Pregnant women 14–50 years	71
Lactating women 14–50 years (during the first 6 months post-partum)	105

Source: United States Department of Agriculture 2011.

Fat

Fat/oil intake should not be more than 35% of total energy needs. People with HIV and/or TB should consume the same percentage of energy from fat as healthy people. However, people on medications such as antiretroviral therapy (ART) or with persistent diarrhoea may need special advice regarding fat intake.

Vitamins and Minerals

Eating a varied diet from the six food groups is the best way to ensure adequate intake of vitamins and minerals.

Where dietary intake of vitamins and minerals may not be sufficient to correct nutritional deficiencies or the recommended intakes cannot be achieved, high-risk groups, such as pregnant and lactating women, may need multiple micronutrient supplements.

Pregnant women and lactating women (up to 6 months post-partum)

- 60 mg of elemental iron and 400 µg of folic acid daily for 6 months throughout pregnancy and 6 months post-partum to prevent anaemia and twice daily to treat severe anaemia

PLHIV

- HIV-positive non-pregnant/non-lactating adults should not exceed the recommended dietary allowance (RDA) of micronutrients

Reference 1.5: Food and Water Safety and Hygiene Messages

1. Use treated water for drinking and store it safely.

- Treat water to make it safe to drink using one of these options:
 - Hypochlorite (chlorine) solution
 - Boiling
 - Commercial filter
- Store treated water in a covered container with a narrow neck and a tap if possible.
- Do not touch the water in the container with your hands. Pour it into a clean pitcher to serve it or hang a ladle on the wall to dip the water to serve it.

2. Wash hands properly.

- Handwashing with soap prevents infection from spreading from person to person.
- Rinsing hands is not enough—use soap or ash every time you wash your hands.
- Wash your hands under poured or flowing water to remove dirt and germs. Do not wash your hands in a basin of water that many people use to wash their hands in. The water becomes dirty, and washing your hands in this water does not prevent infection.
- Wash your hands **before** you handle, prepare, or eat food; before you feed someone or give them medicines; and often while you are preparing food.
- Wash your hands **after** you go to the toilet, clean someone who has defecated, blow your nose, cough, sneeze, or handle an animal or animal waste.
- Wash your hands **both before and after** you take care of someone who is sick.

3. Always use a latrine.

- Keep latrines as far away from houses or cooking areas as possible.
- Upgrade pit latrines with cleanable platforms, covers over the pits, housing that provides privacy, and nearby hand washing stations.
- Clear the path to the latrine by removing stones and branches and filling in holes.
- Keep the latrine platform, seat, walls, and other surfaces clean and free of faeces. Keep all anal cleaning materials in the latrine. Put a scoop of lime or ash in the latrine after defecating to reduce odour and keep flies away.
- Add supports (e.g., poles, ropes, stools) for children or weak household members so that they can use the latrine comfortably.
- If you do not have a latrine, put a bedside commode or bedpan next to the bed of children or weak household members and empty it regularly.
- Always wash your hands after defecating.
- If you do not have a latrine, bury faeces away from your house.

4. Keep food preparation areas clean.

- Wash all surfaces and equipment used to prepare or serve food with soap and water (and bleach, if possible).
- Protect food from insects and animals by covering it with netting or cloth or keeping it in containers.

5. Separate raw and cooked food.

- Keep raw eggs, meat, poultry, fish, and seafood away from other foods because they can contain bacteria that cause illness.
- Use separate knives and cutting boards for raw animal foods.
- Store food in covered containers to avoid contact between raw and cooked foods.

6. Cook food thoroughly.

- Cook meat, poultry, eggs, fish, and seafood until they are well done. For meat and poultry, cook until the juice is clear, not pink.
- Bring soups and stews to a boil, at least until you see the first big bubbles.
- Reheat already cooked food thoroughly by bringing it to a boil or heating it until it is too hot to touch. Stir the food while reheating it.

7. Keep foods at safe temperatures.

- Do not leave cooked food out at room temperature for more than 2 hours.
- Reheat already cooked food before serving it.
- Do not store food in a refrigerator for more than 2 days.
- Do not thaw frozen food at room temperature.

8. Eat safe foods.

- Buy only fresh and healthy foods.
- Do not use food beyond its expiry date.
- Use pasteurised milk or boil fresh milk before use.
- Wash raw vegetables and fruits with treated water or peel the skin before eating.

Reference 1.6: Dietary Management of Symptoms

Symptom	Diet
Anorexia (appetite loss)	<ul style="list-style-type: none"> • Stimulate appetite by eating favourite foods. • Eat small amounts of food more often. • Eat more energy-dense foods, such as vegetable oils, nuts, and avocados. • Avoid strong-smelling foods.
Diarrhoea	<ul style="list-style-type: none"> • Drink plenty of fluids (e.g., soups, diluted fruit juices, boiled water, and light herbal teas) to prevent dehydration. • Avoid citrus fruits, which irritate the stomach. • Eat foods rich in soluble fibre (e.g., bananas, peas, and lentils) to help retain fluids. • Eat fermented foods such as yoghurt. • Eat easily digestible foods, such as rice, bread, porridge, potatoes, and crackers. • Eat small amounts of food frequently. • Continue to eat frequently after illness to recover weight and nutrient loss. • Eat soft, mashed fruits and vegetables. • Drink non-fat milk if there is no problem with lactose. • Boil or steam foods if diarrhoea is associated with fat malabsorption. • Avoid or reduce intake of dairy products, caffeine, alcohol, fatty foods, fried foods, and gas-forming foods, such as cabbage, onions, and carbonated soft drinks.
Fever	<ul style="list-style-type: none"> • Drink plenty of fluids to prevent dehydration. • Continue to eat small, frequent meals as tolerated.
Nausea and vomiting	<ul style="list-style-type: none"> • Avoid an empty stomach, which makes nausea worse. • Eat small, frequent meals. • Eat soups, unsweetened porridge, and fruits such as bananas. • Eat slightly salty and dry foods, such as crackers, to calm the stomach. • Avoid spicy and fatty foods. • Avoid caffeine and alcohol. • Drink liquids such as clean boiled water, herbal teas, and lemon juice in hot water. • Avoid lying down immediately after eating—wait at least 20 minutes. • Rest between meals.
Thrush	<ul style="list-style-type: none"> • Eat soft, mashed foods, such as rice, carrots, scrambled eggs, potatoes, bananas, and soup. • Eat cold or room-temperature foods. • Avoid spicy, salty, or sticky foods that may irritate mouth sores. • Avoid sugary foods that help yeast grow. • Drink plenty of fluids, but avoid citrus juices and alcohol. • Use a spoon or cup to eat small amounts of foods. • Tilt your head back when eating to help with swallowing. • Rinse your mouth with boiled warm, salty water after eating to reduce irritation and keep yeast from growing.
Constipation	<ul style="list-style-type: none"> • Eat more high-fibre foods, such as rice, green leafy vegetables, and washed fruits with the peel. • Drink plenty of fluids. • Avoid processed or refined foods. • Avoid cleansing practices, such as using enemas and laxatives.

Symptom	Diet
Bloating or heartburn	<ul style="list-style-type: none">• Eat small, frequent meals.• Avoid gas-forming foods (cabbage, soda).• Drink plenty of fluids.• After eating, wait a while before sleeping to allow food to digest.

Reference 1.7: Food Guidance for HIV Medications

Drug	Nutrition guidance	Possible side effects
Antiretroviral drugs (ARVs)		
Nucleoside and nucleotide reverse transcriptase inhibitors (NRTIs)		
Tenofovir (TDF)	Take with or without food.	Headache, diarrhoea, nausea, vomiting, abdominal pain, rash, headache, flatulence, anorexia, dizziness, insomnia, depression, sweating, renal function impairment
Zidovudine (AZT)	Take with or without food but NOT a high-fat meal. Avoid alcohol.	Anaemia, anorexia, nausea, vomiting, bone marrow suppression, headache, fatigue, constipation, fever, dizziness, dyspnoea, insomnia, muscle pain, rash, lipodystrophy, cardiovascular disease
Stavudine (d4T)	Take with or without food. Avoid alcohol.	Nausea, vomiting, diarrhoea, peripheral neuropathy, chills and fever, anorexia, stomatitis, diarrhoea, anaemia, headaches, rash, pancreatitis, lipodystrophy, cardiovascular disease
Abacavir (ABC)	Take with or without food, but taking with food reduces side effects. Alcohol increases levels of side effects.	Nausea, vomiting, fever, allergic reaction, anorexia, abdominal pain, diarrhoea, anaemia, rash, hypotension, pancreatitis, dyspnoea, weakness and insomnia, cough, headache
Lamivudine (3TC)	Take with or without food.	Nausea, bloating, vomiting, diarrhoea, loss of sleep
Emtricitabine (FTC)	Take with or without food.	Diarrhoea, headache, nausea, rash, skin discoloration, lipodystrophy
Non-nucleoside reverse transcriptase inhibitors (NNRTIs)		
Nevirapine (NVP)	Take with or without food.	Nausea, vomiting, rash, fever, headache, skin reactions, fatigue, stomatitis, abdominal pain, drowsiness, paraesthesia, high hepatotoxicity
Efavirenz (EFV)	Take with or without food but NOT with a high-fat meal. Take just before bedtime. Avoid alcohol.	Elevated blood cholesterol levels, elevated triglycerides, rash, dizziness, anorexia, nausea, vomiting, diarrhoea, dyspepsia, abdominal pain, flatulence
Protease inhibitors (PIs)		
Lopinavir/ Ritonavir (LPV/r)	Take with or without food.	Nausea, vomiting, weakness, diarrhoea, headache, dizziness, abdominal pain, fever, diabetes, anorexia, hepatitis, jaundice
Ritonavir (RTV)	Take with food.	Nausea, vomiting, diarrhoea, hepatitis, jaundice, weakness, anorexia, abdominal pain, fever, diabetes, headache, dizziness, possible increased risk of lipodystrophy
Atazanavir (ATV/r)	Take with food.	Gastrointestinal complaints, renal toxicity (especially when renal function is already reduced), jaundice
Once daily single tablet regimen		
Atripla (Efavirenz 600 mg, Emtricitabine 200 mg, Tenofovir 300 mg [EFV/FTC/TDF])	Take on an empty stomach (1 hour before eating or 2 hours after eating), preferably at bedtime. Avoid alcohol.	See above for Efavirenz, Emtricitabine, and Tenofovir

Reference 1.8: Food Guidance for TB Medications

Drug	Nutrition guidance	Possible side effects
Rifampicin (RIF)	Take on an empty stomach, 1 hour before or 2 hours after a meal. Avoid alcohol.	Itching; flushing; headache; drowsiness; dizziness; vomiting; rash; fever; swelling of the eyes and face, lips, tongue, throat, arms, hands, feet, ankles, or lower legs; blisters; nausea; loss of appetite; dark urine; joint pain or swelling; jaundice (yellowing of the skin and eyes); diarrhoea; stomach cramps; gas; vision changes; painful irregular menstrual periods; muscle weakness; difficulty in concentrating
Pyrazinamide (PZ)	Take on an empty stomach, 1 hour before or 2 hours after a meal. Avoid alcohol.	Joint pains (arthralgia), nausea, vomiting, anorexia, sideroblastic anaemia, skin rash, urticaria, pruritus, dysuria, intestinal nephritis, malaise, porphyria (rarely), fever, loss of appetite, aches or joint pains
Isoniazid (IHZ)	Take on an empty stomach, 1 hour before or 2 hours after a meal. Avoid alcohol.	Tiredness, nausea, loss of appetite, numbness or tingling in the hands or feet
Ethambutol (ABC)	Take with food. Avoid alcohol.	Vision problems, loss of appetite, upset stomach, vomiting, numbness and tingling in the hands or feet, inability to see the colors red and green, skin rash, itching

Reference 1.9: Nutrition Interventions That Can Be Delivered at Health Facility Contact Points

Health Service Contact Point	Nutrition Activities
Antenatal care (ANC) and prevention of mother-to-child transmission of HIV (PMTCT) services	<ul style="list-style-type: none"> • Assess and monitor nutritional status and weight gain of pregnant women every month. • Counsel and educate on maternal nutrition during pregnancy, breastfeeding, child spacing. • Counsel and educate on the core needs for PLHIV and TB clients: adequate diet, adherence to medication, regular clinic visits, and WASH. • Provide iron/folic acid. • Refer for supplementary food if severely or moderately undernourished. • Provide HIV testing and counselling; if HIV positive, initiate ART immediately. • Provide standard ANC according to the national guidelines. • Refer clients to ES/L/FS support if needed.
Maternity care	<ul style="list-style-type: none"> • Initiate breastfeeding within 30 minutes of birth. • Counsel on good breastfeeding practices • Counsel and educate on the core needs for PLHIV and TB clients: adequate diet, adherence to medication, regular clinic visits, and WASH. • Provide iron/folic acid supplements. • Refer for supplementary food if severe or moderately undernourished. • If mother is HIV-positive, ensure that the mother and infant are taking ART as prescribed.
HIV-exposed child and mother-infant pair clinics	<ul style="list-style-type: none"> • Assess and monitor the mother’s nutritional status and child’s growth every month. • Counsel on and support breastfeeding, and counsel on complementary feeding. • Counsel and educate on the core needs for PLHIV and TB clients; adequate diet, Adherence to medication, regular clinic visit and WASH. • Provide iron/folic acid supplementation for the mother for 6 months. • Refer for therapeutic food if severely undernourished. • Refer for supplementary food if moderately undernourished. • Ensure that the mother and infant are taking ART as prescribed. • Provide the infant with immunisation, vitamin A supplementation, and de-worming. • Refer clients to ES/L/FS support if needed.
Medical ward	<ul style="list-style-type: none"> • Assess and monitor the client’s nutritional status while admitted in the ward. • Refer or provide nutrition care and support depending on the client’s nutritional status: normal, moderate, severe, overweight, or obese. • Counsel and educate on the core needs for PLHIV and TB clients: adequate diet, adherence to medication, regular clinic visits, and WASH.
Outpatient departments (OPDs)	<ul style="list-style-type: none"> • Assess and monitor the client’s nutritional status on every visit. • Counsel and educate on the core needs for PLHIV and TB clients: adequate diet, adherence to medication, regular clinic visits, and WASH. • Refer or provide nutrition care and support depending on the client’s nutritional status: normal, moderate, severe, overweight, or obese. • Refer clients to ES/L/FS support if needed.

TB clinics	<ul style="list-style-type: none"> • Assess and monitor the client’s nutritional status on every visit. • Counsel and educate on the core needs for PLHIV and TB clients: adequate diet, adherence to medication, regular clinic visits, and WASH. • Refer or provide nutrition care and support depending on the client’s nutritional status: normal, moderate, severe, overweight, or obese. • Refer clients to ES/L/FS support if needed.
Pre-ART and ART clinics	<ul style="list-style-type: none"> • Assess and monitor the client’s nutritional status on every visit. • Counsel and educate on the core needs for PLHIV and TB clients: adequate diet, adherence to medication, regular clinic visits, and WASH. • Refer or provide nutrition care and support depending on the client’s nutritional status: normal, moderate, severe, overweight, or obese. • Counsel on drug-food interactions and dietary management of symptoms. • Refer clients to ES/L/FS support if needed.
Adolescent clubs/ Teens’ Clubs	<ul style="list-style-type: none"> • Assess and monitor adolescent’s nutritional status on every visit. • Counsel and educate on the core needs for PLHIV and TB clients: adequate diet, adherence to medication, regular clinic visits, and WASH. • Refer or provide nutrition care and support depending on the client’s nutritional status: normal, moderate, severe, overweight, or obese. • Counsel on drug-food interactions and dietary management of symptoms. • Refer clients to ES/L/FS support if needed.

