

NUTRITION AND HIV AND AIDS

Why is good nutrition important?

Good nutrition is essential for all people to live healthy and be productive. Food gives us energy to live, move and survive, to grow and repair damaged cells and tissue, to keep warm and to prevent diseases, and is especially important for children for their mental and physical development.

If PLHIV eat well they will support their immune system so that they can live longer healthily.

What are the main nutritional problems in Tanzania?

In Tanzania many people are malnourished; children are often underweight or stunted.

This is mainly because there is a lack of energy and protein in their diets, but they also lack iodine, iron and vitamin A. The most affected groups are children under five years of age, pregnant or lactating women, and persons with chronic illnesses. The main causes of malnutrition are inadequate food intake and frequent infections and diseases.

What is a balanced meal or diet?

A balanced meal is not a special meal for HIV-positive people. It means that a person eats the right amount of food from different food groups to stay healthy and drinks enough safe water. This is the same for all people infected or not. A balanced meal or diet should contain food from all four nutrients as shown in the table below:

How is good nutrition related to HIV and AIDS?

Good nutrition cannot cure AIDS or prevent HIV infection, but it can help to maintain and strengthen the immune system and thereby the overall well-being of a person infected with HIV. Good nutrition is part of comprehensive care for PLHIV, together with prophylaxis and treatment for opportunistic infections, and Anti-Retroviral Treatment when needed.

What should PLHIV eat?

PLHIV are advised to use the locally available and seasonal foods including indigenous vegetables and fruits. They are affordable and widely available to everybody. Choose foods from each of the following groups to make your meal:

- Cereals, roots and tubers.
- Legumes, nuts and foods of animal origin.
- Vegetables.
- Fruits.
- Fats/oils and sugar.

It is also important to eat regularly (if possible, three meals a day) and to drink lots of water. The water needs to be clean to avoid contamination and diseases from unsafe water.

What are the nutritional/dietary supplements for PLHIV?

There are no special recommendations on micronutrient supplementation for PLHIV. They are the same for people infected or not infected with HIV. It is important to remember that food supplements do not replace other foods, but can be used to complement a diet if certain vitamins or minerals are lacking.

There are numerous nutritional supplements on the market today, but one should be careful in selecting them. If the diet is made up of different kinds of food, then dietary supplements are not needed.

What food should a PLHIV eat during the different HIV related health problems?

People living with HIV might experience complications like fever, loss of appetite, thrush, nausea, vomiting, diarrhea and cough. The following are some of the complications and their nutritional management.

1. Diarrhea

Diarrhea causes dehydration, loss of nutrients, reduced appetite and malnutrition if it is persistent. People with diarrhea are advised to:

- Drink lots of clean and safe water and other fluids such as fruit juice.
- Eat small meals more frequently that are soft and mashed, or liquidized foods like mashed vegetables, i.e., potatoes, pumpkin, carrots and soups.
- Peel and cook vegetables so they are better tolerated.
- Whenever possible, prepare fresh food by using fresh ingredients.
- Avoid foods and beverages that cause gas, for example, cabbage, onions, green pepper and carbonated drinks as well as caffeine drinks and spices.

2. Poor appetite and taste changes

Lack of appetite can be caused by infection, depression, anxiety, tiredness or taste changes. Below are some ways of improving appetite and taste for food:

- Do not stop eating, but try and get your appetite back.
- Choose and prepare foods that look and smell good to you.
- Eat varieties of small meals more frequently.
- Take fluids in-between meals, not with meals. Lemon juice can help to stimulate appetite.
- Go for short walks and get fresh air, as this also stimulates appetite.

3. Sores in mouth and throat, and thrush

Sores and thrush (fungal infection) in the mouth and throat can make eating uncomfortable and painful. Below are some ways to help cope with this situation:

- Eat soft, mashed or moist foods such as potatoes, pumpkins, avocado, pawpaw or bananas, soups, non-sour juices and sour milk.
- Limit use of sugary foods and drinks because sugar facilitates the growth of thrush, or rinse mouth immediately after taking sugary foods and drinks.
- Avoid irritating foods such as spicy and salty foods or sour fruits.
- Avoid cold and very hot foods and drinks.
- Avoid rough, coarse, hard or dry foods.
- Avoid alcohol and tobacco.
- Rinse your mouth several times a day with warm salty water.

4. Nausea and vomiting

Nausea and vomiting reduces appetite and can be brought about by food or infections or can be a side-effect of medication. These conditions can be managed by doing the following:

- Eat small meals frequently and chew properly.
- Drink lots of fluids after eating.
- Try eating sour or salty foods or drinking lemon juice or ginger to reduce nausea.
- The smell of fresh orange or lemon peel can help.
- Avoid strong flavored or spiced foods, fatty and oily foods, and caffeine drinks.

5. Fever

Fever enhances body metabolism which, in turn, leads to increased nutrient requirements. When you have fever, do the following:

- Drink plenty of fluids and eat energy-rich foods such as porridge.

6. Heartburn and peptic ulcers

Heartburn and peptic ulcers may bring eating and digestion problems to PLHIV. These conditions can be managed by doing the following:

- Eat slowly and chew properly to facilitate digestion.
- Avoid high-acidic juices and soups, such as orange or lemon fruit juices and tomato soup as well as gas-forming foods.
- Avoid sleeping immediately after eating to allow food to be digested.

7. Weight loss

Weight loss in PLHIV is caused by increased demand for nutrients, not eating enough food, or poor absorption of nutrients. Below are some suggestions for preventing and managing weight loss:

- Increase the amount and variety of food intake and frequency of eating.
- Increase the energy density and protein content of your meal by adding margarine, sugar, honey, nuts, milk, oily seeds or eggs.
- Use fermented food such as togwa and sour milk to improve absorption of nutrients.
- Eat small snacks between meals like nuts, fruits, roasted bananas, cassava or potatoes.
- Exercise regularly.

8. Anaemia

Anaemia is most often caused by deficiency of iron in the diets, malaria infection and worm infestation. Pregnancy highly increases requirements for iron. It has been shown that for an HIV infected person who is anaemic, the progression to AIDS is faster. Anaemia can be managed by:

- Eating foods rich in iron, such as fish, meat and liver.

- Eating foods of plant origin that are rich in iron, such as amaranth, spinach, cassava leaves, potato leaves, pumpkin leaves, beans and peas.
- Eating fruits rich in vitamin C, such as guava, oranges, tangerines, baobab fruit, tamarind and passion fruits.
- Avoiding taking drinks during meals because they may interfere with iron absorption, but they may be taken an hour before meals.

9. Constipation

Constipation can be caused by a diet low in fluids and fiber, or a lack of physical activities. To manage the problem:

- Eat high-fiber foods, such as fresh fruits, vegetables, unrefined cereals and legumes.
- Drink plenty of fluids and exercise frequently.

10. Tuberculosis

Tuberculosis (TB) commonly affects lungs and other parts of the body, such as the kidneys, spine and digestive tract. A person with TB may experience complications similar to those of HIV and AIDS. These include fever, loss of weight, diarrhea, loss of appetite, nausea and vomiting. Such complications can be managed in the same way as already discussed earlier in this chapter.

11. Cold, flu and cough

To deal with cold, flu and cough:

- Increase intake of fruits and vegetables rich in vitamin C, such as tamarind(ukwaju), mabungo, baobab juice, citrus fruits, plums, mangoes, java plums
- (zambarau), guavas, tomatoes and potatoes.
- Drink plenty of fluids.
- Add ginger, cinnamon, lemon, garlic and onions to drinks and food. They have a soothing effect.

12. Skin conditions

Pathological conditions of skin including sores, rashes and dry patches are often caused by deficiency of various vitamins. One can reduce these problems by:

- Eating foods rich in vitamin A, C and foliate, such as liver, dairy products, kidney, eggs, fish, dark green vegetables, pumpkins, red palm oil, carrots, yellow sweet potatoes and fruits.
- Eating foods rich in B-vitamins, such as beans, cabbage, sweet potatoes, maize, avocado, fish and meat.

Which food can increase the CD4 count?

Foods that are rich in vitamin A, such as yellow-orange foods play an important role in the improvement of immunity. These include fruits like pawpaw and vegetables like carrots, foods of animal origin, and green leafy vegetables.

What kind of foods can be given to PLHIV who have to stay in bed and cannot get up?

It is important to provide nutritious foods and water to PLHIV who are confined to their bed. They need to:

- Eat frequent, small, soft meals including fruits and vegetables.
- Eat high energy food, like rice, millet, sorghum and cassava.

It is very important to give PLHIV the kind of food they like. In addition it is important to seek treatment for opportunistic infections, and to be assisted by other family members physically, emotionally, materially (e.g., goods support), mentally and spiritually.

Can PLHIV drink alcohol?

Alcohol interferes with food intake, digestion, absorption, transportation and storage of food. It removes water from the body and should always be consumed in small amounts.

It is advised that PLHIV avoid excessive alcohol intake, and drink in modest quantities.

Is sugar in food good for PLHIV?

Sugar and sugary foods, oil and fats are a good source of energy, even in small amounts.

They should be consumed in moderation and together with other foods, as they do not have other important nutrients.

Is it all right to use food from cans and bottles?

It is also okay to eat canned food, but, compared to fresh vegetables and fresh fruits, canned food is much more expensive and not always available. Fresh food is always preferable.

Which vegetables are good for PLHIV?

Most importantly, PLHIV should consume various types of vegetables in every meal; however yellow-orange and dark green vegetables are more nutritious.

- Rich in vitamin A: spinach, pumpkin, cassava leaves, green beans, green pepper, papaya, mango.
- Rich in vitamin C: tomato, cabbage, pineapple, baobab fruit, lemon, mangos, oranges.

The best way to eat is to use fresh fruits and vegetables, they contain the most vitamins and minerals and to not boil the vegetables too long, they can still be a little hard and will even taste better.

Which types of meat are good for PLHIV?

There are two types of meat: red (beef, pork, mutton, goat, wild animal) and white (chicken, fish). Any type of meat has important nutrients, however, white meat can be better digested and contains less fat. But PLHIV can eat any meat they like best.

Which food should HIV-positive children eat?

HIV-positive children are at a higher risk of illness and death due to malnutrition because either immune systems are weaker. Often malnutrition and related problems are not noticed by parents or relatives. Yet special attention and medical treatment has to be given to children who are HIV-positive and who have:

- inadequate food intake due to lack of appetite or eating too little, stomach pain, feeding difficulties – poor sucking, swallowing or breathing reflex, or nausea, vomiting, diarrhea.

Children's nutritional requirements differ according to age:

The best for overall child health and survival is exclusive breastfeeding for the first six months.

How many times should a PLHIV eat food?

Due to increased energy requirements, PLHIV are advised to take small meals and eat frequently. Three main meals a day are best for everybody with small snacks in-between the meals.

What is a healthy lifestyle for PLHIV?

- Eat a variety of foods every day and drink plenty of water or juices.
- Eat plenty of fruits and vegetables.
- Eat small meals frequently.
- Be physically active, walk, get fresh air and try and avoid alcohol and smoking.

What is a recommended way to prepare food for PLHIV?

PL HIV are advised to eat food which is locally available and which is nutritious, like and digest and according to what each person likes to eat.

How does HIV and AIDS affect household food security?

AIDS-related complications (illness, death) can affect a household in several ways:

- Sick people may be too weak to work: PLHIV may fall sick more frequently, needing more care; the caregivers family members or relatives, spent more time caring for him/her and less time working.

- Households' assets, savings and income may be used for paying for hospital visits, treatment and funeral costs. All these factors can lead to less food production and less income and earnings to buy food for the household.

What can be done to maintain household food security?

To maintain food security the household community and organizations can do the following:

- Distribute food properly to household members.
- Improve food handling and preparation so as to minimize nutrient loss.
- Maintain food safety and hygiene.
- Use food and money economically and buy locally produced foods.
- Get involved in food production and income-generating activities such as gardening and keeping small livestock and poultry.
- As a temporary measure, in times of crisis, seek assistance from government or other institutions, including Non-Governmental Organizations (NGOs), Faith Based Organization (FBOs) and Community Based Organizations (CBOs).

Why do ARVs go together with food?

ARVs can interact with food and nutrition in many ways, resulting in both positive and negative outcomes. ARVs work best when a person eats regularly and healthily. This practice will enable effective management of the interactions to maintain good nutritional status and improve drug efficacy, safety, tolerance and adherence.

Would proper nutrition make PLHIV better and delay the need for ARVs?

HIV-positive people with no symptoms do not need a special HIV diet. Proper nutrition can help strengthen the immune system, thereby reducing the incidence of infections, preventing loss of weight and lean body mass, and delaying disease progression.

Who is responsible for buying food for HIV-infected adults?

Food is often cited by people infected with and affected by HIV as their most important and urgent need. Family members and the community around the infected individuals have the responsibility of caring for and supporting those infected, including providing nutritious foods to meet their requirements. Food aid to PLHIV from the government and

NGOs can only be a temporary measure, one that should lead to more sustainable food security plans.

What can the CMAC do to help our community to eat healthy and have enough food?

Many people in the community are poor and cannot afford to buy healthy food, or food at all. The situation is often worse for PLHIV. These households require food assistance to prevent malnutrition of PLHIV and other household members. First of all, these households need to be supported – neighbors and community members can help immediately. Then the CMAC can approach community organizations or other organizations or partners, who are active in the respective district to take these households into their support programs.

CMAC can ensure regular support of poor households by including issues of food support in their planning and then by supporting local community groups. This should be linked with longer-term food security initiatives, such as income generation.

PLHIV in need of care and support should be identified through village/hamlet multisectoral AIDS Committees. There is also the need for the committees to have information of who (groups, organizations/institutions) is providing what types of services and where, in order to enable PLHIV access to the various services available, including food support.