Nutrition and HIV and AIDS

The HIV virus attacks the immune system. In the early stages of infection a person shows no visible signs of illness but later many of the signs of AIDS will become apparent, including weight loss, fever, diarrhoea and opportunistic infections (such as sore throat and tuberculosis).

Good nutritional status is very important from the time a person is infected with HIV.

Nutrition education at this early stage gives the person a chance to build up healthy eating habits and to take action to improve food security in the home, particularly as regards the cultivation, storage and cooking of food.

Good nutrition is also vital to help maintain the health and quality of life of the person suffering from AIDS. Infection with HIV damages the immune system, which leads to other infections such as fever and diarrhoea. These infections can lower food intake because they both reduce appetite and interfere with the body's ability to absorb food. As a result, the person becomes malnourished, loses weight and is weakened.

One of the possible signs of the onset of clinical AIDS is a weight loss of about 6-7 kg for an average adult. When a person is already underweight, a further weight loss can have serious effects. A healthy and balanced diet, early treatment of infection and proper nutritional recovery after infection can reduce this weight loss and reduce the impact of future infection.

A person may be receiving treatment for the opportunistic infections and also perhaps combination therapy for HIV; these treatments and medicines may influence eating and nutrition. Good nutrition will reinforce the effect of the drugs taken.

When nutritional needs are not met, recovery from an illness will take longer.

During this period the family will have the burden of caring for the sick person, paying for health care and absorbing the loss of earnings while the ill person is unable to work. In addition, good nutrition can help to extend the period when the person with HIV and AIDS is well and working.

Food can neither cure AIDS nor treat HIV, but it can improve fitness and quality of life for PLHA. Food is important for everyone. Familiar foods make us feel safe and secure. Food reminds us of our childhood, home country and culture. We celebrate events by eating special foods in the company of people who are important to us. When we eat well we feel well.

Food provides the energy and nutrients that our bodies need to:

- stay alive, move and work;
- build new cells and tissues for growth, maintenance and repair;
- resist and fight infections.

When the body does not get enough food, it becomes weak and cannot develop or function properly.

Healthy and balanced nutrition means eating the right type of foods in the right quantities to keep healthy, keep fit and enjoy

Eating an adequate and balanced diet can help maintain body weight and muscle mass and improve immune function. To understand what constitutes healthy food, it is important to learn about nutrient composition. Food can be divided into four groups, according to its dominant nutrient content: carbohydrates, fats, proteins, and vitamins and minerals.

Foods rich in carbohydrates
Grains (e.g., corn, wheat, millet, sorghum, rice, barley), potatoes, sweet potatoes, cassava, yam, and legumes (beans and peas) are rich in carbohydrates (starches and sugars). Carbohydrate-rich foods provide the body with energy, and they are usually inexpensive and easy to digest.

Foods rich in fats
Oils, butter, margarine, fatty meats and poultry, fatty fishes, peanut butter, nuts, and seeds are rich in fats. Like carbohydrates, fats provide the body with energy, but they can be harder to digest than carbohydrates.

Foods rich in proteins
Meat, chicken, liver, fish, ants, caterpillars, dairy products, eggs, beans (soy and others), lentils, nuts, peanuts, peas, and seeds are all rich in proteins. Proteins, which are made up of amino acids, help build and repair the body and play an important role in immune function. Consuming animal proteins provides the range of amino acids the human body needs; individual vegetable proteins do not. Thus, vegetable sources of protein should be varied or combined with other sources. An example of a good combination is legumes and grains.

Foods rich in vitamins and minerals
Green leafy vegetables (including cabbage, green beans and peas, tomatoes, pumpkin and other squash, carrots and avocados) and many fruits (pear, mango, orange, guava, banana, mulberry, baobab, peach, pineapple, apple, paw-paw, plum, passion fruit, and lemon) provide the body with vitamins and minerals. There are at least 17 vitamins and 14 minerals, each with a special use in the body; the body cannot work

properly if any of these are missing. Each vegetable or fruit is rich only in a few vitamins or minerals, so it is important to eat a variety (varied in color, shape, and botanical function—leaves, fruits, and roots). Generally, dark green and orange or red vegetables and fruits are best.

Balanced Diet

Good nutrition requires a balance of proteins, fats, carbohydrates, and vitamins and minerals. No single food contains every nutrient. A healthy meal is made up of at least one food item from each of the four food groups.

Food Safety

It is important to avoid ingesting food-borne bacteria and parasites, especially because PLHA are 20 times more likely to contract illnesses from these pathogens than are people without HIV.

Comprehensive care programs should encourage food safety and, when possible, offer guidelines for action.

Food and Diarrhea in People Living with HIV and AIDS

PLHA, especially those who are in advanced stages of HIV and AIDS, often experience diarrhea. The main causes are infection (viral or bacterial), poor nutrition, and malabsorption (improper absorption of food in the digestive tract). Proper nutrition can play an important role in both minimizing the causes of diarrhea and treating it. Selecting foods carefully and following the foregoing guidelines for food handling can reduce the risk of infection-related and malabsorption-related diarrhea significantly.

If diarrhea does occur, practical steps can be taken to prevent dehydration (the biggest danger of severe diarrhea) and/or malnutrition (the biggest danger of long lasting diarrhea).

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