

NUTRITION GUIDELINES

FOR CARE AND SUPPORT
OF PEOPLE LIVING WITH
HIV/AIDS



For more copies and information contact:

**National Food and Nutrition Commission (NFNC)
P.O. Box 32669, Lusaka, Zambia
e-mail: nfnc@zamtel.zm
tel: +260-1-221426**

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FOREWORD

The Zambian population has not been spared from the effects of the HIV and AIDS pandemic. A lot of efforts have been made by the Government with its cooperating partners, local and international organisations and other groups to come up with a number of interventions to reduce the spread of HIV, and indeed to lessen its burden on the household livelihoods and national economy.

It is a known fact that good nutrition plays an important role in keeping the health of individuals. Individuals with poor nutrition often experience fast progression of HIV infection to AIDS. Good nutrition plays a greater role in tissue repair and improving the immune system. Because of this, there is an increasing demand for including nutrition concerns in HIV and AIDS prevention and management to improve survival rates of those affected.

As a result, a number of recommendations on nutrition in the HIV and AIDS control, have been recorded by a number of individuals, researchers, and agencies such as the Food and Nutrition Technical Assistance (FANTA), SARA/AED, and the UN agencies, including WHO, FAO, UNAIDS, just to name a few. Globally, one of the recommendations called for individual countries to develop or adapt guidelines on the nutritional care and support for People Living with HIV and AIDS (PLWHA), to which Zambia committed herself. Knowing how important the nutritional care and support for PLWHA was, the Government initiated the development of these guidelines.

A team, led by the National Food and Nutrition Commission (NFNC), took up the challenge and came up with these guidelines that have been adopted to the Zambian situation. The guidelines will provide first hand information to individuals and organizations that give nutritional care and support to PLWHA. It is my sincere hope that these guidelines will be put into practice by the service providers at all levels, PLWHA and their families, in order for the country to get better health outcomes for all those directly or indirectly affected with HIV and AIDS. Furthermore, once the effects of HIV and AIDS are reduced, the country will be able to devote more resources to economic development.



**Honourable Dr. Brian Chituwo, MP.
Minister of Health.
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ACRONYMS

AED	Academy for Educational Development
AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal Clinic
ART	Antiretroviral Therapy
ARV	Antiretroviral
AZT	Azidothymidine
BCC	Behaviour Change Communication
CBO	Community Based Organisation
DRI	Dietary Recommended Intake
FANTA	Food and Nutrition Technical Assistance Project
FBO	Faith Based organization
HEPS	High Energy Protein Supplements
HIV	Human Immunodeficiency Virus
IEC	Information, Education and Communication
IU	International units
MOH	Ministry of Health

ACRONYMS

MTCT	Mother-To-Child Transmission
MTP	Mid Term plan
NAC	National AIDS Council
NAP	National AIDS Policy
NFNC	National Food and Nutrition Commission
NGO	Non-Governmental Organization
ORS	Oral Rehydration Solution
PLWHA	People living with HIV and AIDS
PMTCT	Prevention of mother-to-child-transmission
SARA	Strengthening Applied Research in Africa
TB	Tuberculosis
UNICEF	United Nations Children’s Funds
VCT	Voluntary Counselling and Testing
WHO	World Health Organization
ZDV	Zidovudine
ZIHP-Serve	Zambia Integrated Health Program

DEFINITIONS

Advocacy:	Speaking or writing in support of someone or something
AIDS:	A group of illnesses caused by the human immunodeficiency virus that weakens the immune system.
Antioxidant:	Something added to a product to prevent or delay its deterioration by oxygen or air.
Anti-retrovirals:	Drugs used for HIV prophylaxis or treatment; however they are not a cure for HIV disease.
Balanced Diet:	Consumption of a variety of foods which provide all nutrients in the correct proportions.
Beri-beri:	A condition caused by vitamin B1 deficiency that affects the nerves, causes heart disease as well as body swelling (oedema).
CD4:	CD4 cells are white blood cells which organize the immune systems' response to some micro organisms including bacteria, fungal infection and viruses. The CD4 count is the measurement of the number of CD4 cells, in a cubic millimetre of blood.
Chronic infection:	An infection that is long standing.
Diet:	The customary amount and kind of food and drink taken by a person from day to day
Digestion:	The process of breaking down food and releasing nutrients in the body.
Enzymes:	Biological catalysts that enhance or inhibit chemical reactions.

DEFINITIONS

Exclusive breast feeding:	When an infant receives only breast milk and no other liquids or solids, not even water, unless medically indicated.
Immune-compromised:	Weakened body defence system leading to easy attack by viruses and bacteria.
Indigenous food:	Available foods native to the country/ community.
Lean Body Mass:	Weight of the body without the fat.
Legumes:	Plant sources of protein e.g beans, peas, groundnuts, cowpeas.
Malabsorption:	Failure of the digestive tract to absorb nutrients into the body.
Malnutrition:	A condition caused by inadequate or excess intake of nutrients. In these guidelines it refers to undernutrition (inadequate intake).
Marinate:	Steeping or soaking food, e.g. meat, in a mixture of vinegar, oil and spices before cooking.
Meal:	The food served or eaten at a given time during the day e.g. Breakfast, lunch, supper.
Metabolic disturbances:	Disruptions in the process of breaking down nutrients and elimination of end products of food.
Metabolism:	The continuous chemical processes taking place in living cells including the release of energy for the body.

DEFINITIONS

Mixed feeding:	Feeding both breastmilk and other foods or liquids.
Morbidity:	Sickness in an individual or community.
Mortality:	Deaths in the community.
Nutrient:	A substance or component of food. Food contains carbohydrates, different nutrients that include water, proteins (amino acids), fats (lipids), vitamins and minerals.
Nutrition:	The processes involved in taking in nutrients and assimilating and utilizing them.
Nutritional status:	A measurement of the extent to which the individual's physiological needs for nutrients are being met.
Nutritious diet:	The kind of food or drink that has a mixture of a variety of foods to provide all essential nutrients for the body.
Opportunistic infections:	Denotes an infection by a micro-organism which does not ordinarily cause disease but becomes infectious under certain conditions, such as when the immune system is impaired.
Pellagra:	A syndrome due to vitamin B3 (Niacin) deficiency in the diet marked by cracking of the skin, diarrhoea, mental disturbances and eventually death.
Replacement feeding:	Feeding infants who are not getting breast milk with a diet that provides the nutrients infants need until the age they can be fully fed on family foods.

DEFINITIONS

- Snack:** A quantity of food that is readily available and can be eaten without much preparation, and is usually taken between main meals.
- Viral load:** The amount of HIV in the blood of an HIV-positive person. The higher the viral load the higher the risk of disease progression to AIDS.

Chapter 1

INTRODUCTION

1.1 Background HIV and AIDS Statistics

Zambia is hard hit by HIV and AIDS. Based on the 2001-2002 population based survey, the national HIV prevalence was estimated at 16%. The prevalence rate is higher in urban areas than in rural areas, 23% and 11% respectively. Women (18%) have a higher prevalence than men (13 %). About 25% of pregnant women are HIV positive and approximately 39% of babies born to HIV positive mothers are infected with the virus. The number of orphans from HIV/AIDS is currently estimated at 630,000 (0-17 years).

The effects of HIV and AIDS have been drastic at national, community, family and individual levels. HIV and AIDS have contributed to poverty and have reduced the numbers of the productive members of the society that is the 15-45 age groups. HIV and AIDS have had a negative impact on some health indicators: the life expectancy at birth has dropped from 52 years in the 1980s, to 47 years in 1990s and 50 years in 2000. (CSO, 2003). HIV and AIDS have also increased the disease burden and increased pressure on the health care systems.

Nutritional Status

Malnutrition levels have continued to be high in recent years in Zambia, giving a challenge to the health care providers and policy makers. Data from the Zambia Demographic Health Survey (ZDHS) of 2001/02, show that 47% of Zambian children aged 0-59 months are stunted, 5 % are wasted and 28% are underweight. Malnutrition rates amongst women of childbearing age are also quite high with low body mass index rate of 13% (BMI lower than 18.5) and low birth weights of 11%.

Although there has been a reduction in vitamin A and iron deficiencies, there are still high numbers affected by these micronutrient deficiencies.

According to the National Vitamin A impact study, vitamin A deficiency, rates among children below under-five years are at 54% (2003) as compared to 65.7% (1999). In the same period, anaemia rates were found to be at 50% as compared to 65% in 1997 in the same age group.

There has been an increase in food production in the recent years. However, there are some geographical spots in the country that are still food insecure. These include those affected by floods and droughts. Eighty percent of the population is below the poverty datum line, and therefore, most of it is at risk of food insecurity.

1.2 Government's Response to the HIV Epidemic

The Zambian Government's commitment in the fight against HIV/AIDS is noted through the following important events:

- 1984: First confirmed case of HIV and AIDS in Zambia (retrospective diagnosis).
- 1986: National Aids Prevention and Control Programme (NAPCP) set up.
- 1987: Emergency short-term plan developed to ensure safe blood and blood product supplies.
- 1988-1992: First MTP which prioritised eight operational areas: TB and leprosy, IEC, counselling, lab support, epidemiology and research, STD and clinical care (including Nutritional care), programme management and home-based care.
- 1994-1998: Second MTP that involved a multi-sectoral approach in design and incorporated a mechanism for inter-co-ordination and collaboration.
- 1999-2003: Creation of a semi autonomous, multi-sectoral National AIDS Council (NAC).
- 2000-2002: PMTCT secretariat set up.
- 2000-2002: Ndola Demonstration Project to integrate infant feeding counselling in the context of HIV/AIDS.

- 2003-2004: Scaling up ARV treatment.
- Ongoing: Capacity building and scaling up of interventions in the area of HIV/AIDS.

1.3 Policy and Institutional Framework

Zambia has a draft national policy on HIV/AIDS. Currently there is a strategic framework that outlines the interventions on prevention, treatment and care. The policy places emphasis on multi-sectoral responses involving Government ministries, the private sector, religious groups and civil society. In line with this strategic framework, a national plan for care and treatment of PLWHA has been developed.

The National HIV/AIDS Council Strategic Framework addresses eight specific objectives, one of which relates to nutrition as part of the care and treatment of PLWHA. It states: “To improve the quality of life of PLWHA by encouraging positive living, *good nutrition*, prevention of opportunistic infections and avoiding high risk behaviour”. Lately, the scaling up of ARVs has also become a major part of the strategy.

1.4 Rationale for the guidelines

Nutrition is considered as a very important part in the treatment and care of HIV/AIDS. To fulfil the mandate of NAC, nutrition guidelines are needed to give information on the nutritional care and support for the people living with HIV/AIDS.

1.5 Target for the guidelines

The guidelines give useful and practical information for those that give care and support to PLWHA. Some of these are the health care providers, nutritionists, social welfare development workers, interest groups, FBOs, CBOs, politicians, NGOs, extension workers, teachers and the affected families. They are well intended for the practical applications, policy formulation and implementation, and review of the impact on overall health outcomes, especially those related to the HIV and AIDS progression and case management.

1.6 Layout of the guidelines

The guidelines are given in 11 chapters. Chapters 2 and 3, give information on basic nutrition for an active and healthy life, and technical information that link nutrition and HIV. Chapters 4 to 9 give advice on the diet, treatment, herbal remedies, positive living and other types of care. Nutritional counselling and education, monitoring and evaluation for the implementation of the guidelines are covered in Chapters 10 and 11.

1.7 How to Use the guidelines

The guidelines give a general approach to different types of conditions in Zambia. Each service provider will need to adapt the recommendations according to given situations or to the needs of the individual client to whom the services are being offered. The guidelines can be used to:

- Create messages that promote good nutrition for all, especially people living with HIV/AIDS.
- Develop more detailed and specific operational guidelines and materials to communicate to caregivers and PLWHA.
- provide nutritional and dietary counselling to people living with or affected by HIV/AIDS.
- Design monitoring and evaluation systems for the nutritional parts of HIV/AIDS programmes and interventions.

These guidelines can be used together with the following reference materials:

Food for people living with HIV/AIDS, second edition, Network of Zambian people living with HIV/AIDS, 2002.

Linkages 2003. Infant feeding options in the context of HIV/AIDS, LINKAGES, Lusaka, Zambia.

LIVING WELL WITH HIV/AIDS: A manual on nutrition care and support for people living with HIV/AIDS, WHO/FAO, 2002.