



Republic of Kenya
Ministry of Health

NUTRITION AND HIV/AIDS: A TOOL KIT FOR SERVICE PROVIDERS IN COMPREHENSIVE CARE CENTRES

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Preface

The links between nutrition and infection are well known. Good nutrition is essential for achieving and preserving health while helping the body to protect itself from infections. Good nutrition also helps to promote a sense of well-being and to strengthen the resolve of the sick to get better. Consumption of an adequate well-balanced diet is the best means to meet the increased energy needs of people infected by HIV, although in cases of specific deficiencies, supplements may be needed. This Tool Kit includes the materials and tools that are needed by a nutritionist to provide support to PLHIV attending the Comprehensive Care Centres (CCC) in Kenya.

After conducting an assessment of what service providers need to provide quality nutritional services in the CCC in Kenya, we in MOH/NASCOP decided to provide a Tool Kit for service providers and an accompanying manual for trainers. These materials and tools are intended to be practical and useful for service providers. The tools will help them carry out nutritional assessments of the client, prepare a nutritional care plan with the patient, carry out counselling and education, prepare a meal-drug plan, choose and collect data in routine work, and analyse and present the data.

The Tool Kit was developed following an extensive review of existing guides from both within and outside the country. We sought technical assistance from a number of institutions and individuals and conducted three sets of trainings for CCC service providers to pre-test these products. We hope we have responded to the needs of service providers with up-to-date, technically sound information and materials. Users are encouraged to further improve these tools by adapting them to their local circumstances as needed. Any comments on how to improve these materials can be sent to **“The Nutrition Manager, NASCOP Office, Nairobi”**.

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Position Statement

It is the position of the National AIDS and STD Control Program (NASCOP) that efforts to optimize nutritional status, including medical nutrition therapy, assurance of food and nutrition security, and nutrition education, are essential components of the total health care available to people with human immunodeficiency virus infection throughout the continuum of care.

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Introduction

Purpose of the Tool Kit

The Tool Kit contains materials that service providers can refer to or use to implement the national nutritional guidelines for people with HIV/AIDS (PLHIV) attending the comprehensive care centres (CCC) in Kenya. These tools can also be used as part of training programs. Some of the materials included are:

- Summary of the Kenya Nutritional Guidelines for PLHIV, including the eight critical nutrition practices for PLHIV.
- Parameters of practice for nutrition in HIV/AIDS care and treatment in Kenya.
- Guidelines on conducting nutritional and dietary assessments of clients, including recommended indicators and growth references.
- Guidelines on conducting nutritional education and counselling on specific topics, e.g. increasing energy intake, the food and nutritional implications of ARVs.
- Examples of indicators to collect in a CCC; data collection guides; and data management guides.
- Steps for preparing drug-meal plans.
- Guidance on how to provide “special food supplements by prescription”.
- Guidance on how to manage severely malnourished HIV+ adult in-patients.
- Nutritional management of diabetes in PLHIV.

Uses of the Tool Kit

The materials can be used as reference materials on nutrition in the treatment and care of PLHIV and can be used by trainees during training programs. Specifically, they complement the trainer’s manual for the five-day HIV and nutrition training for CCC service providers. Some of the materials (e.g. the drug-food meal plan card, the patient evaluation form, and the patient monitoring chart) can be photocopied and used to support day-to-day care of clients.

Content of the Five-day Training on Nutritional Care and Support for PLHIV at CCCs

It is recommended that all persons providing nutritional care and support for PLHIV in Kenya receive a MOH approved training on nutrition and HIV/AIDS: at a minimum the five-day course on nutrition and HIV/AIDS.

Purpose of the Course

The purpose of the course is to train participants in nutrition interventions they can use to support clients discharged through or referred to comprehensive care centres.

Learning Objectives

By the end of this course the participants are able to:

1. Identify the role of nutrition in comprehensive care of PLHIV
2. Be familiar with the Kenya National Guidelines on Nutrition and HIV/AIDS
3. Carry out nutrition assessments
4. Formulate a nutritional care plan based on nutrition assessment results
5. Conduct nutrition counselling
6. Prepare a drug-meal plan
7. Identify when the patient should be referred for specialized nutritional care
8. Develop and implement a follow-up plan
9. Be familiar with the “food-by-prescription” and how to monitor its impact
10. Collect data from patient records and write reports

Course Outline

1. Definition of comprehensive services provided in the CCC

- Definition of terms
- Services provided in a comprehensive care centre
- Set-up and client flow in a comprehensive care centre
- The roles of nutrition in care and treatment of PLHIV

2. Overview of the Kenya National Guidelines on Nutrition and HIV AIDS

Important Content of the Kenyan Guidelines on Nutrition and HIV/AIDS

- Relation between Nutrition and HIV/AIDS
- Nutritional requirements/needs of PLHIVs
- Critical nutrition practices for PLHIV
- Nutritional care of persons taking medication, supplements and herbal remedies

3. Steps in Caring for Patients in a CCC

a) Nutrition assessment

- Nutrition assessments, e.g. anthropometry (including effects of ART), biochemical and clinical assessments and dietary intake assessments done in a CCC

- References for growth and nutritional status of adults and children
- Clinical, psychosocial and economic factors in nutritional status

b) Preparation of a nutritional care plan

- Nutritional assessment interpretation
- Underlying problem identification
- Identification of plausible intervention options

c) Nutrition and HIV/AIDS counselling/education

- Principles, techniques and application of counselling
- Nutrition messages for behavioural change for PLHIV
- Dietary strategies for symptom management
- Preparation of demonstration models for CCC counselling and education

c) Drug-Meal plan preparation

- Characteristics and purpose of drug-meal plans,
- How to prepare a drug-meal plan and support its use

d) Follow-up plan

- Setting nutritional goals and review plans based on Risk level
- Nutritional care plan adherence (development and review)
- Referral and linkages to community/group support

4. Referral for specialized nutritional care

- Nutritional assessment of critically ill patients on ART
- Management of patients with severe malnutrition
- Management of feeding (mode of feeding and appropriate diets)
- Body cell mass enhancement approaches

5. Food-by-prescription or another food intervention program

- What qualifies for food-by-prescription
- Admission and discharge criteria
- Data collection, monitoring and reporting

6. Data management and reporting

- Ethical considerations and observations (including data storage)
- Data collection/assessment forms used in a CCC
- Data analysis, interpretation and presentation
- Data storage and reporting
- Supervision of nutrition activities at a CCC

7. Visit to a CCC

- Activities to do in a field visit
- Reporting field visit to a CCC

Definition of Terms

AIDS	A combination of illnesses caused by the human immunodeficiency virus (HIV) that weaken the immune system.
Advocacy	Activities in support of a particular issue or cause.
Anaemia	Low haemoglobin levels in the blood.
Antenatal	Period during pregnancy before delivery.
Anthropometry	Measurement of changes in body dimensions.
Antioxidant	Compounds that scavenge free radicals in the body.
Anti-retro Viral therapy	Treatment of HIV-infected persons using drugs that specifically slow replication of the HIV virus.
Asymptomatic	Characterized by the absence of symptoms of illness.
Bacteria	Disease-causing micro-organisms that are larger than viruses and that are treatable with antibiotics.
Balanced diet	Meals and snacks containing all nutrients in adequate proportions to ensure nourishment of the body.
Bioavailability	The degree and rate at which a substance is absorbed into the body at the site of physiological activity (e.g. gut).
Body Composition	Proportion of different components of the body (Blood, muscle, fat, bone, and others).
CD4 cells	A subset of specialized lymphocytes that fight infections; the cells are used as a marker of HIV progression.
Cholesterol	A fat-like substance that is produced in the liver, and also found in animal-source foods. It circulates in blood as low-density lipoproteins (LDL) and high-density lipoproteins (HDL).
Diet	Amount and kind of food and drink a person consumes.
Disease	An illness.
Food	Any solid or liquid that is edible and contains nutrients.
Entomophagy	The traditional practice of consuming edible insects such as termites and locusts.
Geophagy	The practice of craving and chewing non-food material (such as soil and soft rock).
HAART	Stands for highly active anti-retroviral therapy. Consists of a combination of multiple anti-retroviral drugs that inhibit HIV multiplication in the body, and improve health status, and delay development of AIDS.
Haematopoiesis	Process of blood formation.
Health	A state of physical and mental well-being.
Helminths	Intestinal worms.
Home-based care	Care given in the home by non-health personnel to people who are sick or recuperating from sickness.
HIV	The human immunodeficiency virus that causes AIDS.
Hypogonadism	Delayed sexual maturity.
Hypothyroidism	Reduced functional activity of the thyroid gland.
Immuno-suppression	A weakened immune (body defense system), creating vulnerability to infections and other disorders.

Definitions

Indigenous foods	Local/native foods grown in a community.
Infant	A child from birth to 12 months of age.
Infection	The presence of disease caused by micro-organisms.
Kcal	A measure of energy consumed through food and used through daily life and physical activities.
Lactation	Breastfeeding.
Lactose intolerance	A body's inability to digest lactose, the sugar that is primarily found in milk and milk products.
Lean body mass	Weight of the body without fat, i.e. mass of muscle, bones and other tissues.
Lipodystrophy Syndrome	Abnormal body shape and body fat distribution, often a side effect of ART. Sometimes also includes abnormally low serum testosterone concentration, high serum cholesterol and triglycerides, or insulin and other hormonal resistance.
Mal-absorption	Failure by the digestive tract to absorb nutrients.
Malnutrition	A condition in the body brought about by inadequate or excess intake of required nutrients, or mal-absorption.
Meal	Food eaten at a particular time, particularly breakfast, lunch and supper.
Metabolism	Process by which drug/nutrients are chemically changed by the action of enzymes (usually in the liver) to allow use by the body.
Monounsaturated and polyunsaturated fats/oils	These are also referred to as 'good' fats because their consumption causes less risk of heart disease than consumption of other fats.
Morbidity	Sickness or illness, often used to express rates of illness.
Mortality	Death, usually expressed as a rate of mortality, e.g. rate of death over a period of time or among a population of a certain size.
Nutrient	A substance or component in food, including carbohydrates, proteins, fats, vitamins, minerals and water.
Nutrition	Process of food ingested, digested, and absorbed to provide the body with required nutrients and to utilize them in the body.
Nutritional Status	A measurement of the extent to which an individual's physiological needs for nutrients are being met.
Oedema	Swelling due to accumulation of fluids.
Opportunistic infections	Illnesses caused by various micro-organisms, which one is more vulnerable to due to a poorly functioning immune system.
Over-nutrition	Excessive nutrients and nutritional stores in the body.
Pharmacokinetics	The way drugs are absorbed, distributed and metabolised in the body, and excreted from the body.
Prebiotics	Nutrients that support the growth of healthy bacteria such as lactobacilli in the gut.
Probiotics	Live micro organisms that, when administered in adequate amounts, confer health benefits on the host.
Quality of Life	Individuals' valuation of their ability to perform daily functions and sense of well-being.

RDA	Average requirement of various nutrients to maintain nutritional status of a healthy person according to international standards.
Red blood cells	Cells that help transport oxygen to parts of the body.
Saturated fats	Also referred to as 'bad' fats, their consumption increases levels of unhealthy cholesterol in body, therefore increasing the risk of heart disease.
Snack	Food or drinks not requiring much preparation, and usually taken between main meals.
Symptomatic	Characterized by symptoms of illness.
Synbiotics	Combination of Prebiotics and Probiotics.
Trans fats	Solidified and partially-hydrogenated vegetable oils that raise blood LDL ("bad" cholesterol) levels and reduce the HDL ("good" cholesterol) levels.
Under-nutrition	State of having inadequate nutrients in the body.
Viral load	Amount of a virus, e.g. HIV, in blood used as a marker for progression of HIV.
Virus	A disease-causing micro-organisms (smaller than bacteria).
Vitamins	Nutrients that among other functions help protect the body against infection.
White blood cells	Combination of cells that help protect the body against infections.

