Chapter 7

Nutritional Care for PLWHA Who Take Medication and Herbal Remedies

7.0 Introduction

A range of drugs are used to manage the symptoms of HIV infection, opportunistic infections, and other common infections. Conventional pharmacological drugs, herbal remedies or their combination are used in Kenya.

7.1 Drugs and Food/Nutrient Interactions

Food and drug interactions may be positive or negative but primarily fall into the following categories:

- Drugs may alter nutrient absorption, metabolism, distribution and excretion thus affecting nutritional status of the patient.
- Food may affect efficacy of medications due to altered absorption, metabolism, distribution and excretion.
- Some drugs may lower food intake and/or absorption. For instance, most drugs have diet restrictions (e.g. avoiding milk and milk products when taking Tetracycline drugs). The side effects of many drugs affect the gastrointestinal tract: loss of appetite/ anorexia, change in taste, diarrhoea and alter food absorption. Side-effects such as fatigue, depression, loss of sleep and pain are also likely to lower food intake.
- Common OIs such as TB, malaria, diarrhoeal diseases, pneumonia, mucosa and skin infections, and the drugs used to treat them, may cause dietary constraints.
- The interaction of food and drugs, along with the nutritional status of the patient, affects drug efficacy, tolerability and adherence to recommended drug regimens.

7.2 Food and Nutrition Implications of ARVs

Highly active antiretroviral therapy (HAART) should improve overall nutritional status with an increase in total body weight and intracellular (relative to extra cellular) water. If weight has not changed within six to 12 months, consider the following possible explanations:

- Adherence to the drugs is <95%.
- Health complication, such as TB.
- Resistance to the ARVs.
- Not enough intake of energy and other nutrients.
- Drug-drug or drug-food interactions, which may reduce drug potency.
- Side effect of the drugs, e.g. lipoatrophy (see below).
- Weight was healthy before starting HAART.

The interaction between food and nutrition varies for different ARVs. This means that the PLWHA on ART need to be counselled on the food/nutrition implication of the ARVs they are taking.

HIV changes its structure over time as it replicates. These changes, or mutations, allow the virus to resist the effects of ARV drugs. Resistance when one drug is used alone may develop within months after treatment begins. Taking a combination of multiple ARVs delays resistance, but may increase potential nutritional considerations.

All PLWHA qualify for ARVs, but those with a BMI of less than 16 kg/m2 should be nutritionally stabilized—with therapeutic foods or nutritional rehabilitation—for no less than seven days before starting ARVs. Clients with BMI less than 18.5 kg/m2 should be supported with nutritional supplements of ready to use therapeutic foods .

Staff who provide ART must know the food and nutrition implications of the different ARVs and advise patients appropriately. The service provider should explain the dietary implications of each drug taken by the patient. Key points to note are that:

a) The interaction of certain dietary constituents, e.g. the amount of fat in a meal, may have different or opposing effects on different ARVs. For example:

- A high-fat meal increases the bioavailability of the Tenofovir, but the same lowers absorption of Amprenavir.
- High protein foods reduce absorption of Indinavir, but increase that of Nelfinavir.

b) Some interactions may be specific to ARVs:

- Grapefruit juice may inhibit intestinal enzymes that metabolize ARVs, especially protease inhibitors, resulting in poor bioavailability and slow cleansing of the drug from the body.
- Garlic may reduce the efficacy of Saquinavir.

ARV side effects and drug-food interactions may lead to poor adherence to drug regimens, especially during the early stages of HAART. Supporting clients to manage side effects and interactions can help ensure good adherence.

It is thus crucial that qualified and knowledgeable staff providing ART and are also fully versed with nutritional issues. They need to:

- Understand the specific food and nutrition implications of the medication a client is taking and help the client identify appropriate food and nutrition actions accordingly.
- Discuss with the ART patient how existing dietary practices can be maintained or improved to help ensure good nutrition and comply with recommendations for taking the regimen of ARVs.
- Inform AIDS patients of foods they must avoid or increase based on their specific drugs.
- Identify changes in eating patterns required to promote effectiveness of ARVs.
- Help the client make a drug-food schedule based on available foods and resources. Discuss the barriers to and enhancers of the available support needed to follow the schedule.

- Review the drug-food schedule with the client on every contact.
- Advise PLWHA on ARVs to avoid alcohol as it reduces the effectiveness of ARVs and may increase the severity of the side effects. They should also drink a lot of safe clean water to avoid side effects and to improve the kidney's functioning.

7.3 Nutrition-related Side Effects of ARVs

Like most medicines, ARVs have side effects. While ARVs contribute to improved nutritional status, in some cases they cause dietary and nutritional constraints that require nutritional interventions.

- **High blood cholesterol:** Interventions: reduce dietary fat intake and limit saturated and trans fats intake; increase daily vegetable and fruit intake; and exercise regularly.
- **High triglycerides:** Interventions: limit saturated and trans fats intake (low density lipoproteins); practice moderation in carbohydrate intake; and increase intake of whole grain cereals, fruits and vegetables. Regular exercise is a vital supportive measure.
- **Peripheral neuropathy:** This condition is felt as numbness, tingling, burning sensation in the toes, feet, fingers or hands, and may be caused by some medications used to treat opportunistic infections (e.g. Tuberculosis). Supplementation with B group vitamins may improve the condition.
- **Liver damage:** ARVs such as protease inhibitors can damage the liver. Detoxifying agents are available on the market, but require a doctor's prescription.
- **Kidney stones:** This condition manifests itself as severe pain in the lower back and side, as well as difficult and painful urination. Kidney stones may be caused by ARVs such as Indinavir. They can be prevented by drinking plenty of water (an extra 1.5 litres or 6 glasses).

Not all side effects are nutrition related. Some of the nutrition-related side effects of common ARVs used in Kenya include: loss of appetite, nausea/vomiting, diarrhoea, loss of taste/metallic taste, anaemia, constipation and changes in body composition. The suggested dietary management of these symptoms is given in Chapter 4.

However, in most cases, careful selection of food, well-planned meals and a drug schedule can minimize the side-effects and improve adherence to and effectiveness of ARVs. Encourage ART clients to inform the clinician of any side effects they experience while taking the drugs. Not all symptoms are due to ARVs or other drugs; a symptom may be due to the HIV infections or OIs. For example, not all diarrhoea is drug induced; it may be a result of a bacterial or viral infection.

7.4 Body Composition Side Effects of ARVs

The common and prominent signs of fat redistribution syndromes (lipodystrophy) include facial and limb fat wasting, central and/or localized adiposity, and visceral fat accumulation, e.g. increased fat around the abdomen and buffalo hump. Localized fat accumulation may also include enlarged breast in both men and women (see Chapter 4). Sometimes the manifestations include lipoatrophy syndrome, marked by predominant loss of subcutaneous fat, e.g. fat loss from limbs, buttocks, and face. This can lead to loss in total body weight, a side effect of HAART.

- Severe cases of lipoatrophy can cause a 5 to 10 kg decrease in body weight. The undesirable changes in body shape may increase stigma and psychological disorders.
- Other manifestations include an elevation of blood cholesterol and triglycerides, and changes in carbohydrate metabolism leading to insulin resistance. The consequence of these effects is increased risk of diabetes mellitus and coronary artery disease.

Lipodystrophy is common in individuals taking nucleoside reverse transcriptase inhibitors (NRTIs) and PIs. These ARVs are also associated with hyperglycaemia due to insulin resistance. However, lipodystrophy is predominantly associated with protease inhibitors.

Actions by Service Providers

Inform the patient, there are no established methods of treating lipodystrophy.

- Some improvement may be seen by encouraging regular medical review of care and side effects of medications.
- Encourage exercise to reduce fat accumulation and improve blood triglyceride levels.

7.5 Food and Non-ART Drug Interactions

Other medications used by PLWHA can negatively affect food and nutritional outcomes, such as causing bitter and unpleasant after-taste. For example Tetracycline may cause severe nausea and vomiting, and may also inhibit protein synthesis. And certain foods, such as dairy products, combined with Tetracycline lessen the drug's efficacy. Aspirin can relieve pain, but can also cause ulceration of stomach or gut mucosa and increase the risk of excessive bleeding. PLWHA should avoid taking medications that have not been prescribed by their clinician or service provider.

Foods rich in certain chemicals may cause severe side effects when taken together with certain drugs. For example, tyramine, which is in cheese, taken together with Isoniazid (anti TB drug) can cause a sharp rise in blood pressure. One can read more on these issues in other texts such as the FANTA Guide to Nutrition and HIV (see bibliography).

7.6 Herbal Remedies

Many Kenyans use herbal and traditional medicines to remedy ailments. Annex 7.1 lists the common herbs and spices, their benefits and preparation methods. Many of these have not been subjected to formal clinical research, however, and their effect on the course of the HIV infection is unknown. Their toxicity is also unknown. Besides treatment, herbs and spices are used to enhance food's taste and smell, and improve appetite. However, though herbs and spices are often beneficial, they may also interfere with of the effects of drugs; they may have negative effects on the body; or they may restrict food intake.

Herbs can be used by PLWHA as long as:

- They are used as supplements and not as replacement for standard therapy.
- They are not toxic and do not overburden the body's ability to metabolize and eliminate them (e.g. the liver or the kidney).

- They have no significant negative interactions with medications: for example, high doses of garlic may reduce the effectiveness of Saquinavir; and St. John's Wort (a herbal treatment for depression) reduces the effectiveness of a number of ARVs including Nevirapine, Indinavir, and Ritonavir.
- They have the potential to prevent, alleviate, and/or cure symptoms (e.g. lower blood pressure, increase energy, improve digestion, reduce severity of diarrhoea, or reduce depression).
- The clinician or health provider is continuously informed of what a client is taking. The clinician or health provider should:
  - Help the client maximize the benefits and minimize the negative side effects of the herbs.
  - Advise on the harmful effects of different herbal preparations.

7.7 Dietary Supplements

Dietary supplements are available as single or multiple micronutrients alone or with herbal formulations. Also available are supplements containing micronutrients and selected amino acids alone or with herbs. Selected health promoting bacterial cultures (probiotics) and materials that promote growth of bacterial associated with good gut flora (prebiotics) or their combination (synbiotics) may also play a significant role in nutritional care of PLWHA.

However consumers are likely to be on several of these formulations at the same time, which may increase the risk of overload and side effects. The risk with fat soluble vitamins is greater than with the water soluble vitamins.

7.8 General Actions by Service Providers

- With every contact, emphasize to the PLWHA the need to adhere to instructions on use of medications, including taking all the medicine and/or completion of the full course.
- Counsel PLWHA to avoid alcohol.
- Counsel PLWHA to avoid self-prescribed medications.
- Caution PLWHA about herbs that may be sold under the pretext of being a cure to HIV infection or opportunistic infections.

> Service providers attending to PLWHA must receive or seek out regular updates on the possible side effects of drugs, drug-food or nutrient interactions, and best management practices.

- For PLWHA in areas where malaria is prevalent, advise use of insecticide-treated nets and to promptly seek treatment for suspected malarial illness.
- Record side effects and actions taken for side effects, and refer all abnormal reactions to a health facility.
- Pay special attention to food and nutrition related factors that are likely to lead to non-adherence due to side effects and reduced efficacy. Intermittent doses of ARVs and sub-optimal levels of drugs in the body can lead to development of ARV-resistant strains of HIV.

Chapter 8

Food Security for Households Affected by HIV/AIDS

8.0 Introduction

Food security means that people at all times have both physical and economic access to sufficient food to meet their dietary needs for a productive life. HIV/AIDS can reduce the food security of PLWHA and affected households. Food insecurity limits the capacity for nutritional care and support.

"Household food security" requires that a household has access to enough quality and culturally acceptable food, for all people in the home (including young children), throughout the year. Household food security often depends on adequate income and assets, including land and other productive resources.

The following are components of household food security:

- Availability – An adequate amount and variety of foods are supplied consistently through production, import, or aid.
- Access - Every member of the household has resources to obtain an adequate quantity and variety of food.
- Utilization – Household members are able to properly use the food biologically, which depends on diet, overall health, sanitation, storage, processing, preservation, preparation, and marketing.

8.1 Food Security for PLWHA and HIV-Affected Households

A majority of households with PLWHA are chronically food insecure. HIV/AIDS reduces a household's productive labour, income and food stores, undermining food security. Where prevalence of HIV/AIDS is high, a whole community's ability to produce and buy food is reduced. As a coping strategy, PLWHA and their families are often forced to resort some of the following unfortunate measures:

- Reduce food intake at each meal, or skip meals.
- Adopt risky behaviours, such commercial sex, to raise cash for food.
- Withdraw children from school, which advances child labour practices, and escalates crime and migration.
- Disregard nutrition recommendations.
- Consume wild foods/fruits to cope with hunger.
- Sell key assets for short-term food security, thereby increasing poverty and long-term food insecurity.

> Not all households with PLWHA are food insecure and in need of food intervention or support.

Ways to improve food security for PLWHA and their affected families should be designed and implemented at the household and community level. Options include:

- diet diversification;
- increased production of nutrient rich crops (i.e. sukuma wiki, amaranthus);
- small, income generating activities;
- improve access to appropriate paid labour;
- rearing animals both as source of food and income.

Sometimes the actions may involve changes in use of household resources so as to buy additional food that may be useful to the nutrition of the PLWHA.

8.1.1 Actions to Improve Food Security of HIV-Affected Households

1. Assess the severity of the household's food insecurity and the factors that are causing it, including dietary practices. Take account of the following:

- Main sources of food: home production, purchase, remittances, begging, and/or food assistance/aid.
- Food production patterns: assess in terms of quantity of food produced, as well as food variety and seasonality, and also food availability in the neighbourhood or community in general.
- Food utilization: how is food used? Is it sold; shared with others; is there wastage? Assess any situation that limits the best use of available food.
- Assess the consequences of food insecurity, and the coping mechanisms of affected households.

2. Help PLWHA and their families to:

- Optimally use the available household resources to access food that is good for PLWHA.
- Use nutrient adding techniques such as pre-cooking, sprouting, fermentation, and household/community food fortification.
- Improve on intra-household food distribution to ensure good and adequate nutritious foods for the PLWHA.
- Address constraints on dietary practices such as social-cultural factors.

3. Link households to other programs that provide related services such as health care, water, growth monitoring and promotion, food assistance programs.

4. In rural areas, promote the production and consumption of indigenous foods, for example:

- Practice kitchen gardens and mixed cropping for production of micronutrient rich foods.
- Produce crops that are nutritious and require low agricultural inputs such as vegetables, cassava, sorghum and millet, and rear small animals like goats, rabbits, chicken.
- Dry and store vegetables and tubers for use during lean times.
- Assist affected households to plan for food lean periods, when availability of some foods is very limited or non-existent: for example to use traditional practices of harvesting and preserving edible insects, such as flying termites.

- Employ low cost agricultural techniques to improve yields and reduce inputs such as essential microbes to speed up compost formation, bucket irrigation and animal ploughing.
- Mobilize the community to support with labour for food crop production, and, where practical, maintain commercial farming for affected households.

5. Link clients to peer support groups of PLWHA and AIDS support organizations such as faith based organizations (FBOs), community based organizations (CBOs) and non-government organisations (NGOs) working in the area:

- Communicate information regarding HIV/AIDS, and the importance of nutrition in mitigation against the effects of AIDS on household resources, social networks, and food security.
- Help peer groups to assess local food resources and design food strategies that are appropriate to the community.
- Link these groups with agricultural extension officers and other relevant sectors to advise on new crop breeds and increase of crop yields.
- Link the support groups to micro-credit schemes to set up income generating activities among households with PLWHA.
- If necessary, link these institutions and affected and infected households to organizations that provide food assistance.

8.2 Food Assistance to Support Clinical and Social Objectives

In some cases, households require food assistance to prevent malnutrition of PLWHA and household members. This should be a short to medium term intervention. There should be criteria for recruitment into—and exit from—a food assistance program.

8.2.1 Purpose of Food Assistance

Depending on the country and policy context, food aid can strengthen interventions to:

1. Prevent HIV Infection

- Programs may help some people avoid HIV infection: help with access to nutritious food can save income which may avoid high risk situations or behaviour. Food acts as an income transfer and asset protection.
- Food as an incentive to counselling and testing.
- Food as an incentive to participate in PMTCT programs.

2. Support Positive Living with HIV through Care and Support

The period between HIV infection and the on-set of AIDS-related illnesses is often years, and sometimes the PLWHA or affected homes may need care and support during this period: access to sufficient, nutritious food can significantly help to prolong the period for healthy living for PLWHA.

- Food to supplement daily nutritional requirements (e.g. proteins and micronutrients) and fulfil special dietary needs, such as increased energy requirements, which would otherwise not be met with usual food in the household.
- Food for nutritional management of symptoms of opportunistic infections (e.g. anorexia, diarrhoea, nausea).

- Food for use in hospitals and hospices as part of inpatient or palliative care.
- Food to provide a safety net, income transfer and asset protection.
- Food for training in life skills, life planning, alternative livelihood strategies (especially as a bridge in adopting new technologies and practices). This also applies for orphans and vulnerable children (OVC) and street children.
- Food for education—to encourage school attendance by OVC.
- Food as a guardian incentive or voluntary care providers—for people to come out to support and care for OVC or sick people.

3. Treatment Support

In most cases, the uptake and adherence to treatment protocols (e.g. ARVs and TB treatment) is improved when PLWHA have adequate food. Therefore, food can be used to:

- Improve adherence to drug intake, especially for TB drugs, but also for ARVs.
- Improve treatment efficacy.
- Help manage drug side effects.

4. Lessen the Impact of Illness

A secure supply of food helps minimize the impact of illness or death in a family or community by:

- Reducing the pressure to sell assets.
- Reducing the pressure to engage in activities that increase risk to HIV infection.
- Training in life skills, life planning and alternative livelihood strategies.

8.2.2 Who Needs Food Assistance?

Not all PLWHA or affected households need food assistance. By considering the specific purpose/objective of food assistance in a given context, those who will benefit can be determined.

> Targeting with food assistance should always be done with care, as non-HIV- affected households, who are equally vulnerable and/or poor, can be marginalized or denied assistance.

1. Food for Therapeutic Purposes

Food for therapeutic purposes, that is food to reduce mortality and severe malnutrition, should rely on nutrition and health indicators as criteria for inclusion.

Criteria include:

- Weight loss. However, although nutritional supplementation is indicated for all patients with weight loss, PLWHA should not receive supplementation without first addressing any reversible causes of weight loss.
- HIV-infected children whose weight-for-height are < -2 Z score, and HIV-infected adults with BMI cut-off point < 18.5 kg/m2 require food assistance. For those whose wt-for-ht and BMI cannot be taken:

[ii] - Commonly observed rates of adult PLWHA malnutrition will range between 5 % and 30 % depending on the BMI and related anthropometric cut-off points. This range is within that established for the general population (KDHS, 2003). For

- A recommended MUAC cut-off of < 25 cm for men and < 22 cm for women. (Or, a cut-off point of < 23.2 cm for both men and women.)
- For children less than 5 years old: Infants 6 – 12 months, < 12.9 cm; 13 – 24 months, 13.5 cm; 25 – 30 months, 13.7 cm; 37 – 48 months, 14 cm and 49 – 60 months, < 14.2 cm.
- PLWHA who need therapeutic food should be included in food assistance programs until there is evidence of reverse trend and stabilization of values above the cut-off points. On average, three months supplementation extending to six months should be sufficient.

2. Food to Improve Household Food Security and Prevent Malnutrition

Food can be provided as an income transfer to improve household's access to food, especially to address HIV-related causes of food insecurity such as reduced labour, savings, and productive assets. In this case beneficiary selection criteria should focus on identifying households who are food insecure or vulnerable to food insecurity. A range of indicators are available to assess household access to food. Food can also be used to prevent or reduce malnutrition and prevent malnutrition from becoming severe. In addition to household food security criteria, other criteria such as nutritional status (based on anthropometric and dietary assessments) may be used to target beneficiaries.

3. Food for Incentive Purposes

Food can be provided as an incentive for participation in particular services/education. In this case, criteria for beneficiary selection can include individuals/households who are most in need of the services/education offered, and those who require supplemental food.

8.2.3 What Food to Provide?

The kind of food and amounts to provide will depend on the objective of the food assistance. The common food ration package used by World Food Programme (WFP) and other agencies is composed of corn-soy blend fortified with micronutrients, cereal and a pulse and vegetable oil, which may be fortified with vitamin A and other micronutrient supplements like salt and blended food (such as corn soy blend). The package is normally supplied in quantities to last 15 days or a month.

Food supplements for PLWHA have the criteria:

- Easily digestible and tolerated by PLWHA and/or children who are in need in the house.
- Food that is energy dense, high in protein, and fortified with multiple micronutrients is preferred.
- Food that is culturally acceptable.
- The household's ability to process, store and prepare the food should be considered. Food that requires simple preparation and less cooking time, such as pre-cooked or blended foods, are advisable for PLWHA and their households.

BMI cut-off point of < 17 kg/m^2, the proportion of PLWHA requiring food aid is likely to be about 10%. In contrast, a cut-off point of < 20 kg/m^2 is likely to raise the proportion to 30%.

To calculate the size of the ration, consider the following:

- The objective of food assistance.
- The average household requirement in the catchments, including the increased energy needs of household members infected by HIV.
- Aim for food assistance to fill the average energy deficit in the area, or the food supplement to cater for 30 - 40% of energy needs for targeted beneficiaries.
- Take into consideration wastage, spoilage, and leakage of the food through selling and sharing.

Types of rations include:

- Take-home rations: Food is provided to the household to take home for storage, preparation, and consumption. A drawback is the risk that the food does not reach the targeted beneficiary as it may be sold, shared with other households, or spoilt.
- On-site feeding: Food is prepared in a central place and the beneficiaries consume the meal or snack at the site. The food will reach the targeted beneficiary, but logistics may be expensive.
- Food-by-prescription: Food is provided depending on individual assessment. It is packaged in small quantities (as a medicine) to take home and consume as prescribed. The best place for this is a health facility.

8.3 Integrate Food Assistance Activities with Local Services

Integrate food security and food assistance programs into existing local services as much as possible and where appropriate. However, sectors should not be over-strained; have each sector do what best fits its mandate.

Actions by service providers include:

- Make community programs and government sectors aware of the need for food assistance.
- Educate the recipients and families of the purpose of the food.
- Promote the inclusion of food assistance for PLWHA in other programs, especially community-based food and nutrition projects such as nutrition gardens, livestock rearing, and income-generating activities.
- Use community-based approaches as often as possible in the implementation of these actions.

Chapter 9

Communication about Nutrition and HIV/AIDS

9.0 Introduction

The success of nutritional care and support depends on how efficiently and effectively the information in these guidelines reaches the clients in ways that will encourage adoption and compliance. Commitment to effective and caring communication must come from everyone involved in the fight against HIV/AIDS: donors, health workers, policy makers, teachers, and families - each in their own way. Communication at the national and the local level is critical to successful nutritional care and support for PLWHA and requires significant financial investment.

The discussion of nutrition's role in the health of PLWHA should be integrated into messaging on HIV and AIDS, at both individual and national level. Each visit with a PLWHA or their caregivers must include a discussion about nutrition. On a broader level, when discussing HIV with donors, government or journalists, nutrition must be an integral part of the message.

The following objectives will guide the communication strategy that will need to accompany these guidelines:

1. Who needs to know? Identify the target. Be clear on the reasons as to why the different target groups need the information.
2. What is the current situation regarding nutritional knowledge and practice in your target group? An understanding of the prevailing situation and 'why' this is so, will assist in defining a focused communication strategy.
3. What information needs to be imparted? Not all the information may be needed for all the different groups. Emphasis may be placed on certain topics of the manual for certain target/user groups.
4. How does one reach the target group? Carefully assess all potential channels of communication that may be used to reach your target/user group.
5. How should the information be packaged? This will vary according to target group, levels of literacy, culture, means of communication and other factors.
6. How will the effectiveness of the strategy be monitored? As the appropriate strategy is being developed, there is also a need to develop a monitoring system that will be sensitive to changes in knowledge, attitudes and practices.

9.1 Communication about Nutrition and HIV/AIDS

9.1.1 Who Needs to Know?

The Kenyan National Guidelines on Nutrition and HIV/AIDS has been compiled to enhance the knowledge and skills of health providers, communities and the public at large. To be effective, the Guidelines' information must be shared with many people, in many sectors.

The information contained herein, can be packaged for decision makers at policy level given the critical role of nutrition in the management of HIV and AIDS.

Programme managers will find useful information on integrating nutrition into HIV and AIDS care and support interventions.

Service providers will benefit from re-orientation, and in some cases new training, on updated nutrition interventions. At the local level, service providers need to continually reinforce the Guidelines' information.

The general public will understand the importance of good nutrition in remaining healthy and those affected by HIV and AIDS will have important and practical information on how to adopt a healthier lifestyle and good nutrition practices.

9.1.2 What is the Current Knowledge among the Target Group?

Recognizing that in general, information on nutrition and HIV and AIDS is not widely available, known and applied in programmes, it is useful therefore, to determine what the current 'gaps' are within different target groups. The gaps should be identified with a clear understanding of the ROLE of the target group in advancing the nutritional care and support of HIV and AIDS.

9.1.3 Message Content

- The overall message will include:
  - The vulnerability of different population groups to HIV and malnutrition;
  - The interaction between HIV/AIDS and nutrition;
  - The opportunities available and the potential to improve nutrition, health, the quality of life and survival of PLWHA;
  - How to take action based on information provided in the Guidelines;
  - How to coordinate with existing interventions.
- The content of an information package can vary. For example, an information package for journalists, goodwill ambassadors and others willing to advocate may include the following: key facts on malnutrition, HIV and AIDS and the interaction of the two; how good nutrition is a critical part of HIV and AIDS management; how much a good simple balance diet may cost per person/day and so on.
- A booklet of essential information from the Guidelines for health workers may include other information including: key facts, practical tips, best practices by the community and service providers. The booklet would be part of a coordinated effort which includes posters, brochures, leaflets, and radio messages.
- Messages must be grounded in the reality of the population. If having meat in the daily diet is beyond the means of most, for example, stress instead the alternative protein sources and having a balanced diet from commonly available foods.

9.1.4 How to Get the Message Out

To effectively share the Kenya National Guidelines on Nutrition and HIV/AIDS, the following suggestions are made:

- At the national level, use television and newspapers to help advocate to government and donors for increased awareness and investment in food security, nutrition, health and HIV/AIDS; use radio as the key mass medium for reaching the most vulnerable populations. Engage local or popular radio stations as full partners to reach PLWHA. Make the messages about essential nutrition simple, clear and straightforward.
- Make simple information on essential nutrition available to every person with HIV/AIDS and all health workers. Present all written information (leaflets, newsletters, and posters) with engaging illustrations for those who have difficulty reading.
- Translate messages into local languages for broad outreach.
- Present information in a creative manner. Use a photo or an image that people value along with information on nutrition. (The image doesn't have to necessarily correspond with the subject of nutrition.) For example, a photo of a popular football player alongside nutrition tips may be valued and not discarded by young men.
- Use goodwill ambassadors, celebrities and opinion shapers to promote nutrition for PLWHA. Celebrities who have recognizable voices (e.g. radio morning show hosts) and do many spots on a subject could be effective.
- Identify special days for nationwide nutrition-promoting activities. Link the day with existing material and activities, such as the messages being broadcast by radio, stickers, posters and celebrity visits.
- Use existing recreational activities framework: youth HIV/AIDS football (soccer) programmes and cookery competitions as entry points for messages.
- Set up good, strong displays in health centres, schools and meeting places. Put up posters, with information that is renewed regularly, to use as a teaching aid in school, or to refer to during discussion in a health facility.
- Target activities to reach out to professional groups, programme managers, trainers and learning institutions. Advocate for nutrition as part of training of health professionals - doctors, nurses and volunteers and for nutrition to be part of the medical training curriculum.

9.1.4.1 Communicate to Children and Adolescents

In many cases, children are the caregivers of PLWHA at home, responsible for preparing food and water. A sound understanding of the importance of nutrition for the young generation, regardless of HIV status, will lead to healthier population in the future.

- Rely on schools to promote information on nutrition and HIV/AIDS to children and adolescents; integrate with existing programmes at the school (such as the school feeding program, life skills education etc.).
- Involve the subject of nutrition and HIV in existing youth programs such as guides and scouts (create a badge for nutrition and HIV!).
- Advocate for key nutritional messages to be included as part of a lesson on biology. Include questions on biology exams about nutrition, such as: 'Why is good nutrition especially important for people living with HIV/AIDS?'
- For out of school children use places where they may congregate such as community centres, vocational skills training places.

9.1.5 Network to Share Information Effectively

- Design strategies that take advantage of a network for information dissemination.
- Use inter-sectoral approach: ensure key messages are integrated in school health programmes, existing media, health promotion materials, and special day events.
- Form partnerships with other providers and develop a consensus on common strategies to disseminate information.
- Organize meetings for the network of nutrition service providers.

9.1.6 Document Information

- Organize and index existing materials so that service providers and PLWHA can easily access information.
- Collate reading materials about nutrition care and support collected from all sources and distribute these to strategic information outlets at the local level.

9.1.7 Monitor the Communication Strategy

- Keeping in mind your objective for the different target groups (e.g. greater resource allocation to nutrition by policy makers or improved and balanced food intake by PLWHA) develop simple indicators that can be used to monitor the desired changes amongst your target.
- Decide upon qualitative and quantitative indicators.
- Decide also on how often you wish to monitor the indicators. Remember that continuous feedback on the different avenues / approaches used for communication will help to sharpen your strategy and make it effective.

Chapter 10
Monitoring and Evaluation

10.0 Introduction
The National AIDS Control Council, in collaboration with various partners, has established a framework for the National Nutrition Intervention in the Fight against HIV/AIDS to coordinate the response in the fight against HIV/AIDS (see Annex 10.1), from the national to the community level. This framework will help harmonize nutrition interventions within the continuum of care and support services for PLWHA. The Kenyan National Guidelines on Nutrition and HIV/AIDS will help initiate new, or strengthen existing, coordinated nutritional care and support services for PLWHA.

To keep track of the Guideline's reach and impact, a systematic assessment, analysis, and documentation of the Guideline's dissemination and implementation is required. Continual monitoring and periodic evaluations are fundamental to assess the Guidelines' success and reach.

10.1 Monitoring and Evaluation of Kenya National Guidelines on Nutrition and HIV/AIDS
Monitoring is the continuous process of measuring progress in achieving specific results in relation to a programme or project plan. In this case we would like to monitor the progress made in the use of the Kenyan National Guidelines on Nutrition and HIV/AIDS Guidelines at the different levels of dissemination and application to nutritional care and support services. Monitoring activities assist national policy makers, district and provincial planners, programme managers and others in setting priorities for capacity building, service provision, resource allocations and standards of care.

The monitoring process **reports on the progress** made towards realizing the following objectives:
- Effective and widespread dissemination of guidelines.
- Practical application of the guideline recommendations in the on-going programmes and services.
- Proper implementation of the guidelines by the service providers and clients.
- Improved well-being of PLWHA due to improved nutritional practices.

A variety of indicators can be used to monitor the use of the national guidelines and to monitor the progress and outcomes of nutritional care and support. Examples of indicators that can be used are listed below. Programs should select and adapt indicators based on the outcomes desired and on the feasibility of measurement.

Types of monitoring indicators for these guidelines would include:
- Number of health programmes implementing nutritional care services for PLWHA in both public and private sectors (Annex 10.1).

- Number of training institutions with nutritional care and support incorporated in their training programmes
- Number of training sessions/workshops organized for service providers from both public and private sectors.
- Number of service providers (counsellors, health educators, extension workers, teachers, social workers) trained in the use of the guidelines.
- Number of initiatives such as home based care and workplace education initiatives in both public and private sectors that include nutritional care and support activities.

Footnote: A sample framework monitoring and evaluation for organizations is cited Annex 10.2.

Evaluation determines the worth of an intervention, strategy or policy. This will look at the relevance of the guidelines in Kenya, efficiency in dissemination and use, effectiveness of the guidelines in achieving set objectives, impact of the guidelines and sustainability of application of the guidelines.

Evaluating the effectiveness of these guidelines may include the following:

- Changes in policy and service provision supporting nutritional care and support for PLWHA.
- Increased resource allocation for nutritional action in support of efforts to combat HIV and AIDS. Costs of implementing the guidelines to measure efficiency or cost-effectiveness
- Changes in stake holder's knowledge and practice regarding nutritional care and support of PLWHA.
- Impact of strengthened nutritional care and support on the quality of life of PLWHA
- Inclusion of nutritional care and support as an integral part of comprehensive service provision to PLWHA.

Evaluation indicators for these guidelines would include:

- Changes in the proportions of PLWHA receiving nutritional care services
- Changes in the proportion of services in the public and private sectors that are offering nutritional support as part of an integrated service delivery for PLWHA.
- National policy statement(s) and changes in the allocation of funding for nutritional care and support of PLWHA.
- Changes in the percentage of PLWHA reporting dietary modifications based on adequacy of energy, protein and micronutrient intake.
- Proportions of households affected by HIV or AIDS with increased food access as a result of food security initiatives.
- Changes in the percentage of PLWHA with improved or stabilized weight and body mass index as a result of a nutritional intervention or programme.
- Changes in the percentage of PLWHA who report ability to perform basic work activities as the result of a specific nutritional intervention or programme.

- Changes in the percentage of PLWHA reporting reduction in frequency and severity of symptoms of opportunistic infections as a result of a specific nutritional intervention or programme.

Impact evaluation usually requires extra resources, trained people, time and equipment, and is generally undertaken in a few selected sites. Impact evaluations may be initiated by individual projects or the national programme. Formal evaluations require careful planning and protocols may require scientific and ethical review. Information from impact evaluations should be widely disseminated in order to improve practices, scale up good interventions, revise guidelines and inform policy.

10.2 Actions by Service Providers

- Use these Guidelines.
- Disseminate the Guidelines to public sector agencies, civil societies, professional organizations and the public sector.
- Monitor, audit, evaluate and report performance.
    - Continuously monitor the dissemination of the guidelines and implementation of specific actions.
    - Periodically audit the effectiveness of activities under implementation
    - Monitor the coverage of activities.
    - Periodically assess applicability and limitations in the implementation of the guidelines.
- Assess and document behaviour change among service providers and PLWHA.
- Assess and document the health outcomes of PLWHA.
- Analyze data and report to your organization and other stakeholders.
    - Report site specific and disaggregated results (according to gender and age) according to scheduled reporting format and time frame to managers of your programme.
    - Document outcomes and incorporate experiences in subsequent expanded and scaled up implementation plans.
    - Prepare short articles demonstrating the impact of the guidelines and nutritional interventions on PLWHA.