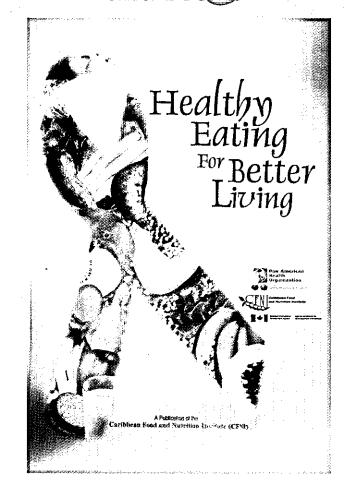


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My Personal Notes

HEALTHY EATING FOR BETTER LIVING

Getting the Best from Your Food and Drugs

A Booklet on Good Nutrition and Healthy Eating for People Living with HIV/AIDS





Canadian International Development Agency

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Caribbean Food and Nutrition Institute is a specialized centre of the Pan American Health Organization (PAHO) which represents the World Health Organization (WHO) in the Region of the Americas. In addition to its parent body, PAHO/WHO, the Institute is also responsible to an advisory Committee on Policy which the member governments* form the majority. Technically, it is guided by a Scientific Advisory Committee, the members of which are selected on the basis of their technical expertise in the field of food and nutrition.

Remember to...

Avoid unnecessary medicines.

• Medicines often have unwanted side effects.



- Medicines can interfere with food and nutrition.
- Only take medicines as prescribed.

Avoid alcohol

- Alcohol harms the liver and can be especially harmful if combined with some medicines.
- Alcohol can cause you to be more at risk of getting infections.
- Alcohol destroys vitamins in the body.
- Alcohol can blur your judgment and eyesight and can lead to accidents, exposure to health risks and unsafe sex to name a few effects.

^{*}Anguilla, Antigua and Barbuda, Bahamas, Barbados, Belize, British Virgin Islands, Cayman Islands, Dominica, Grenada, Guyana, Jamaica, Montserrat, St. Christopher-Nevis, Saint Lucia, St. Vincent, Suriname, Trinidad and Tobago, Turks and Caicos Islands.

- Is the product or diet recommended for a number of different conditions? If general claims are made using words like "detoxify", "revitalize", "energize", "anti-stress", "tonic", or "immune-booster", be suspicious.
- Do you have to pay a lot of money for the diet or cure? Be suspicious of people who try to sell you an expensive treatment or "cure" for HIV/AIDS. Be especially cautious if you have to pay cash for expensive travel arrangements or treatment ahead of time.



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Introduction

ealthy eating for better living is important for everyone. It is the backbone for being in good nutritional
status as well as living healthier. For persons living
with HIV, healthy eating is even more important because the
virus can affect your nutritional status and health which
depend on more than just having enough quality food to provide you with the needed energy and nutrients. Your nutritional health also includes using clean and safe water, and
paying attention to food hygiene and food safety. Also important is matching your food choices and intake with your antiretrovirals and other drugs, as well as managing any problems that you may experience.

Since the widespread distribution of the 2002 publication "Healthy Eating for Better Living, A Caribbean Handbook", many users have provided us with invaluable feedback. This has resulted in the creation of 7 booklets for easier use by HIV-positive persons and your care-providers. We have kept part of the original title, "Healthy Eating for Better Living" and each booklet now has one of the following subtitles:

- (1) What is Good Nutrition for HIV?
- (2) About Nutrition and HIV
- (3) Planning A Healthy Diet

It may be good to get a second opinion and better still, check with your doctor.

What Should You Ask?

Before you start a particular diet or therapy, it is important to ask yourself a number of questions:

- Does the diet contain substances in amounts that could be physically harmful? Taking any one substance, vitamin, mineral or food in excess can be harmful to your body.
- Does the diet completely replace healthcare that is generally regarded as effective? There are no secret cures or remedies. To help you make a decision about a new treatment, seek out different opinions from people who have nothing to gain from you.
- Does the cure or diet promote or emphasize a particular product or nutrient? Be wary. Good health depends on a balance of many elements including sleep, relaxation, food, regular activity and a positive attitude.
- Does the diet provide adequate energy and protein along with a variety of other nutrients? You need to eat a variety of basic
- foods to get the nutrients you and your immune system require. A diet that recommends that you omit a food group should make you suspicious.

and other conditions may require consideration when planning management of drug and food consumption.

Drug-drug interactions arising from prescribed, over-thecounter or traditional therapies should be evaluated especially since the content of traditional therapies is unknown.

Alternative Therapies and Miracle Cures

There is currently no cure for HIV or AIDS. In the search for help though, you may meet people promoting a nutritional or herbal "cure" or an "immune-booster"



diet, or a "special" series of vitamins and minerals for people with HIV/AIDS. They may even get your hopes up about having a cure.

Since there is no cure, people living with HIV have to make choices about how to cope with the disease. It is important to get as much information as possible to help you with making your choices. There are people who only want to make money • and will try to get you to buy their "miracle" cures.

It is good for you to keep your hopes up. But beware of people who tell you they have something that no one else has. If it sounds too good to be true, then think again before you act.

- (4) Keeping Healthy and Living with HIV
- Dietary Tips for Coping with Problems that Could Affect Your Nutritional Health
- (6) Food Safety and Hygiene
- Getting the Best from Your Food and Drugs

Each booklet allows you to focus on one topic at a time. However, we suggest that you keep all of them handy as quick references that can help to make life and living better. We hope that you will continue to find the information useful. Remember that the information provided in these booklets is not intended to be used in place of any individualized treatment you will require from your doctor, dietetics or any other healthcare professional. In addition, mention of any product does not mean any expressed or implied endorsement. If you have questions or need additional information, we encourage you to consult your doctor, nutrition or dietetics professional or nurse.

> Dr. Fitzroy Henry Director, CFNI

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Table 2 (cont'd) Dietary Recommendations for Side Effects of Anti-retroviral Medications

Class of ARV	Medications	Side Effects	Dietary Recommendations
	Nelfinavir (Viracept, NFV)	Diarrhoea, flatulence, lactose intolerance, nausea, abdominal pain.	Take with food that includes protein. Avoid bowel irritants.
	Kaletra (Lopinavir/ Ritonavir)	Nausea, abdominal pain, diarrhea.	Take with high fat meal.
Nucleotide Reverse Transcriptase Inhibitor	Tenofovir (Viread TDF)	Abdominal pain, headache, fatigue, dizziness.	Take with meals to increase AUC and bioavailability.

After discussion with your doctor or pharmacist, you are encouraged to update this list as more medications become available or when some medications are no longer being used. Keep informed with this part of your life.

Combination Drug Therapy

It is possible that you may have to take many medications for

HIV and other conditions. Some food interactions of combination therapy are different from those of the individual drug. For example with



- Indinavir and Ritonavir, two protease inhibitors when taken together, food has no effect but when taken
- separately, the diet requirements are different. Your doctor or pharmacist can help you to develop a drug usage/combination therapy timetable to minimize drug-food or drug-drug interactions. In addition, drugs for opportunistic infections

Table 2 (cont'd) Dietary Recommendations for Side Effects of Anti-retroviral Medications

Class of ARV	Medications	Side Effects	Dietary Recommendations
Non- Nucleoside Reverse Transcriptase Inhibitors (NNRTI's)	Nevirapine (Viramune NVP)	Stomatitis, nausea, vomiting, abdominal pain, fever, headache, fatigue, drowsiness, high risk of hepato - (liver)toxicity.	Food has no effect. Avoid alcohol and St. John's Wort.
	Efavirenz (Sustiva, EFV)	Anorexia, nausea, vomiting, abdominal pain, flatulence, diarrhoea, elevated blood cholesterol and triglycerides.	Take with a low fat meal; a high fat meal reduces absorption; take at bedtime; Avoid alcohol.
	Delavirdine	Dry mouth, stomatitis, taste changes, tongue edema, bleeding gums, dysphagia, gastritis, GI bleeding, colitis, diarrhoea, dyspepsia, constipation.	Food has no effect; antacids can decrease absorption.
Protease Inhibitors (PI)	Indinavir (Crixivan, IDV)	Nausea, vomiting, abdominal pain, fatigue, diarrhoea, dry mouth, taste changes, sore throat. May increase risk of lipodystrophy.	Take on an empty stomach at least 1 hr before or 2 hrs. after a meal or with a low-fat (3 grams), low-protein snack (6 grams) 300 kcal Avoid grapefruit juice. Drink at least 1.5 litres fluid daily.
	Indinavir with Ritonavir	See individual profiles	Food has little effect. Take with food to decrease side effects.
	Saquinavir (Invirase, Fortovase, SQV)	Nausea, diarrhoea, abdominal pain, mouth ulceration, taste changes, diarrhoea, constipation, flatulence. May increase risk of lipodystrophy.	High fat foods increase AUC; take within 2 hours of a high-fat and high-calcium meal. Take with meal or light snack. Avoid alcohol, grapefruit juice and St John's Wort

HIV/AIDS Drugs and Nutrition

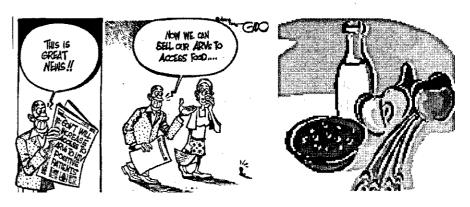
any medications are now available and necessary to treat HIV and AIDS. The medications help to keep the virus from making more of itself. It is therefore necessary for you to pay special attention to your diet to ensure that you benefit from both the drugs and your diet.

Drug Food Interactions

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It is known that all drugs have side effects but drugs and food can also interact with each other and reduce the benefits of each. The unhealthy side effects of drug-food interactions are:

1. Food can affect how well the drugs work.



- 2. Drugs can affect absorption, metabolism, distribution of nutrients and excretion water.
- 3. The side effects of drugs can affect your desire to eat, your food intake and your nutritional status.
- 4. The side effects can affect compliance with taking your drugs.

Side Effects of Drugs

Sometimes the drugs that are used to threat HIV and oppor-



tunistic infections may have side effects like nausea, vomiting, diarrhoea, pain, swelling in the mouth, loss of appetite and changes in the taste of food. Some side effects are easily recognized and may appear soon after you take the drug. Other side effects may not be so obvious

and can only be diagnosed by your doctor. For instance, many drugs used to prevent and treat opportunistic infections can block the body's ability to get nutrients from the food you eat.

Drugs affect everyone differently, so you may not have any of the side effects listed. With most drugs, the chance of experiencing side effects increases with the dosage and the length of time you are taking the drug. When you take a drug at a low dose to prevent infection (prophylaxis), it is less likely to cause side effects than when you are taking it at a high dose

Table 2: Dietary Recommendations for Side Effects of Anti-retroviral Medications

Class of ARV	Medications	Side Effects	Dietary Recommendations
Nucleoside Reverse Transcriptase Inhibitors (NRTI's)	Zidovudine Retrovir (AZT)	Nausea, vomiting, taste changes, fatigue, abdominal pain, appetite changes (increased or decreased), anaemia, constipation, weight gain.	Take with food to decrease nausea. High fat foods decrease absorption. Avoid alcohol.
	Lamivudine(3TC, Epivir)	Nausea, vomiting, abdominal cramps, diarrhea.	Food has no effect but taking with food can decrease side effects. Avoid alcohol.
	Combivir (3TC/AZT)	Similar to AZT or 3TC alone.	Take with food to decrease nausea
	Didariosine (DDI, Videx)	Pancreatitis, nausea, diarrhea, stomatitis, dry mouth, flatulence, decreased taste acuity.	Take on an empty stomach 1 hour before or 2 hours after a meal. Taking with food reduces absorption. Avoid alcohol. Do not take with juice, antacids or supplements that contain Aluminum or Magnesium.
	Abacavir (Ziagen, ABC)	Anorexia, nausea, vomiting, abdominal pain, diarrhoea, anaemia, weakness and insomnia. May slightly increase glycaemia	No effect of food but taking with food can decrease side effects. Alcohol increases AUC. Avoid alcohol.
	Trizivir (ABC, 3TC, AZT)	See individual profiles.	Take with low fat meal. Avoid alcohol.
	Stavudine (D4T, Zerit)	Anorexia, stomatitis, nausea, vomiting, abdominal pain, diarrhoea, chills/fever. May increase risk of lipodystrophy.	Food has no effect but taking with food may decrease side -effects. Avoid alcohol.

Table 1 (cont'd) Possible Nutrition-Related Side-Effects of Drugs By Grouping

Drug Grouping	Possible Nutrition-Related Side Effects
Antifungal	 Loss of appetite Nausea Vomiting Metallic taste Weight loss Diarrhoea Cramping Stomach pain Increased thirst Dry mouth Taste changes Cough Fatigue/tiredness
Anti HIV	 Weight gain Nausea Vomiting Abdominal pain Diarrhoea (possibly mild) Taste changes Increased or decreased appetite Constipation Fatigue/tiredness
Anti viral	NauseaVomitingMetallic tasteMild diarrhoea

changes in how you feel. Don't be shy. Get in the habit of talking with your doctor, pharmacist or member of your healthcare team about your health, your habits and how you are feeling. Your dietitian can also help. The more you know about what is happening to your body and about what to expect, the more likely you are to cope with symptoms. The more you know, the easier it will be to make informed decisions about your health and care.

Non-prescription drugs, herbs and natural supplements have side effects as well, and can interfere with how your body uses medication and the nutrients in your food.

Here are some questions that you should ask about your drugs:

- When is the best time to take my medicine?
- Can it affect my appetite?
- Can it affect my sense of taste?
- Will I feel nauseous or could it make me vomit?
- Will my mouth get sore?
- Will I develop diarrhoea?
- · Are there any foods that I should not eat with any of my medicines?
 - Is there anything else I need to know about the drugs I am taking?

You should also inform doctor. pharmacist and dietitian about all the medications/drugs and other treatments you are following whether or not they are prescribed.

Remember to speak with your healthcare provider such as your doctor or pharmacist or dietitian to find out about the possible nutritionrelated side effects of the drugs.

Table 1 gives you an idea of what you may experience when you take certain types of drugs.

Although each drug behaves differently in your body, you will find that within each group there will be some similarities in side effects. This does not mean that you will experience all of them.

Many drugs are used to treat HIV and AIDS. Many of them are currently used in the Caribbean. Table 2 lists some antiretroviral medications, their side effects and dietary recommendations for each drug.

Possible Nutrition-Related Side-Effects of Drugs By Grouping

HIV/AIDS, Drugs and Nutrition

Drug Grouping	Possible Nutrition-Related Side Effects
Antibacterials (sometimes referred to as antibiotics)	 Dry mouth Sore mouth Nausea Vomiting Diarrhoea Constipation Taste changes Thrush Abdominal pain Loss of appetite Problems swallowing
Anticancer	 Loss of appetite Sore mouth and throat Nausea Vomiting Anorexia Weight loss Abdominal cramps/pain Constipation Swelling of gums Irritation of the stomach Altered taste Difficulty swallowing Thirst