

Eating Right

A Food and Nutrition Manual



THE JOHN HOWARD SOCIETY OF MANITOBA, INC.
1998©



Developed by
Tara Realini
For The John Howard Society of Manitoba, Inc.

Special thanks to The Winnipeg Foundation for their financial support in producing this workbook.

To order copies of this workbook, or others in the series, contact the
John Howard Society of Manitoba, Inc.
583 Ellice Avenue
Winnipeg, Manitoba R3B 1Z7
Tel: (204) 775-1514 Fax: (204) 775-1670
E-mail: office@johnhoward.mb.ca Website: www.johnhoward.mb.ca

LITERACY WORKBOOKS AVAILABLE

Adult Survivors of Child Abuse
All My Relations: An Aboriginal Cultural Awareness Manual
AIDS and HIV
Children and Parenting
Eating Right: A Food and Nutrition Manual
Gangs: Learning About Them, Living Without Them (NEW!)
Getting a Job
Getting Along: A Guide to Healthy Relationships
Get Out & Stay Out
Healthy Lifestyles
Hurting People: A Victim Awareness Manual
It's Your Country Too: Voting, Volunteering, and Making the world a better place
Learning to Talk and Listen Better
Living With Pain and Loss: a Manual on Grief
Math: What's the Point? (NEW!)
Relapse Prevention
Repairing the Harm: An Introduction to Restorative Justice
Respecting Our Earth
Staying Sober
Stress, Anxiety and Depression
Understanding Anger
Writing Made Easy

EATING RIGHT

A Food and Nutrition Manual

EATING RIGHT was developed for The John Howard Society of Manitoba Inc.'s Basic Literacy Program. It contains twenty-seven lessons dealing with the body, food, nutrition, and health issues.

Each of the lessons is followed by an exercise designed to build literacy skills and to reinforce materials contained in the lesson. While anyone can benefit from this book, it is especially suited to low-level readers.

Words that appear in **bold** throughout the lessons can be found in a glossary at the end of lesson twenty-seven.

TABLE OF CONTENTS

INTRODUCTION

LESSON #1 Introduction

LESSON #2 Nutrients

THE HUMAN BODY

LESSON #3 The Cells

LESSON #4 The Immune System

LESSON #5 The Digestive System

CANADA'S FOOD GUIDE TO HEALTHY EATING

LESSON #6 About Canada's Food Guide

LESSON #7 Recommended Food Servings

THE FOOD GROUPS

LESSON #8 Grain Products

LESSON #9 Vegetables and Fruits

LESSON #10 Milk Products

LESSON #11 Meat and Alternatives

LESSON #12 Other Foods

PUTTING IT TOGETHER

LESSON #13 Balanced Meal

LESSON #14 Menu Planning

LESSON #15 Buying Food

LESSON #16 Living Single

FOOD LABELS

LESSON #17 Nutrition Labels

LESSON #18 Expiry Dates

FOOD SAFETY

LESSON #19 Food Poisoning

LESSON #20 Preventing Food Poisoning

HEALTH ISSUES

LESSON #21 Diabetes

LESSON #22 HIV & AIDS

LESSON #23 Heart Disease and Strokes

LESSON #24 Nutrition and Pregnancy

ODDS AND ENDS

LESSON #25 Fibre

LESSON #26 Salt

LIFESTYLE CHOICES

LESSON #27 Overall Health

GLOSSARY

REFERENCES



LESSON #1

Introduction

Good health leads to physical and mental well being. Healthy people generally feel good and function well. The most important aspect of good health is proper **nutrition**.

We consume foods for a variety of reasons. Food satisfies our hunger and **nourishes** our bodies. It gives us the energy to get through each day. Food also is a part of our social lives. We eat for enjoyment, entertainment, and socialization. The right balance of food and activity will help us stay at a healthy body weight.

Whatever your reason is for eating, it is important to know how to choose the right foods. Choosing the right types of food will help you live a healthy life. In order to do this, it has been suggested that we follow *Canada's Food Guide to Healthy Eating*. We will be referring to the *Food Guide* throughout this workbook.

In the next few lessons we will be looking at nutrients and the human body. Although the **anatomy** of the human body can be quite complex, for the purpose of this workbook, the brief anatomy lessons that follow are selected for their importance to nutrition.

EXERCISE #1

USE COMPLETE SENTENCES TO DESCRIBE WHY YOU DECIDED TO
READ THIS WORKBOOK.

LESSON #2

Nutrients

Nutrients fall into six different categories. These categories include: water, carbohydrate, fat, protein, **vitamins** and minerals. All six are *essential nutrients*. By essential nutrients we mean those nutrients the body needs from the food we eat. The body can't manufacture these nutrients on its own.

Water

The body is composed mostly of water. In fact, the human body is between 60 and 70 percent water. Water is one of the most important nutrients needed by the body. It also helps to circulate the blood throughout the body. Other important nutrients are carbohydrates, fats, proteins, vitamins and minerals.

Carbohydrate, Fat, & Protein

Carbohydrate, fat, and protein are oxidized (burned) by the body to produce energy the body can use. The energy contained in these nutrients can be measured in **calories**.

Energy from food may be used by the body in several ways:

to produce heat

to build its structure

to move its parts

to be stored in body fat or other compounds for later use

Although carbohydrates, fats, and protein are important because they contribute food energy, an excess of any of the three can add unwanted fat to the body. Many people may not realize that even protein can be converted to body fat.

Almost all foods contain mixtures of these three energy-yielding nutrients. However, when you eat a certain food, for example a piece of steak, it is incorrect to say that you are eating “a protein.” Instead, you are eating a protein rich food.

Vitamins

The role of some of the vitamins is to help the oxidization (burning) process of the nutrients that produce energy. The vitamins themselves do not give us energy, they work with other nutrients throughout the body to help produce energy. Vitamins are needed only in small amounts and are found in the foods you eat. For example, oranges contain a good source of Vitamin C.

Minerals

Minerals are naturally occurring, **inorganic**, chemical elements. Our body is composed of major minerals and trace minerals. Our bodies have larger amounts of major minerals than trace minerals. An example of a major mineral is **calcium**. Calcium can be found in milk and other dairy products. An example of a trace mineral is **fluoride**. Fluoride is found in drinking water.

EXERCISE #2

I. List the six essential nutrients the body needs from the foods we eat.

II. List four ways our body uses the energy it obtains from food.

III. One word in each of the following pairs of words is spelled incorrectly.

Write the word that is spelled correctly on the line provided.

nutriant, nutrient	<hr/>
protien, protein	<hr/>
vitamin, vitimen	<hr/>
calorys, calories	<hr/>
staek, steak	<hr/>

LESSON #3

The Cells

The body is composed of millions of **cells**. Each cell is a self-contained, living being. A cell keeps itself alive by taking up the substance it needs from its surrounding fluid.

The cells in our bodies have three basic needs. The cell's most basic need is for energy fuel. As mentioned in the previous lesson, food energy can be measured in **calories**. Next, cells need water, which is the environment in which they live. Finally, they need the essential nutrients which, as we learned, must be supplied by the foods we eat.

The most important rule of nutritional planning is that whatever foods we choose, they must provide energy, water, and the essential nutrients. If energy or nutrients are under-supplied or oversupplied, the result is malnutrition. Malnutrition is any condition caused by excess or **deficient** food energy or nutrient intake, or by an imbalance of nutrients. Malnutrition can result if you do not receive enough nutrients in your diet.

EXERCISE #3

I. List the three basic needs required by the cells in our bodies.

II. Use a dictionary or the glossary at the end of LESSON #28 to write down a definition for the following words:

cells: _____

calorie: _____

deficient: _____

malnutrition: _____

LESSON #4

The Immune System

Many of the body's cells work together to help fight against infection. The skin acts as a physical barrier, and the body's lungs, digestive tract and other **body cavities** are lined with **membranes** that help protect against unwanted substances such as bacteria and viruses.

If these membranes are destroyed, some special cells produce **antibodies** which are designed to destroy the bacteria or virus that has made its way into the body. The immune system has the ability to **withstand** disease, however, its successful functioning depends on an **adequate** nutrient supply. This is why it is very important that when you eat, you choose foods that have a good source of nutrients.

A **deficiency** or an overdose of any nutrient is likely to negatively affect the immune system. If the immune system is weakened, you may become ill. Young children who do not get enough nutrients when they are growing may damage their immune system.

EXERCISE #4

- I. Use the letters in the title “The Immune System” to create twelve new words in the chart below. (For example: sun)**

- II. Matching: write the number from each word beside its best description.**

- | | |
|------------------|---|
| 1. Skin | _____ Are lined with protective membranes. |
| 2. Antibodies | _____ Provides the nutrients you need. |
| 3. Body Cavities | _____ An inadequate amount of something. |
| 4. Immune System | _____ Acts as a physical barrier. |
| 5. Deficiency | _____ Need an adequate nutrient supply while growing. |
| 6. Bacteria | _____ Destroy bacteria & viruses. |
| 7. Food | _____ Can be the cause of infection. |
| 8. Children | _____ If weakened, it is easier to become ill. |

LESSON #5

Digestive System

You may eat meals only two or three times a day, but your body's cells need their nutrients around the clock. When the body's cells do not receive enough nutrients throughout the day your brain signals hunger. You may experience hunger pangs and gurgling sounds in your stomach. Becoming aware of hunger, you eat, delivering a mixture of food to the digestive tract.

We won't get into the whole process of how food is digested; however, you should know that just like the immune system, the digestive system is sensitive to an under-supply of nutrients. It is important that you get enough nutrients, **fibre** and exercise in order for your digestive system to function properly.

Now that we have learned a little bit about how our body uses the foods we eat, the next few lessons will look at the various food groups as outlined in *Canada's Food Guide to Healthy Eating*.

EXERCISE #5

I. Write down everything that you ate yesterday. (We will refer to it later).

Breakfast: _____

Lunch: _____

Supper: _____

Any Snacks? Include coffee, alcohol, and any beverages (other than water):

LESSON #6

About Canada's Food Guide

Canada's Food Guide to Healthy Eating states that there are four basic food groups: Grain Products, Vegetable & Fruit, Milk Products, and Meat & Alternatives. Each food group is important because it provides its own set of nutrients. Foods that do not fall under these basic food groups are referred to as Other Foods. The guide was developed by Health Canada to be used as a basic nutrition education tool. It may be used as a guide to help plan healthy meals and make wise food choices.

Canada's Food Guide to Healthy Eating is based on five guidelines from Health and Welfare Canada. The guide suggests that you should:

Enjoy a variety of foods.

Emphasize cereals, breads, other grain products, vegetables and fruit.

Choose lower-fat dairy products, leaner meats and foods prepared with little or no fat.

Achieve and maintain a healthy body weight by enjoying regular physical activity and healthy eating.

Limit salt, alcohol and caffeine.

The four food groups mentioned at the beginning of this lesson will provide you with the nutrients you will need to be healthy. You need to choose foods from each group because each group gives you different nutrients. It is also important to choose different foods from *within* each food group in order to ensure that you are getting all the nutrients your body needs. In the next four lessons, we will be learning which nutrients each food group offers.

We also mentioned the “Other Foods” group. Other Foods are foods and beverages that are not part of any food group. The following list shows a few examples of Other Foods:

Foods that are mostly made of sugar such as jams, jellies, syrup, candies.

High-fat and high-salt snack foods such as potato chips, corn chips, pretzels and the like.

Beverages such as water, coffee, tea, alcohol and soft drinks.

Although these foods do not fall into one of the four basic food groups, that does not mean that you should not enjoy them. These food items should be eaten in moderation, with the exception of water.

EXERCISE #6

- I. List the four basic food groups as described by *Canada's Food Guide to Healthy Eating*.**

- II. What five guidelines are *Canada's Food Guide to Healthy Eating* based on?**

- III. Give answers for the following:**

- 1. What are your favourite "other foods"? _____**

- 2. How can you tell if you are eating too many "other foods"? _____**

LESSON #7

Recommended Range of Servings

The amount of food that you need on a daily basis from the food groups depends on a variety of things. Your age, body size, activity level, gender, and whether you are a woman who is pregnant or breast-feeding, influences the required amounts you should be eating.

Canada's Food Guide to Healthy Eating is set up in a fashion that shows a lower and higher number of servings for each of the four food groups. The following chart represents serving suggestions presented by the guide.

GRAIN PRODUCTS 5 - 12 Servings Per Day	<u>1 Serving</u> 1 slice of bread or 30 g cold cereal or 3/4 cup hot cereal	<u>2 Servings</u> 1 bagel or 1 pita or 1 cup pasta/rice
VEGETABLES & FRUIT 5 - 10 Servings Per Day	<u>1 Serving</u> 1 medium size vegetable or fruit ½ cup fresh, frozen, or canned vegetable or fruit 1 cup tossed salad ½ cup juice	
MILK PRODUCTS Children 4-9 yrs: 2 - 3 servings per day Youth 10-16 yrs: 3 - 4 servings per day Adults: 2 - 4 servings per day Pregnant/Breast Feeding Women: 3-4	<u>1 Serving</u> 1 cup milk 50 g cheese 3/4 cup yogurt	
MEAT & ALTERNATIVES 2 - 3 Servings Per Day	<u>1 Serving</u> 50 - 100 g meat, poultry or fish 50-100 g can fish 1-2 eggs 1/3 cup tofu 2 tbsp peanut butter	

The food guide was developed for people who are four years and older. The guide is designed to meet the needs of different people in various stages of life. As you have noticed by the chart on the previous page, there is quite a range between serving amounts in the different food group headings. In order to determine which range would be best suited for you, we must look at the factors as described in the opening paragraph of this lesson:

- Age:** Teens generally have higher energy needs than mature persons.
- Body Size:** Nutrient and energy needs are greater for those with a larger body size.
- Gender:** Males generally have higher nutrient and energy needs. Females also have special nutrient needs, particularly for calcium and iron.
- Activity Level:** Increased activity levels can increase energy and nutrient needs.
- Pregnancy:** Nutrient and energy needs are greater for women who are pregnant or breast-feeding.

This means, young children can choose the lower number of servings from each of the four food groups, while male teenagers can go to the higher numbers.

A five year old child would meet all of her nutrient needs by consuming five servings from both the Grain Products and Vegetable & Fruit groups and two servings each from both Milk Products and Meat & Alternatives group. An active teenage boy would need to consume the highest number of servings from each of the four food groups in order to meet his nutrient needs.

Keep in mind that the Food Guide is just a guide. Most people will meet their needs for energy and nutrients by choosing a number of servings that fall somewhere between the lower and upper ends of the servings range.

EXERCISE #7

- I. List five factors that influence the required amounts of food that one should consume.**

- II. Choose three factors from your list above and explain how they are related to our nutrient needs.**

LESSON #8

Grain Products

Canada's Food Guide recommends between 5 - 12 servings from the Grain Products food group each day. As already discussed in the previous lesson, we know that the number of servings required by an individual varies depending on factors such as age, gender, etc.

The guide recommends Grain Products, particularly whole grain and **enriched** grain products. These products include whole wheat, multi grain, pumpernickel, rye breads, brown rice, whole wheat pasta and whole grain cereals. Enrichment means the addition of nutrients to a food. Below you will find some examples of the nutrients that may be added to enrich various foods. Don't worry if you are not familiar with the definitions or pronunciations of all of these nutrients.

White flour: thiamin, riboflavin, niacin, iron, vitamin B6, folic acid, pantothenic acid, calcium, and magnesium.

Pasta: thiamine, riboflavin, niacin, and iron.

Breakfast cereals: thiamine, niacin, folic acid, vitamin B6, pantothenic acid, magnesium, and iron.

Pre-cooked rice: thiamine, niacin, folic acid, vitamin B6, pantothenic acid, and iron.

Grains are naturally low in fat. However, fats are often combined with grains to create the prepared foods that we buy at the grocery stores. You can look at the ingredient label on most food products to determine if fat has been added. We will be talking about labels in greater detail in a future lesson.

We mentioned a sample of grain products at the beginning of this lesson. Other grains that you may wish to choose from include: bannock, pita bread, tortillas, cooked cereals, crackers, doughnuts, macaroni, and muffins. An active, average size male in his twenties or thirties consuming upwards of 12 servings of grains a day would meet his nutrient needs required from the Grain Product food group. Keep in mind that it is important to choose a *variety* of foods from the Grain Product food group. Eating twelve doughnuts a day would not be considered as a healthy choice when it comes to your grain consumption.



EXERCISE #8

I. Use the information in this lesson to fill in the blanks below.

1. *Canada's Food Guide to Healthy Eating* recommends between 5 – 12 _____ from the _____ food group each day.
2. The guide emphasizes whole grain and _____ grain products.
3. Enriched pasta may contain any or all of the following nutrients: _____, _____, and _____.
4. Grains are naturally low in _____.
5. Nutrients are added to _____ certain foods.
6. Check the _____ on most manufactured food products to see if fat has been added.

II. List as many foods from the Grain Products food group that you can think of in the chart below.

LESSON #9

Vegetables & Fruit

Canada's Food Guide to Healthy Eating recommends 5-10 servings from the Vegetables & Fruit food group each day. Fresh and processed vegetables and fruit are sources of vitamins, minerals and fibre. You must choose different forms of vegetables and fruit to be eating healthy.

The guide recommends that you should try to choose dark green and orange vegetables and orange fruit more often. These foods are higher than other vegetables and fruit in certain key nutrients like vitamin A and **folacin**. Vegetables and fruit that contain a good source of these vitamins include: broccoli, brussel sprouts, spinach, squash, sweet potatoes, carrots, cantaloupes, apricots and orange juice.

You may think that ten servings of vegetables and fruit seems like an awful lot to consume in one day. However, if you think about how food is prepared, you will be surprised how quickly these servings add up. For example, if you eat a stir-fry prepared with broccoli, carrots, snow peas, peppers and onions, you will have consumed at least four servings from the Vegetable & Fruit food group. A breakfast including 1 cup of orange juice and a banana provides you with three

servings from this food group. This is because 1 cup of juice equals two servings of fruit and the banana equals one serving for a total of three servings.

Vegetables and fruit are low fat food items if eaten in their natural form. The only vegetables that contain any significant amounts of fat include avocado and olives. However, cooking methods tend to add extra fat to these otherwise low fat food items. If you are trying to reduce the fat consumption in your diet, you should be aware that butter and sauces added to vegetable dishes will greatly increase the fat in your diet. This is not to say that you should not enjoy dishes made with sauces, but you should choose them in moderation. As previously mentioned, we will be taking a closer look at the impact of fat in your diet in a later lesson.



EXERCISE #9

- I. List 5 of your favourite foods from both the vegetable and fruit food group in the chart below.**

VEGETABLE	FRUIT

- II. From your list above, write down any vegetables or fruit that are high in nutrients such as vitamin A and folacin. (Remember that these fruits and vegetables are dark green and orange in colour). If you have not included any of these foods in your list above, refer to the lesson on the previous page to choose vegetables and fruit that are good sources of these nutrients.**

LESSON #10

Milk Products

As we have already discussed, the food guide recommends 2-4 servings of Milk Products every day. A single serving could equal 1 cup of milk, 3/4 cup of yogurt, or 2 cheese slices. Milk Products provide a major source of calcium and vitamin D in our diet. We need calcium and vitamin D at every stage of our lives for the proper development and maintenance of strong, healthy bones and teeth.

Calcium also plays another important role for our health. Almost every cell in our body, including those in our heart, nerves and muscles depend on calcium to function properly. If we do not get enough calcium in our diet, the body takes what it needs from our bones, which act as a calcium storage bank.

Keeping with the guide's theme of choosing healthier foods, the guide suggests that you try to choose lower-fat milk products more often. All fluid milk - skim, 1%, 2%, and whole milk contains almost equal amounts of vitamins A and D. However, the fat content is different among these milk products. Skim milk and 1% milk contain very little fat while whole milk contains a higher amount of fat.

The fat in Milk Products is either butter fat (B.F.) or milk fat (M.F.). As you shop for milk products, you may notice different labels stating “low fat” on individual containers. Lower fat milk products are items like the ones listed below:

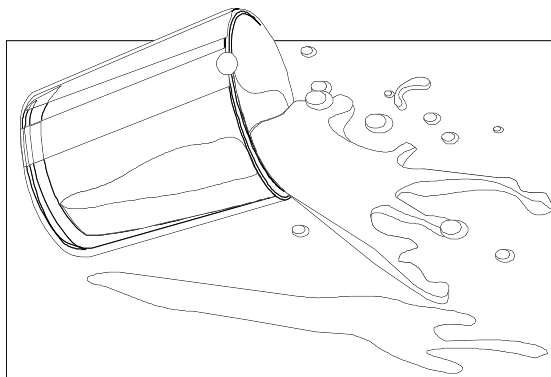
Skim, 1% and 2% milk, and 2% evaporated milk

Cottage cheese and yogurt with 2% or less B.F. or M.F.

Lower-fat cheeses ranging from 2% B.F. or M.F. to 15% - 20% B.F. or M.F.

Frozen yogurt with 3% or less B.F. or M.F., ice milk with 3%-5% B.F. or M.F.

As mentioned at the beginning of this lesson, whole milk is a higher-fat Milk Product. Other higher-fat Milk Products include: regular evaporated milk, yogurts and cottage cheese containing more than 2% B.F. or M.F., cheese with 20% or more B.F. or M.F., regular ice cream, cream, and sour cream. If you are concerned with your fat intake, you would not want to use these food items very often.



EXERCISE #10**TRUE OR FALSE**

1. The food guide recommends between 2 - 4 servings of Milk Products every day. _____
2. ½ cup of milk represents a single serving. _____
3. Milk Products provide a major source of calcium and vitamin D in our diets. _____
4. Only a few cells in our body depend on calcium to function properly. _____
5. All fluid milk contains almost equal amounts of vitamins A and D. _____
6. The fat content is the same in skim, 1%, and 2% milk products. _____
7. If you eat a sandwich with 2 cheese slices, you will consume a single serving from the Milk Product food group. _____
8. The guide suggests that you try to choose lower-fat milk products more often. _____
9. An active male in his twenties should consume at least 4 servings from the Milk Product food group on a daily basis. _____

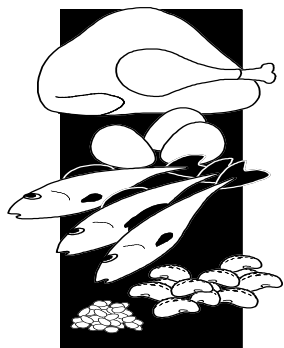
LESSON #11

Meat and Alternatives

The food guide recommends 2 - 3 servings a day of foods from the Meat & Alternatives group. The Meat & Alternative group provides us with the following main nutrients: protein, thiamin, riboflavin, niacin, vitamins B6 and B12, folacin, magnesium, and zinc.

The size of servings can vary within the Meat & Alternatives group. For example, the guide presents that 50 - 100 grams of meat, poultry or fish equals 1 serving. (If you are not familiar with grams, you can keep in mind that a 100 grams of meat is approximately the size of a deck of playing cards). The variance between 50 - 100 grams allows for a younger child to choose a smaller portion of meat while an adult can choose a larger portion to get a single serving.

Canada's Food Guide also suggests that you should choose leaner meats, poultry, and fish, as well as dried peas, beans and lentils more often. Doing so will decrease your fat intake while promoting healthy eating. Be aware of how you prepare your meats. Baking, broiling, roasting and barbequing your meat, fish, and poultry is much healthier than frying these foods in lots of grease and butter.



These days many people prefer to stay away from common meats such as beef, pork, lamb and the like. The Meat & Alternatives food group allows vegetarians (and everyone else) to eat the nutrients they require even if they choose not to eat meats such as steak, hamburger, pork chops, and ham. This is where the “alternative” part of this food group becomes important. Excellent

meat alternatives that are high in fibre include: dried peas, beans, and lentils. Many of these foods can be used in dishes such as chili and most Mexican recipes.

Tofu is another meat alternative which is becoming increasingly common. Tofu is made from soybeans and is an inexpensive alternative to meat. Eggs, nuts and seeds are also meat alternatives; as is peanut butter which is made mainly from peanuts. 2 tablespoons of peanut butter equals one serving from the Meat & Alternative food group. So, even if you prefer not to eat meat, you can still maintain healthy eating by choosing some of the alternative foods described in this lesson.

EXERCISE #11**WORD SEARCH**

**MEAT
RIBOFLAVIN
HEALTHY
BEANS
BEEF
TOFU**

**NUTRIENTS
SERVING
POULTRY
BROILING
PORK
EGGS**

**PROTEIN
GRAMS
FISH
LENTIL
FIBRE
NUTS**

R	A	B	U	L	L	E	N	T	I	L	H
I	Z	A	M	E	A	T	U	O	N	P	E
B	E	A	N	S	R	E	T	F	M	O	A
O	A	L	S	G	G	E	R	U	T	R	L
F	I	N	S	E	R	V	I	N	G	K	T
L	I	I	A	C	W	B	E	E	F	L	H
A	T	S	S	G	O	N	N	P	F	P	Y
V	A	T	H	P	R	O	T	E	I	N	N
I	D	E	L	M	A	A	S	Y	S	T	U
N	K	M	Z	U	Q	C	M	X	H	I	T
B	R	O	I	L	I	N	G	S	B	A	S
F	I	B	R	E	Y	R	T	L	U	O	P

LESSON #12

Other Foods

Other Foods are used to add variety, spice things up, and increase food enjoyment. We briefly discussed Other Foods in LESSON #6. This lesson will list some of the food items found in this group.

Fats and Oils

We often use foods that are mostly fats and oils. These foods are generally used in preparation of the foods found in the four basic food groups. Butter, margarine, cooking oils, mayonnaise, some salad dressings, shortening and lard are all categorized together as one sub-group of the Other Foods group. These food items would never be eaten alone. They are used in recipes, on sandwiches, and on salads. People who are trying to lose weight should limit their use of these items. Studies have shown that decreasing your fat intake promotes healthier living.

Sugars

Foods that are mostly sugar have been described as “empty calories” in the past. They do contain energy; however, they hold little or no nutritional value if eaten on their own. While you may enjoy the taste of them very much, your body

does not gain anything from them, with the exception of an occasional cavity. Most jams, jelly, honey, syrups, candy, marshmallows, and popsicles are mostly sugar.

People who eat according to the *Food Guide* and who are active do not need to be too worried about these sugary foods being in their diet. However, if you have a weight problem, you may want to cut back on your sugar intake, particularly food items such as cookies and pastries, as these foods are also very high in fat. Also, you should note that sugar is found naturally in foods such as fruits and these foods are much healthier as they provide nutrients as well as sugar to your body.

High Fat or High Salt Snack Foods

Everyone enjoys munching out on potato chips, pretzels, cheese-puffs and other snack foods. These foods are generally associated with parties and a good time. If you consume the required nutrients from the various food groups throughout the day, there is no reason why you should not enjoy these snack foods from time to time. Unfortunately, if you are trying to lose weight, you should stay clear of these Other Food items. They are very high in fat and in order to reduce weight you have to decrease your fat intake and increase your activity level.

Beverages

Beverages such as coffee, tea, water, pop, fruit flavoured drinks, and alcohol are their own category of Other Foods. With the exception of water, you should limit the amounts of the above-mentioned beverages that you consume. If you find yourself drinking excess amounts of the above liquids, you should try to switch to water or unsweetened fruit juices. Doing so will not only quench your thirst, but will provide your body with the important nutrients it needs.

Herbs and Spices

We add different herbs and spices to enhance the flavour of the foods we eat. There are many different kinds of herbs and spices available- too many to count. A sample of common herbs and spices are oregano, basil, pepper, salt, and thyme. Many herbs are made from the dried leaves of herb plants. Different people have their own tastes, therefore, they will consume herbs and spices at their own discretion.

Herbs do not have to be used in moderation, however, they generally are: a “dash of this” or a “pinch of that.” Salt, with the sodium it contains, is the one spice that you should not over use. High amounts of **sodium** may be harmful to your

health. There has been a link between the over use of salt and high blood pressure in approximately 20% of the people who suffer from high blood pressure. Also, high blood pressure has been linked to heart disease and stroke.

If high blood pressure runs in your family, it is important that you limit your salt intake while also keeping a healthy body weight by eating a well balanced diet. We will be returning to high blood pressure again when we discuss health issues later in this workbook.

Condiments

The last little sub-group that falls under the Other Foods group is condiments. Condiments are all of those little extras that we add to things such as hamburgers, hot dogs, french fries, and rice, to name a few. Popular condiments include: ketchup, mustard, relish, steak sauce, horseradish, hot sauce, pickles and soya sauce. You may use these items at your own **discretion**, depending on your personal preference. The only exception is if you are concerned about your salt intake, in which case, you may want to eliminate the condiments that have a high salt content. A condiment with a high salt content is soya sauce.

EXERCISE #12

All of the words below are found in the “Other Food” group category.
Your task is to list the items in alphabetical order under the appropriate headings below.

butter	paprika	candy	syrops	potato chips
jelly	pop	relish	pepper	salad dressing
lard	oils	margarine	mayonnaise	shortening
jam	honey	marshmallow	popsicles	cheese-puffs
taco chips	alcohol	water	tea	ketchup
hot sauce	oregano	mustard	soya sauce	coffee
basil	salt	thyme	steak sauce	pickles

FATS & OILS	SUGARS	SNACK FOODS	BEVERAGES	HERBS/SPICES	CONDIMENTS

LESSON #13

Balanced Meal

When we talk about a *balanced meal*, we mean a meal that has at least one food from each of the four food groups. That is, there is at least one food from the Grain Products, Vegetables & Fruit, Milk Products, and Meat & Alternative food groups. If you choose to use the concept of creating your meals around a *balanced meal*, you will be sure to consume the required nutrients your body needs on any given day.

However, you should also note that it is not necessary that every single meal during an entire week be a *balanced meal*. A healthy meal does not always have food from every food group. However with this in mind, you should be aware of your overall daily and weekly eating patterns. Are you eating a variety of vegetables throughout the week? How about your Grain Product consumption? You may want to track this by writing down the foods you consume over a given week. Perhaps food groups that are not included in one meal may be consumed as snacks throughout the day or as extras during other meals. Don't get too caught up in trying to hit every food group when you prepare your meals throughout the day.

The idea of a balanced meal is a tool to help promote healthy eating. As long as you eat the serving amounts appropriate for yourself during the course of a day, it is not critical that you use a food from every group at each and every meal.

EXERCISE #13

Use the foods below or your own personal favourite foods to create a menu of balanced meals for breakfast, lunch, and supper.

orange juice
cereal
bannock
vegetable soup
milk
toast

carrots
salad
tuna
eggs
rice
ham sandwich

steak
toast
apple
green beans
chicken
yogurt

Breakfast	Lunch	Supper

LESSON #14

Meal Planning

We have learned how our body uses the food and nutrients found in foods. We have also learned about the different food groups and the serving size that we should eat to maintain a healthy diet. Now let's take a look at how to go about planning a menu.

When you are planning a menu there are a variety of factors to take into consideration. If you are serious about eating healthy, you need to consider *Canada's Food Guide to Healthy Eating*. What are your food likes and dislikes? Do your likes represent healthy eating?

Then there is the issue of money. It is important to know what you can and can't afford. Planning a menu in advance will give you the opportunity to review grocery store flyers and clip coupons. You might be amazed at how much money you can save if you take the time to use coupons when grocery shopping.

Other things to think about when planning a menu include your cooking ability and interest. If you do not like cooking, try choosing simple recipes. Don't burden yourself with the hassles of cooking **extravagant** meals.

Also, don't forget about leftovers. Many times there is food in your fridge just waiting to be used up. Avoid wasting food by using your leftovers, either as meals on their own, or in soups and casseroles. Freeze food in jars, freezer bags or containers if it can't be used right away.

Menu planning gives you the chance to see what it is that you need to purchase in order to prepare any given meal. It is important that once you have decided what it is that you need to buy, you write out a grocery shopping list to make sure that you won't have to keep running back to the store.

EXERCISE #14

- I. Use the following spaces to plan your meals for the next four days. Keep in mind what you already have in your cupboard, what you can afford to buy, and what you have time to prepare. Exercises #5 & 13 can give you ideas of what you already enjoy; try to add foods from each food group, and be aware of how many extra foods that you include.**

Day One:

Day Two:

Day Three:

Day Four:

LESSON #15

Buying Food

We are faced with a wide assortment of items in the grocery stores. The items we choose to buy affect our health and the health of our families or the people who eat what we buy. In recent years we have been faced with convenience foods, such as fast food items, and the luxuries of high-speed cooking equipment such as microwaves. Thanks to modern technology, we have far greater freedom to choose foods from a far greater variety in our stores than people ever have had in the past. However, with freedom comes both risk and responsibility. You will have to make choices when you buy your food. Are these foods of nutritious value?

If you are health conscious and serious about what it is that you are putting into your body, you may want to learn how to read food labels. Food labels are found on most canned and packaged foods these days. We will be discussing food labels in greater detail in the next lesson.

For the purpose of this lesson, we will look at some tips that you may wish to consider when you are buying food. First, it is important that you choose a store that best suits your shopping needs. You may wish to consider its location, prices,

and services. You should also be aware that although most convenient or corner stores stock a lot of the foods that you buy, the prices at these stores tend to be higher than the prices found at larger grocery stores. If budgeting is an issue for you, you may want to take this into consideration. Also, the turnover of convenient store stock is not as high, therefore products may be stale or spoiled.

Other tips that you may wish to consider when you are buying your food include:

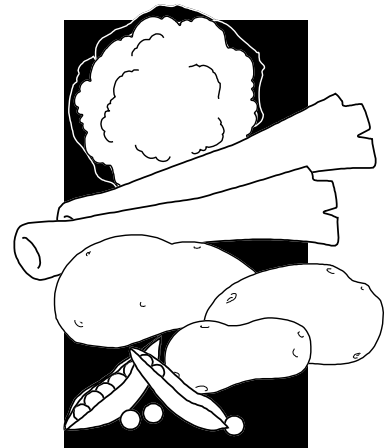
Check weekly flyers for the best buys.

Make a shopping list and stick to it.

Buy healthy foods from each of the four food groups.

Don't shop in a hurry or when the store is overly busy.

Don't shop when you are hungry, as this may lead to impulse buying.



EXERCISE #15

- I. List five tips that you may wish to consider when you are buying your food.**

- II. Unscramble the following words and write the new word in the space provided. (Hint: all words can be found in LESSON #15)**

gnibyu	<hr/>
tansesomtr	<hr/>
cgyreor	<hr/>
thahle	<hr/>
pshnpoig	<hr/>
srelfy	<hr/>
odof rgopus	<hr/>

LESSON #16

Living Single

Single people of all ages sometimes face problems when buying, storing and preparing food. Large packages of meat are often suitable for families, and vegetables can sometimes spoil before one person can use them. This lesson gives some helpful hints for those single people who may experience these problems.

Buy only what you will use - the small-size containers of food may be a little more expensive, but so is letting the unused portion of a large-size container spoil before using.

Don't be afraid to ask the grocer at the meat counter to break open a large sized package of wrapped meat to create a smaller, more convenient size for you.

Think up a variety of ways to use a vegetable when you buy it in large quantity. For example, you can divide a bundle of broccoli into thirds. Cook one third as a hot vegetable, use one third with a vegetable dip, and the other portion in a marinade salad. Be creative!

Experiment with stir-fry foods. A variety of vegetables and meats can be enjoyed this way. It is also a good way to use up left-over foods and is also an excellent source of nutrition.

Depending on the size of your freezer, you may want to make larger meals when you are cooking so that you can freeze individual portions to eat at a later time; particularly when making casseroles or one-pot meals.

Keep your loaf of bread in the freezer and remove slices only as you need them. Remember to close the bag tightly. Don't leave it in the refrigerator as it will make the bread stale.



EXERCISE #16

- I. Have you ever experienced problems regarding food storage or spoilage? If so, describe below.**

- II. What ideas or tips outlined in this lesson might you use? Do you have any of your own tips to include?**

LESSON #17

Nutrition Labelling

Most packaged foods have nutritional information on the label. This information is provided so that you, the consumer, gain knowledge about the nutritional value of that particular food item. In this lesson, we will examine how to read the nutrition information on food labels.

The following is an example of what a food label listing nutritional information may look like:

Serving Size tells you the size of serving for which the nutrition information is given.

Energy is the calories (cal) per serving. Energy may also be shown in kilojoules.

Fat shows both the total amount of fat in food and may also break it down into various kinds of fat.

Carbohydrate shows the total amount of sugar, starch, and fibre. Some labels may break these carbohydrates down individually.

NUTRITION INFORMATION	
1 SERVING = 25 g or approximately 19 crackers	
Per Serving	
Energy.....	108 cal
Protein.....	2.1 g
Fat.....	2.9 g
polyunsaturates.....	0.1 g
monounsaturates.....	1.4 g
saturates.....	0.7 g
cholesterol.....	1 mg
Carbohydrate.....	18 g

The label shown on the previous page gives you an idea of what a nutrition label may look like. Some labels may present more details than other labels, while other labels may not include any nutritional information at all. You should get used to reading these nutritional labels as they are very helpful in determining how much of the various nutrients you are receiving. If there is no nutrition label on a food item, you can read the ingredient label. Ingredients are listed in the order that they appear in the food item. Therefore, if sugar is the first thing listed as an ingredient, then that particular food item is made up of mostly sugar.

EXERCISE #17

- I. Have you ever read a nutrition label before? Did you or do you understand how to read one?**

- II. Using the nutrition label on the previous page as a reference, write down the definition of the following headings:**

Serving Size: _____

Energy: _____

Fat: _____

Carbohydrate: _____

LESSON #18

Expiry Dates

The expiry or *best before date* on a package indicates the time limit during which a product, if properly stored, will stay fresh. These dates are stamped on the foods when they are packaged for sale. Bread, dairy products, and packaged luncheon meats are all examples of products that will have a best before date somewhere on their labels.

Best before dates are shown using letters from the months. Below you will find the abbreviations for each month.

January	JA	May	MA	September	SE
February	FE	June	JN	October	OC
March	MR	July	JL	November	NO
April	AL	August	AU	December	DE

Along with the month abbreviation you will also see a number. For example, a loaf of bread showing 19JL or JL19 indicates that the bread should be used prior to July 19. However, keep in mind that food can remain good past the best before date if it is stored properly. The date indicates that food will start to lose its freshness and eventually spoil once it reaches the date shown on the package. You should never eat any food if you think it might be spoiled.

EXERCISE #18

- I. What does an expiry date or best before date indicate on a package of food?**

- II. Write down the months and dates that correspond with the following abbreviations.**

JA12	<hr/>
JL19	<hr/>
FE05	<hr/>
NO26	<hr/>
MR20	<hr/>
DE03	<hr/>
JN13	<hr/>
MA11	<hr/>
AL26	<hr/>
AU02	<hr/>

LESSON #19

Food Poisoning

Food poisoning is caused when you eat food that contains large numbers of harmful bacteria. Although the food may look and smell fine, it may be **contaminated** by hundreds, thousands, or millions of bacteria.

Bacteria are everywhere - on your hands, on raw foods, and in your house. However, before bacteria can cause illness, they need food, warmth, moisture and time to grow and multiply. For instance, one hundred bacteria can become one million in less than four hours at room temperature. Bacteria growth on food is much slower when the food is kept in the refrigerator.

The symptoms you get from food poisoning are quite similar to the flu. Cramps, diarrhea, vomiting, fever and headaches can all occur if you have food poisoning. If you suspect that food poisoning has occurred, it is very important to see your doctor as soon as possible.

In order to help prevent the food that you prepare from becoming contaminated with bacteria, it is important that you follow some safety tips. We will be looking at these safety tips in the next lesson.

EXERCISE #19

I. How is food poisoning caused?

II. What four factors need to be present before bacteria gets to the point where it would cause illness?

III. List five symptoms you could have from food poisoning.

IV. What should you do if you suspect that you have food poisoning?

LESSON #20

Preventing Food Poisoning

To help make sure that the food you prepare does not become contaminated with bacteria which could cause food poisoning, you should be aware of the following tips:

Always wash your hands before and after you handle any raw food. Raw food is any food (fruit, vegetables and meat) that has not been cooked.

Take off any jewelry when preparing food as it may carry bacteria to the food.

People with infectious diseases (flu or cold) or people with an infected cut should not work with food, as bacteria causing this infection may be transferred to the food. Bacteria called staphylococcus aureus are often expelled into the air when we cough or sneeze. If they happen to land on food which stays at room temperature, they will grow very rapidly.

Always wash your hands after touching your pet to ensure that you don't pass any unwanted bacteria on to your food.

When purchasing eggs, never buy a carton that has a cracked egg inside and

never used cracked eggs from your fridge.

Avoid buying dented, rusted or bulging cans.

Choose foods that you know you will use before the expiry date.

Wrap raw meat thoroughly and store on a plate in the fridge. Never let the blood drippings from raw meats come into contact with other food in your fridge.

Keep leftovers in the fridge for no more than three days. If you know that you won't be able to use them up, freeze them to eat at a later date.

Thaw frozen food in the fridge, not on the counter. This saves the nutrients and slows down bacteria growth.

Never re-freeze thawed, raw meat. Check when buying meat that it does not say previously frozen.

Thoroughly wash cutting boards after cutting raw meats and poultry.

Keep towels for drying hands away from those for drying dishes.

Never put cooked meat on the same plate that you used for the raw meat.

Always use a clean plate.

EXERCISE #20

Use complete sentences to write down eight tips to prevent food poisoning:

[illegible]

LESSON #21

Diabetes

When food is eaten, much of it is broken down to sugar which appears in our bloodstream. When you have diabetes, your body does not have enough **insulin** to remove the sugar from your blood. Therefore, the sugar from food remains in your blood and cannot be used by the body for energy. Although there is no cure for diabetes, this disease can be controlled through diet, pills, and insulin.

There are three types of diabetes. Type 1 occurs when the **pancreas** no longer produces any or very little insulin. People who suffer from Type 1 diabetes are insulin-dependent. They rely on insulin injections by a needle. Type 2 diabetes occurs when the pancreas does not produce enough insulin or when the body does not use the insulin that is produced effectively. However, people who suffer from Type 2 diabetes are not dependent on insulin. The third type of diabetes is called gestational diabetes and is a temporary condition that occurs during pregnancy.

Although the causes of diabetes are unknown, there are several things that can increase the risk of developing diabetes. For the purpose of this workbook, we will be examining factors that can increase the risk of developing Type 2 diabetes.

Factors that can influence the risk of Type 2 diabetes include:

- family history of diabetes
- age - over 45 years old
- obesity**
- physical inactivity
- race/ethnicity (diabetes is more prevalent in people of Aboriginal, African and Latin-American descent)

People with Type 2 diabetes can experience few or no symptoms of diabetes, sometimes making this disease undetected. If the list above is characteristic of yourself, you may want to have routine blood tests to determine if you have diabetes. However, in other cases, some symptoms do exist. These symptoms may include:

- frequent urination
- unusual thirst
- extreme hunger
- frequent infections
- cuts and bruises that are slow to heal
- tingling or numbness in the hands or feet
- recurring skin, gum or bladder infections

If you suffer from diabetes, it is very important that you watch your diet. You need to stay away from foods that have a lot of sugar in them because when they are eaten, they will produce a rapid rise in blood sugar. Foods that you should avoid include: sugar, marmalade, regular soft drinks, candy, honey, preserves, molasses, jams, jellies, maple syrup, regular chewing gum, regular pudding and

gelatin desserts. All of these food items are concentrated sources of sugar. You would also want to carefully read food labels, as discussed in LESSON #17. You should avoid foods if the ingredient list on its label includes sugar, glucose, fructose, sucrose or other words ending in “ose” in the first or second spot on the ingredient list.

It is also important that you do not skip any meals or snacks throughout the course of the day. Maintaining good health will increase if you follow a *diabetes meal plan*. A diabetic diet is a method of measuring the amount of sugar entering the blood from the digestion of foods eaten. Different foods put different amounts of sugar into the blood. Almost all of bread, vegetables and fruit are changed to sugar during digestion. Therefore, measuring foods, which in turn measures the amount of sugar entering the blood, will make sure that there is enough insulin from your pancreas to keep the amounts of sugar in your blood at normal levels. Please note that it is a good idea to consult a dietician or your doctor to discuss diabetic meal plans in greater detail.

Exercise is another measure that will improve your health if you are suffering from diabetes. Regular exercise may improve blood sugar control. It also increases the circulation of blood to all parts of the body.

EXERCISE #21

I. What happens to your body when you have diabetes?

II. Describe what happens if you have Type 2 diabetes.

III. List five factors that can influence the risk of diabetes.

IV. What should you do if you suffer from diabetes?

LESSON #22

HIV & AIDS

AIDS stands for Acquired Immune Deficiency Syndrome. The word acquired refers to the fact that the condition is not hereditary. AIDS is a syndrome associated with HIV infection. HIV stands for Human Immunodeficiency Virus and is believed to cause damage to your immune system. For the purpose of this workbook, we will be discussing the importance of nutrition if you are suffering from HIV or AIDS. For information in greater detail on AIDS and HIV you may wish to refer to the AIDS and HIV Literacy Workbook, as its entire content deals with issues surrounding HIV/AIDS.

Eating well is one of the first steps in taking care of yourself if you have HIV or AIDS, and for that matter, even if you don't. Eating nutritious food helps your immune system fight diseases and gives you energy. (Remember we discussed this in LESSON #4). HIV-positive people tend to suffer from malnutrition and **malabsorption**. Their body uses up vitamins and minerals faster than normal. It is harder for the body to absorb what it needs from the food that is eaten. The stomach may even have a hard time breaking down the food into a form that the body can use. Therefore, it is very important for HIV sufferers to watch what they eat.

During a state of chronic illness, or long-term illness, the body requires more food than normal. Although it is good to eat regular meals, it may be easier for some to eat smaller meals more often throughout the day. Getting a balance of basic nutrients like proteins, carbohydrates, and fats is important. Being HIV positive means that the body may need more protein than it did before. It has also been suggested that people living with HIV/AIDS take higher than normal doses of vitamins.

When you are HIV positive you not only want to watch what you eat but also how you prepare your food. You should avoid undercooked or raw meat or fish. Some undercooked foods may put you at risk for bacterial or other infections. Raw vegetables and fruit must be thoroughly washed to remove all dust and chemicals. This is a habit everyone should get used to doing. It is also important that you wash your hands with soap before handling any food.



EXERCISE #22**I. What do the following letters stand for?**

AIDS: _____

HIV: _____

II. Fill in the blanks below.

1. One of the first steps in taking care of yourself if you are living with HIV/AIDS is _____
2. Eating nutritious food helps your immune system fight _____ and gives you energy.
3. HIV positive people's bodies tend to use up _____ and _____ faster than normal.
4. During a state of chronic illness, the body requires more _____ than normal.
5. Getting a balance of basic nutrients like _____, _____ and _____ is important.

LESSON #23

Heart Disease and Stroke

More Canadians die from heart disease and stroke than any other disease. There are ways to reduce your risk of getting these health problems. Although some factors such as age, family history, gender, or race can't be controlled, there are risk factors that you can control. As this workbook is designed to increase your knowledge regarding food and nutrition issues, we will be looking at how you can decrease your chances of suffering from these health problems by looking at nutrition.

Several factors can increase your risk of developing heart disease and stroke. Controllable risks, things you can monitor or control, of heart disease include:

- smoking or exposure to second-hand smoke
- high blood pressure
- high blood cholesterol
- inactive lifestyle
- diabetes
- being more than 30lbs overweight
- extra weight around your abdomen
- stress

Several of the above controllable risks are also true of increasing your risk of experiencing stroke, such as smoking, high blood pressure, diabetes, and high

blood cholesterol. Other factors include: having a history of a *mini-stroke* or *warning stroke*, and excess alcohol intake.

Looking at the lists above, we can see that some of these factors can be controlled through our diet. Let's start by looking at high blood pressure. High blood pressure damages blood vessel walls. It leaves scars that promote the build-up of fatty plaque on artery walls. High blood pressure is a leading cause of stroke and increases the risk of heart disease up to four times. Nutrition plays a part in decreasing high blood pressure. If you are overweight you should try to lose the extra weight. Eating healthy as well as getting and staying active will help you do so. Your doctor may also advise you to cut down on your salt intake. Furthermore, you should drink little or no alcohol.

High cholesterol is another risk factor when it comes to heart disease and stroke. Cholesterol is a group of blood fats. You may have heard that there are "bad" cholesterol and "good" cholesterol. What this means is that some cholesterol promote the build-up of fatty plaque inside arteries while other cholesterol protect arteries from plaque build-up. Diet and medication can often help balance the body's natural production of cholesterol. Let's look at how diet influences this.

For starters, you should reduce your intake of all fat, particularly **saturated fat**. Your fat intake should be 30 percent or less of your total daily calories. Average fat intake per day should be 65 grams or less for women and 90 grams or less for men. Use *Canada's Guide to Healthy Eating* to plan a healthier diet. Doing so will help you choose lower-fat dairy products while encouraging eating more grains, cereals, fruits and vegetables. It is also important that you use low-fat cooking methods such as baking, broiling and steaming. Also, don't forget to drink lots of water.

Although we are concentrating on food and nutrition, it is important to mention that if you smoke you should seriously think about quitting because smoking increases the "bad" cholesterol levels in the blood. Also, you should increase your activity level, as activity can improve your levels of "good" cholesterol.

EXERCISE #23

I. List eight factors that can increase your risk of developing heart disease.

II. Which of the above also increase the risk of stroke?

III. Write a paragraph to describe how you can monitor your diet in order to decrease your risk of developing both heart disease and stroke.

LESSON #24

Nutrition and Pregnancy

Women who are pregnant have to be especially careful about what it is that they are putting into their bodies. Expectant mothers are eating for two, therefore, they need to choose foods that both she and the baby need for health. Mothers need to take care of themselves during their pregnancy and while they are breastfeeding to help make sure that their baby will be strong and healthy. If expectant mothers do not choose a sensible diet, their baby won't get the nutrients it needs.

If you or someone you know is under nineteen years old and pregnant, their diet is especially important. At this age, the body is still growing, so the foods that the person eats must help her and her baby grow and remain healthy. She will need the same foods as older pregnant women and more. It is very important to talk to a doctor about proper nutrition.

Pregnant women should eat a variety of foods from each group every day. Pregnant women and women who breast feed need four servings from the Milk Product Food Group a day. They should also consume at least five servings of Grain Products, two of which should be whole grain or enriched. She should eat at least five servings from the Vegetables & Fruit Food Group, including at least two

servings of vegetables. Pregnant women also need to consume at least two servings from the Meat & Alternative Food Group. Eating the recommended serving amounts will ensure that the expectant mother gets the right amount of nutrients needed to keep her and her baby healthy.

It is important to eat a wide variety of food, as discussed above. However, it is also important to avoid a few things. For instance, pregnant mothers should avoid foods containing artificial sweeteners. Pregnancy is not the time to be limiting weight gain by using sugar substitutes. Women should also limit the amount of caffeine they use, as too much caffeine during pregnancy may have a harmful effect on the fetus. Also, pregnant women should not drink alcohol. Alcohol affects physical development of the baby and can cause brain damage.

A final word of caution is that babies need nutrients throughout the day and night. Pregnant women should not go longer than 12 hours without eating. Therefore, if someone is a late riser who doesn't eat breakfast until 10:00 a.m. then she should make sure that she has a nutritious snack at 10:00 p.m. before going to bed.

EXERCISE #24

- I. Create a balanced meal plan for a day that would be suitable for an expectant mother.**

BREAKFAST	LUNCH	SUPPER	SNACKS

- II. Use complete sentences to describe the food items pregnant women should avoid.**

LESSON #25

Fibre

Fibre is the portion of some foods that is not digested by the body. Fibre is often referred to as the *roughage* or *bulk* in one's diet. Although fibre is not a nutrient, there are many good reasons to eat more food containing fibre. Let's look at why this statement is true.

Fibre is important for many reasons such as for **bowel** health, heart health, and for healthy weight. In regard to bowel health, fibre acts as a sponge, absorbing water and moving the bowel. It may also reduce the risks of contracting certain diseases in the large intestine.

We also mentioned that fibre helps maintain a healthy weight. The reason for this is because foods high in fibre are bulky, which takes longer to chew and helps to make you feel full after eating. For those who are trying to eat less or lose weight, high fibre foods may help with this. It is also known that certain kinds of fibre, namely from oat bran, dried beans and lentils, help to lower the level of cholesterol in the blood. These types of fibre are also helpful for controlling blood sugar levels in people with diabetes.

Fibre is found in a variety of foods that we consume. High fibre sources can be found in bran cereals and **legumes** such as baked beans, kidney beans, and dried peas and beans. Fruits containing a high amount of fibre include dates, dried figs, and prunes.

A moderate source of fibre can be found in whole grain cereals and bread products, as well as in rye bread and bran muffins. Vegetables with moderate sources of fibre include beets, broccoli, brussel sprouts, cabbage, corn, parsnips, green peas, spinach, sweet potatoes, and turnips. There are also many fruits which contain moderate sources of fibre. Apricots, apples, bananas, blueberries, and oranges are samples of such fruit.

You should be aware of how much fibre you eat. Healthy eating may require that you adjust your current intake of foods that contain fibre. If you are going to do this, you should do so gradually. Do not overindulge with too many high fibre sources as this may lead to stomach pains, gas and diarrhea. Make gradual changes such as switching from white bread to whole wheat or cracked wheat bread, and choosing fruits as desserts after meals.

EXERCISE #25**I. Answer either true or false.**

1. Fibre is digested by the body. _____
2. Fibre is one of the essential nutrients. _____
3. Fibre is important to ensure both bowel and heart health. _____
4. Some types of fibre are helpful for controlling blood sugar levels
in people who suffer from diabetes. _____
5. Dates and dried figs contain small amounts of fibre. _____

II. Write the following food items under the appropriate column.

bran cereal	broccoli	cabbage	bananas
blueberries	kidney beans	oranges	dried peas
prunes	dates	dried figs	baked beans
rye bread	corn	apples	apricots

HIGH FIBRE SOURCES		MODERATE FIBRE SOURCES	

LESSON #26

Salt

Salt and salty foods can be part of a healthy way of eating if they are eaten in moderation. However, studies have shown that Canadians are consuming between ten to twenty times the amount of salt that they need. You may be wondering why there is a concern about salt. Let's look at these concerns.

Firstly, it is not the actual salt that is a concern, but rather, it is the sodium that is found in salt. Too much sodium is more harmful for some people than others. For some people, the sodium they eat can actually cause high blood pressure. High blood pressure in turn can lead to heart disease and stroke.

How much salt is healthy? Adults need about 0.7 grams of sodium per day to keep healthy. This amounts to approximately a 1/4 teaspoon of salt. As mentioned, our bodies only need a small amount of sodium, however, a healthy person can consume upwards of 6 - 7 grams throughout the day.

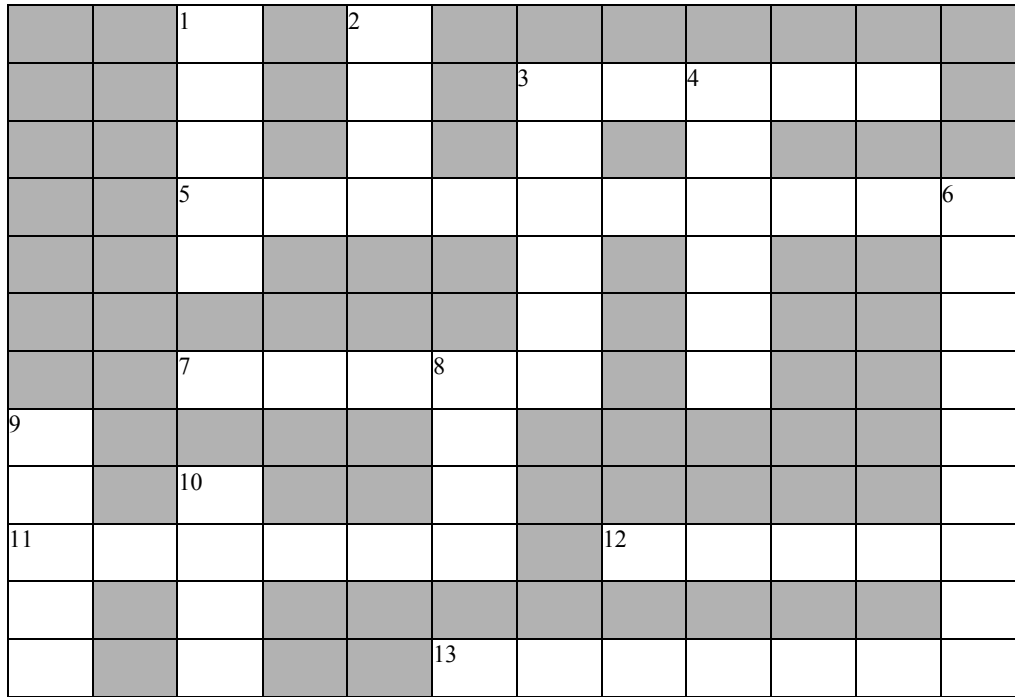
Keep in mind that sodium becomes part of our food in different ways, not only in table salt. Almost 1/3 is found naturally in foods such as in meat and milk. You need not be concerned with the salt found naturally in foods.

However, it is also added during food processing, such as in luncheon meats and snack foods. You should be conscious that these types of processed foods tend to be very high in sodium. Reading the labels found on the packages will tell you how much sodium is added to foods.

If you are guilty of eating way too much salt it is important that you cut down on this sodium intake. Gradually cut down on these high sodium items. Find things to replace them, such as adding other low sodium spices to foods, or move from salty snacks to unsalted snacks such as crackers or pretzels.

EXERCISE #26

Crossword Puzzle:



Across:

3. Salt is considered a _____.
5. Salt can be part of a healthy way of eating if it is eaten in _____.
7. Sodium may _____ high blood pressure.
11. Canadians are consuming between 10- 20 times the _____ of salt that they need.
12. Package ingredients are listed on the _____.
13. Eating too much salt is not _____.

Down:

1. Adults need about 0.7 _____ of sodium per day.
2. Sodium becomes part of _____ in many ways.
3. High blood pressure can cause a _____.
4. Limiting your salt _____ can be done gradually.
6. A third of sodium is found _____ in foods.
8. Sodium is found in _____.
9. Pretzels and chips are _____ foods.
10. You cannot live without eating _____.

LESSON #27

Overall Health

Lifestyle or the way people live has an important effect on overall health. The choices people make about smoking, alcohol, drugs, diet, and regular activity have an effect on their quality of life. This particular workbook was written to inform the reader about the importance of healthy eating. However, eating well, along with being active, feeling good about yourself and avoiding addictive behaviours are all ways to a healthy lifestyle.

Throughout this workbook, you were provided with suggestions promoting healthier eating habits. For this final lesson, we will recap some of the tips that were mentioned throughout previous chapters.

Trim visible fat from meat and remember to choose low fat methods of cooking such as baking, broiling, and steaming.

Make snacks nutritious. Incorporate milk, juice, yogurt, and fresh fruit as possible snack foods.

Plan meals to include more pasta, rice, beans and vegetables.

Cut down on high calorie snack foods, sweets, baked goods and alcohol.

Sticking to the tips listed above as well as suggestions throughout this workbook will lead you in the direction of healthy eating.

EXERCISE #27

Use the space below to describe what you learned from this workbook.

Will you be making any changes in your diet?

[illegible]

GLOSSARY

ANATOMY -	the science of the structure of the body.
ADEQUATE -	to make equal, in nutrition, the description of a diet that provides all of the essential nutrients, fibre and energy in amounts sufficient to maintain health.
ANTIBODIES -	proteins made by the immune system, designed specifically to combine with and inactivate specific antigens (substances that are foreign to the body).
BOWEL -	referring to the intestines or interior of the body.
CALCIUM -	one of the major minerals found in the body, best known for its role in bone development.
CALORIES -	a measure of the energy in foods.
CARBOHYDRATE -	an energy rich compound mainly containing carbon, hydrogen, and oxygen.
CELLS -	the basic building blocks of life.
CONTAMINATE -	to infect.

DEFICIENT -	as used in nutrition, a term for inadequate dietary intake of a nutrient.
DISCRETION -	using your own judgement
ENRICHED -	refers to a process by which the nutrients thiamin, riboflavin, niacin, and iron are added to refined grains and grain products.
EXTRAVAGANT -	extremely or excessively elaborate.
FAT CELLS -	cells that specialize in the storage of fat.
FIBRE -	the indigestible parts of dietary carbohydrate; non-nutrient parts of some foods.
FOLACIN -	a B vitamin that is important in the manufacture of new cells.
FLUORIDE -	a nutrient which helps create strong teeth and bones.
GLUCOSE -	a single sugar used in both plant and animal tissue.
GLYCOGEN -	a storage form of carbohydrate energy (glucose).
INORGANIC -	being or composed of matter other than plant or animal.
INSULIN -	medicine used to treat diabetes.

LEGUMES -	plants that produce “pod like” vegetables such as peas and beans.
MALABSORPTION -	the opposite of absorption: without the ability to absorb.
MEMBRANES -	thin flexible tissue in the body.
MODERATION -	to use sparingly, only a little bit.
NUTRIENTS -	components of food that help to nourish the body; provide the body with energy, serve as building material, and maintain or repair body parts.
NUTRITION -	referring to the nutrients found in food - eating healthy foods equals good nutrition.
NOURISH -	supply or feed with food.
OBESITY -	an accumulation of body fat such that actual body weight exceeds ideal body weight by 20% or more.
PANCREAS -	an organ with two main functions - the making of hormones and the manufacturing of digestive enzymes.

- SATURATED FAT -** made up of saturated fatty acids, usually solid at room temperature, tend to raise blood cholesterol.
- SODIUM -** metallic element found in salt and other compounds.
- TOFU -** meat alternative; made from bean curd.
- VITAMINS -** a major class of nutrients, consisting of two types fat-soluble and water-soluble.



REFERENCES

Health and Welfare Canada, Canada's Food Guide To Healthy Eating.

Hamilton, E., Whitney, E., &Sizer, F., Nutrition: Concepts and Controversies,
St. Paul: West Publishing Company, 1988.

Kreutler, Patricia A., Nutrition: In Perspective, New Jersey: Prentice-Hall, Inc., 1980.

Manitoba Association of Home Economists, Eating Healthy Foods Series,
Winnipeg: MAHE and NLS, 1997.

Manitoba Health - Health Promotion, Towards Healthier Eating: The Facts on Sugar.

Manitoba Health - Health Promotion, Towards Healthier Eating: The Facts on Fibre.

Manitoba Health - Health Promotion, Towards Healthier Eating: The Facts on Salt.

Manitoba Health - Health Promotion, Baby Building Foods: A Guide for Expectant Mothers.

Patterson, Brent & Robichaud, Francis., Managing Your Health: A Guide for People Living With HIV or AIDS, Toronto: CATIE, 1996.

Heart and Stroke Foundation - Heart and Stroke Risk Factor Series, Take Control: Actions to Lower Your Risk.

What do you think of this Workbook?

What is the title of this workbook?

Did you find this workbook useful? Yes__ No__ Why or why not?

Did you learn things that you wanted to know about? Yes__ No__

Example: _____

Do you think that you will use any of the ideas in your everyday life? Y__ N__

How: _____

Was the reading too easy__ just right__ or too difficult__?

Was the reading boring__ or interesting__?

I suggest: _____

Were the exercises too easy__ just right__ or too difficult__?

Were the exercises boring__ or interesting__?

I suggest: _____

Which other workbooks, if any, have you completed?

What other topics would you like to learn about in a workbook?

Do you think the workbooks are a good way to learn about these topics?

Yes__ No__

Do you think there are other ways to learn about these topics? Do you have any suggestions for us? _____

Thank you for taking the time to complete this form.

Please return the completed form to the John Howard Society instructor or send it to:

The John Howard Society, 583 Ellice Avenue, Winnipeg, MB, R3B 1Z7
Tel: (204) 775-1514 Fax: (204) 775-1670 e-mail: office@johnhoward.mb.ca