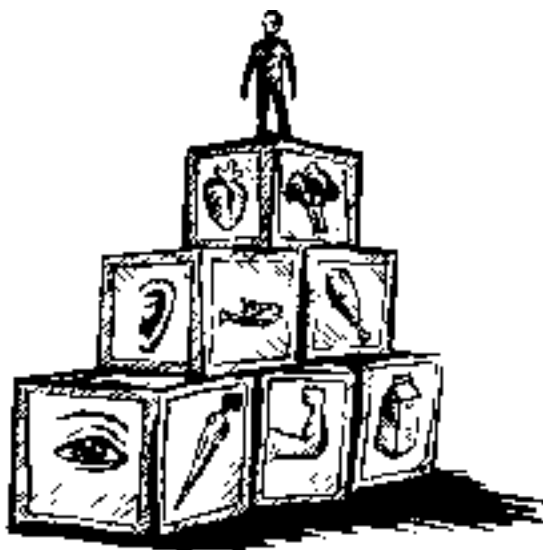


Healthy Eating: A Guide For Persons With Multiple Sclerosis

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Healthy Eating:

A Guide For Persons With Multiple Sclerosis

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Multiple Sclerosis Society of Canada

The Multiple Sclerosis Society of Canada is pleased to be a source of information about multiple sclerosis. The information in this publication is based on professional advice and expert opinion, but does not represent therapeutic recommendations or prescription. For specific information and advice, please consult your personal physician.

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HEALTHY EATING: A GUIDE FOR PERSONS WITH MULTIPLE SCLEROSIS

Multiple sclerosis is an unpredictable disease, and as a result there are numerous unproven treatments, some of the most popular being special diets targeted towards the individual with multiple sclerosis. To date, no special diet has been scientifically shown to change the course of multiple sclerosis, despite all the claims.

A well-established medical fact is that **proper nutrition** is the key to **good health**. The 1990 Health and Welfare Canada Nutrition Recommendations give the proper nutrition guidelines that should be followed by all Canadians, including people with multiple sclerosis.



CANADA'S GUIDELINES FOR HEALTHY EATING

- Enjoy a **VARIETY** of foods.
- Emphasize cereals, breads, other grain products, vegetables and fruits.
- Choose low-fat dairy products, lean 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 advantage of healthy eating for people with multiple sclerosis include:

- fewer complications of poor nutrition, such as anemia, protein deficiency, obesity or inadequate body weight
 - ability to fight off infections
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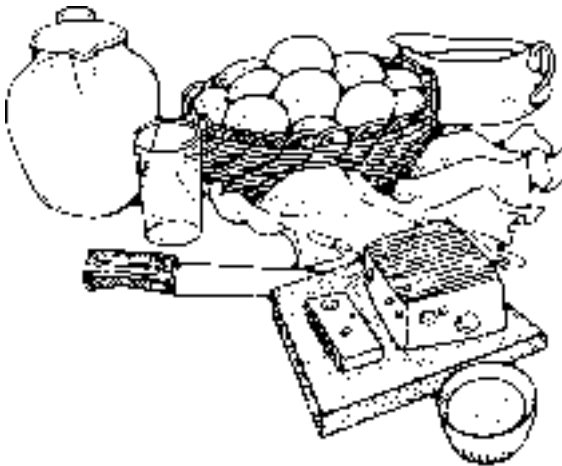
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- increased energy level and reduced fatigue
 - improved wound healing
 - less difficulty with particular symptoms such as constipation

A balanced diet helps you keep healthy and strong to make the most of what you have!

A BALANCED DIET

A balanced diet is made up of foods selected from each of the food groups in Canada's Food Guide. A variety of foods should be chosen from each of the food groups daily. Each food group has certain important nutrients needed by the body that cannot be supplied by any other food group.

CANADA'S FOOD GUIDE



Different people need different amounts of food. The amount you need everyday from the 4 food groups and other food depends on:

- age
- activity level
- pregnancy or breast feeding
- body size
- male or female

That is why the Food Guide gives a lower and higher number of servings for each food group. For example, young children can choose the lower number, while male teenagers can go to the higher number.

Most other people can choose servings somewhere in between.

Grain Products

Choose whole grain and enriched products more often. **5-12** servings each day.

Examples of 1 serving:

Bread	1 slice
Hot cereal	175 mL (3/4 c.)
Cold cereal	30 grams
Cooked spaghetti, macaroni, rice or noodles	125 mL (1/2 c.)
Hamburger, wiener, bun, pita or bagel	1/2

Vegetables and Fruits

Choose dark green and orange vegetables and orange fruit more often. **5-10** servings each day.

Examples of 1 serving:

Fruits, vegetables or their juices
(fresh, frozen or canned) 125 mL (1/2 c.)
1 medium-size potato, carrot,
tomato, peach, apple, orange
or banana
Salad 250 mL (1 c.)

Milk Products

Choose lower-fat milk products more often.

		servings
Children	4-9 years	2-3
Youth	10-16 years	3-4
Adults		2-4
Pregnant or nursing women		3-4

Examples of 1 serving:

Fluid milk
(whole, 2%, 1% or skim) 250 mL (1 c.)
Cheese 50 grams
Yogurt 175 mL (3/4 c.)
Milk pudding 250 mL (1 c.)
Cream soup
(made with milk) 375 mL
(1 1/2 c.)

Meat and Alternatives

Choose leaner meats, poultry and fish, as well as dried peas, beans and lentils more often. **2-3** servings each day.

Examples of 1 serving:

Lean, cooked meat, fish,	
poultry	50-100 grams
Eggs	1-2
Peanut butter	30 mL (2 Tbsp.)
Cooked dried peas, beans	
or lentils	125-25 mL
	(1/2 - 1 c.)
Tofu	100 grams
	(1/3 c.)

Other Foods

Taste and enjoyment can also come from other foods and beverages that are not part of the 4 food groups, but are commonly used by Canadians. Some of these foods are higher in fat or Calories, so use these foods in moderation. They include:

- foods that are mostly fats and oils, such as butter, margarine, cooking oils, mayonnaise, oil-based salad dressings,
-

shortening, lard

- foods that are mostly sugar such as jam, honey, syrup, candy, marshmallows, popsicles
- high-fat and/or high-salt snack foods such as chips (potato or corn), pretzels
- beverages such as water, coffee, tea, soft drinks, fruit-flavoured drinks, alcohol
- herbs, spices, condiments such as pickles, mustard, ketchup, horseradish, soya sauce, steak sauce

These foods can be used in making meals and snacks and are often eaten with foods from the 4 food groups.

SALT

It is advisable to use less salt in cooking and on the table and to choose highly-salted snack foods less often.

ALCOHOL

Canadians are advised to reduce their total alcohol consumption to 1 drink per day and no more than 7 drinks a week. If you are pregnant or breast-feeding, avoid alcohol.

CAFFEINE

Intake should not exceed the equivalent of 4 cups of coffee a day, as it acts as a diuretic (increases the need to urinate) and bladder irritant. Caffeine is also obtained from tea, cola drinks, chocolate and some cold remedies and head-ache medicines.

FLUIDS

Daily intake of fluids (water, juice, tea, coffee) should satisfy your thirst. Choose water often and be sure to drink more in hot weather or when you are very active. An adequate amount of fluid is needed by the body to maintain fluid levels and to aid in the removal of body waste products.

FATS

Choose:

- low-fat dairy products - skim milk, low-fat cheese
- lean meats, fish, poultry without skin
- foods prepared with little or no fat

Remember that doughnuts, croissants, pastries and nuts contain hidden fat.

It is recommended that only 1/3 of your total

fat intake should be a saturated fat, such as butter, hard margarine, shortening, animal fats, whole milk and whole milk products (ice cream, cheese, sour cream).

The other portion of your fat intake can include oils, most soft margarine, nuts and seeds.

A saturated fat is one that is solid at room temperature, a polyunsaturated fat is liquid at room temperature, while a mono-unsaturated fat is liquid at room temperature but becomes partly solid when chilled.

NUTRIENTS NEEDED FOR GOOD HEALTH

Eating a variety of foods from all food groups provides the nutrients needed. These are: protein, carbohydrate, fat, vitamin, minerals, water. Some foods are better sources of these nutrients than others.

Carbohydrates

- chief source of energy
- should be used to replace some of the fat in the diet

Excellent Sources

Bread, cereals
Rice, pastas
Potatoes
Dried peas and
beans
Fruit
Milk

Poor Choices

Syrup and
table sugars
Candy
Soft drinks
Jams and jellies
(empty calorie
foods - energy, but
few nutrients

Protein

- the body's building blocks
- promotes growth and development
- builds muscle tissue which holds the bone structure together
- provides strength to move and work
- forms antibodies that help fight infection
- aids in making hemoglobin - an oxygen carrier in the blood

Excellent Sources

Meat

Fish

Poultry

Eggs

Cheese

Milk and milk products

Soybeans

Good Sources

Dried peas and
beans

Chick peas

Peanut butter

Fats

- provide energy
- carry fat-soluble vitamins A,D,E and K
- add flavor and variety to the diet
- contribute to maintenance of healthy skin tissue
- form a protective cushion around vital organs

Canadians should reduce their fat intake by selecting and preparing foods with small amounts of fat.

High in
Polyunsaturated
Fat

Corn oil
Safflower,
sunflower oil
Salad dressings
with oils
Peanut butter

High in
Saturated Fat

Butter
Hard margarines
Fat in meats
Cheese
Potato chips
Chocolate

Walnuts	Cream
Sunflower seeds	Palm oil
Sesame seeds	Coconut oil

High in Monounsaturated Fat
Canola, olive oil

Vitamin A

- helps bone and tooth development
- promotes good night vision
- maintains healthy skin and body membranes

Excellent Sources	Good Sources
Liver	Broccoli
Sweet potatoes	Peaches
Carrots	Tomatoes
Apricots	
Cantaloupe	
Winter Squash, pumpkin	
Dark green, leafy vegetables such as spinach and beet greens	

Vitamin B

B1 (thiamin)

- releases energy from carbohydrates
- promotes normal growth and appetite

B2 (riboflavin)

- maintain healthy skin
- aid in nerve function
- releases energy to body cells

B3 (niacin)

- promotes growth and development
- aid in nerve function
- aid in digestion

B6 (pyridoxine)

- promotes production of antibodies
 - formation of red blood cells
-

Excellent Sources

Pork (lean)

Organ meats

Nuts

Good SourcesWhole grain or
enriched breads
and cereals

Fish

Legumes

Egg yolks

Milk

Vitamin C

- maintains strong blood vessel walls
- wound healing
- bone and tooth formation

Excellent Sources

Broccoli

Cantaloupe

Brussel sprouts

Oranges

Grapefruit

Strawberries

Good Sources

Green peppers

Fruit juices with
Vit.C addedCauliflower

Vitamin D

- The sunshine vitamin
- formed in the body by the direct action of sun light on the skin
- works with calcium to build strong bones and teeth

Excellent Sources

Milk and margarines
fortified with vitamin D

Good Sources

Organ meats
(liver)
Egg yolks
Salmon, tuna

Folate

- involved in normal red and white blood cell formation
- involved in energy production

Excellent Sources

Liver, kidney
Spinach, asparagus,
broccoli

Good Sources

Walnuts
Oranges, bananas
Lettuce

Dried beans

Almonds

Eggs

Salmon

Dried peas

Calcium

- builds and maintains strong bones and teeth
- helps nerves and muscles function properly
- helps blood clot

Excellent Sources

Milk- whole, skim
or buttermilk

Yogurt

Cheese, hard or
processed

Good Sources

Creamed soups,
puddings and
custard

Salmon (with
bones)

Mackerel,
oysters

Soybeans, nuts,
tofu

Iron

- an essential part of hemoglobin - an oxygen carrier in the blood
- helps body cells release energy from food

Excellent Sources

Liver, kidney
Enriched breads
and cereals
Dried peas and beans

Good Sources

Chicken, lamb,
beef
Nuts and
seeds
Dried prunes,
apricots

Minerals

ZINC

- helps energy metabolism
- aids in tissue formation

Sources: Meat, shellfish, poultry
 Liver, egg yolk
 Whole grains

SELENIUM

- prevents breakdown of fats and other body chemicals

Sources: Whole grain cereals
 Meat, dairy products, poultry

COPPER

- aids in formation of red blood cells

Sources: Liver, shellfish
 Whole grains, nuts

MAGNESIUM

- builds and maintains strong bones and teeth
- helps energy metabolism and tissue formation

Sources: Whole grains
 Vegetables

IODINE

- helps thyroid gland to function
-

Sources: Iodized salt
 Seafood

SPECIAL DIETS

No special diet has been scientifically shown to modify the natural course of multiple sclerosis, despite numerous claims.

Fad diets may create false hopes and if followed to the extreme, may have detrimental effects on the well-being of individuals with multiple sclerosis.

The following are a few of the most publicized diets with recommendations by the International Federation of Multiple Sclerosis Societies.

Vitamin Supplementation or Megavitamin Therapy (massive doses of vitamins)

- Adequate intake of vitamins is advised for all individuals with MS, but there appears to be no scientific proof that supplementary doses of vitamins, alone or in combination, favorably affect the course of the disease.
-

-
- Excessive doses of some vitamins, especially A and D, may produce harmful effects.
 - When pyridoxine (Vitamin B6) is used in high doses, it sometimes produces weakness and loss of balance.
 - High levels of Vitamin C can produce stomach problems and kidney stones.
 - Vitamins are expensive

Mineral Supplementation

- The use of minerals, such as zinc, magnesium and calcium, in a large single dose has never been tested in a properly controlled study.
- Many minerals are harmful when taken at any level above the traces found in normal foods.

Low-Fat Diet (Swank Diet)

- This is a diet having a fixed low intake of animal fats and a low, inter-
-

mediate or high level of vegetable oils.

- In the reported studies, no matched control group was studied at the same time, and although the diet is not associated with any significant risks, it is clear that the diet does not prevent exacerbations (attacks) or progression.

Polyunsaturated Fatty Acid Supplements

- Supplementing the diet with linolenic acid, linoleic acid, sunflower seed oil, safflower seed oil or evening primrose oil, has shown conflicting results in the studies conducted to date.
 - This would add quite a few calories to the diet, so would need to be combined with a low fat diet.
 - This therapy may have some benefits to a very small percentage of individuals with MS.
-

Allergen-Free Diet

- This diet involves avoiding foods that are known to produce hives, other skin eruptions, asthma attacks, etc.
- Short term use of this diet has little risk, provided food from all food groups are eaten.
- It has never been tested in a properly controlled trial and there appears to be no generally accepted scientific basis for use of this therapy.

Gluten-Free Diet

- This is usually a balanced diet, which excludes wheat and rye.
 - It may result in inadequate protein and fibre intake.
 - On the basis of available data, this diet must be considered ineffective in multiple sclerosis.
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MacDougal Diet

- This combines a low-fat diet with a gluten-free diet and adds supplements of vitamins and minerals.
- It has never been tested in a properly controlled trial, and there appears to be no scientific evidence that this diet is effective in multiple sclerosis.

Kousmine Diet

This diet advises the consumption of:

- less fats, particularly animal fats, less meats, processed products and sugars.
 - It involves the consumption of more raw fruits and vegetables and whole grain cereals (in order to obtain maximum vitamins and minerals).
 - While these basic dietary principles are approved by dieticians the diet also includes information, for the most part, that is unsubstantiated by scientific evidence.
-

Always remember to consult with your physician before changing your diet in any way.

COMMON CONCERNS

Constipation

- Constipation is very common and is caused by a “sluggish” bowel and the lack of physical activity.
- To help prevent constipation, the diet should include fibre from cereals and legumes.

The following foods are high in fibre:

- Whole grain breads, bran cereals, brown rice
- Dried fruits - prunes, raisins, apricots, figs
- Legumes and nuts - baked beans, kidney beans, peanuts, peanut butter

Also important is:

- adequate fluid intake (8 cups a day). This can include juices, tea and coffee.
 - regular activity, whether it be swimming, yoga or wheelchair exercises.
-

- emptying the bowel at the same time of day. The best time is usually 1/2 hour after a meal, when the emptying reflex is strongest.

Laxatives, such as Ex-Lax™, should be avoided as they irritate the intestine and eventually worsen constipation.

Urinary Tract Infections and Formation of Renal Stones

To reduce this risk, it is recommended that individuals with multiple sclerosis, who are sensitive to infections and formation of stones:

- drink lots of fluids
- empty the bladder completely
- choose cranberry juice rather than other juices. Cranberry juice reduces the strong odor of urine and makes it more acidic. This helps to prevent the growth of germs.

Weight Gain

- A significant amount of weight gain
-

may increase the risk of serious medical problems and make walking more difficult.

- When trying to reduce the calories in your diet, remember to select foods high in essential nutrients and to avoid foods which supply “empty calories”, such as pop drinks, candy, chocolates, chips, etc.
 - Follow “Canada’s Guidelines for Healthy Eating” by choosing foods lower in fat, higher in fibre and lower in sugar:
 - skim milk products
 - lean meats
 - whole wheat or bran
 - breads and cereals
 - fresh fruits and vegetables
 - Check your portion sizes with those recommended in Canada’s Food Guide.
 - Read labels on food products. The ingredients are listed from highest to lowest amount found in that product. If sugar is listed as the first ingredient,
-

then there is more sugar than any of the other ingredients.

- Choose a regular exercise program that is suited to you. The best way to lose weight is to combine healthy eating with exercise.
- Fad diets or very low calorie diets are not advised.

Weight Loss

- Occasionally individuals with multiple sclerosis may experience weight loss due to swallowing problems, fatigue or physical limitations.
 - When weight loss is more than 10% of your average weight, and occurs in the absence of a weight loss program, it may represent serious malnutrition. It then becomes extremely important that you follow the guidelines for healthy eating and try to increase your daily energy intake.
-

1. Try to have a high energy dessert after each meal:
 - fruit cobbler with ice cream, date squares
 - milk puddings topped with fresh fruit

2. Choose high energy snacks:
 - sandwich or oatmeal cookie with a glass of milk
 - milkshakes, eggnogs
 - commercial dietary supplemental drinks
 - Lack of energy and physical limitation may result in a problem with shopping and meal preparation. You may need to use community resources such as “Meals on Wheels”.
 - Difficulty swallowing can also cause weight loss, and softer foods have to be chosen.
 - hamburger dishes
 - macaroni and cheese
 - well-cooked vegetables

If these are not suitable, minced or pureed foods may be required. If a blender or food processor is not available, baby meats can be

used and gravy or spicy sauces added for flavor. Vegetables can be mashed with a potato masher.

- If swallowing fluids is a problem, instant potatoes can be added to thicken cream soups. Milk or juice can be thickened to the proper consistency by adding pureed fruits, using plain gelatin or a thickening agent such as “Thickit”, which can be purchased from some drug stores.

Fatigue

- Fatigue is a major problem for individuals with multiple sclerosis. It is important that you do not skip meals even though you feel too tired to eat, as this will tend to increase your feeling of tiredness.
 - It takes a lot of organizing to prepare nutritious meals and still have enough energy left to eat them.
-

Here are a few tips you may find helpful:

1. Preplan your menus and organize your work. Try to save as many steps as possible.

2. If you have to cut, peel or mix ingredients for more than a minute, sit down. It will be less tiring.

3. Appliances that can help you save energy are:

- microwave oven (avoids use of several pans and is easy to clean)
- blender
- toaster oven
- electric can opener

4. Prepare simple, nutritious meals, such as cottage cheese with fruit and a muffin or scrambled eggs on toast with a slice of cheese.

5. Prepare meals, such as casseroles, that will cook in the oven while you rest before dinner.

6. Prepare meals in large quantities and freeze extra servings to be used on a day when you are feeling too tired to cook.

- There may be days when fatigue is such that you will want to choose pre-prepared meals, such as a TV dinner or a commercial dietary supplemental drink, for example Resource, Boost or Ensure.

For more information, contact a nutritionist at your local Dietetic Association, Home Economics Association or Public Health Unit.

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