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## **Food for Thought** *MS and Nutrition*



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*Cover: Rosanne Dawer and her daughter Janice. Photograph by Bill Stanton.*

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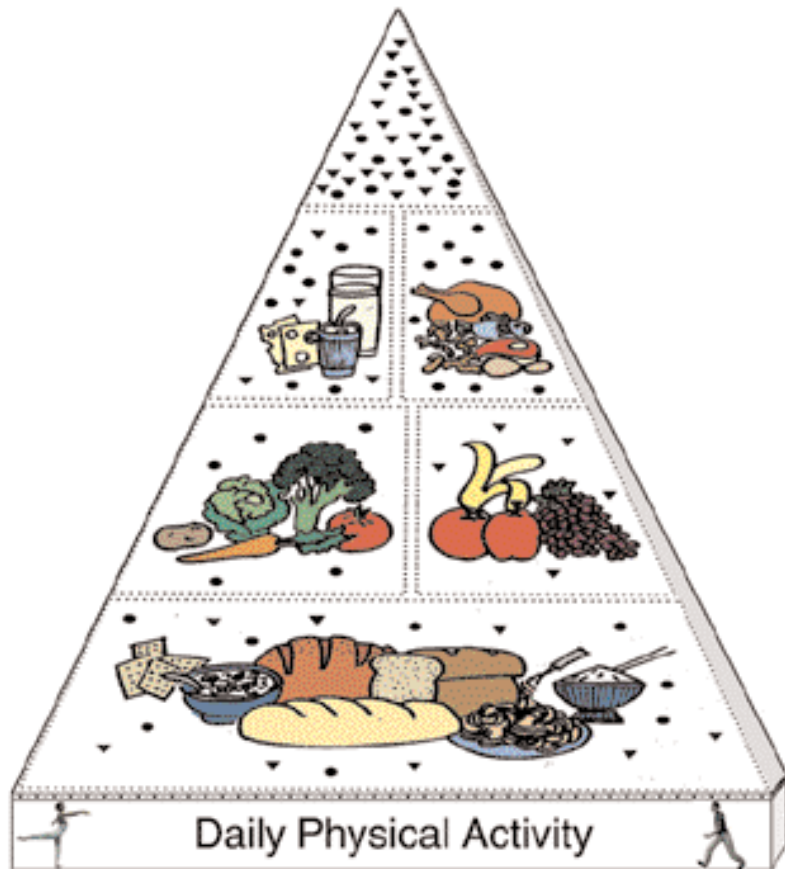
*Some of our popular pamphlets include:*

- ❖ Vitamins, Minerals, and Herbs in MS: An Introduction
- ❖ Exercise as Part of Everyday Life
- ❖ Controlling Bladder Problems in Multiple Sclerosis
- ❖ Bowel Problems: The Basic Facts

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# Food for Thought

*MS and Nutrition*



*by Denise M. Nowack, RD, with Jane Sarnoff*

## Helping yourself to a healthier life

MS is an unpredictable disease that affects each person differently. But a person's quality of life can often be improved by focusing on those aspects of health that can be changed. Good health has a lot to do with what you put on your plate at every meal, so diet is an area where you can be in control.

### Nutrition basics

Eating for good health is as simple as A-B-C.

#### **A**im For Fitness

Make a healthy weight your target. There are many reasons why a person with MS may gain or lose weight—but controlling weight is the same story for everyone: watch the calories and do regular physical activity. Calories are a measure of the energy locked inside the carbohydrates, fats, and proteins found in foods. This energy fuels our body but what we don't use gets stored as fat, and over time results in extra weight.

Physical activity and good nutrition are perfect partners in managing weight. Not only

does physical activity burn calories, it can help you:

- ❑ Make the most of your potential muscle strength, or even build strength, depending on your program.
- ❑ Increase your endurance.
- ❑ Maximize range of motion and joint flexibility.
- ❑ Strengthen your heart.
- ❑ Decrease feelings of fatigue. (Really. Even with MS.)
- ❑ Decrease symptoms of depression.
- ❑ Maintain regular bowel and bladder functions.
- ❑ Minimize the risk of skin breakdown and irritation.
- ❑ Protect your weight-bearing bone mass.

High fat foods and uncontrolled portion sizes are leading contributors to weight gain. High-fat foods contain more calories per portion than their carbohydrate or protein counterparts. To cut back on calories look at ways to trim the fat. Also, keep tabs on portion sizes. Do a little measuring with raw rice or water to

see what 1/2 cup really looks like. If your portion sizes have crept way up, you may want to switch to smaller plates and bowls.

## Build A Healthy Base

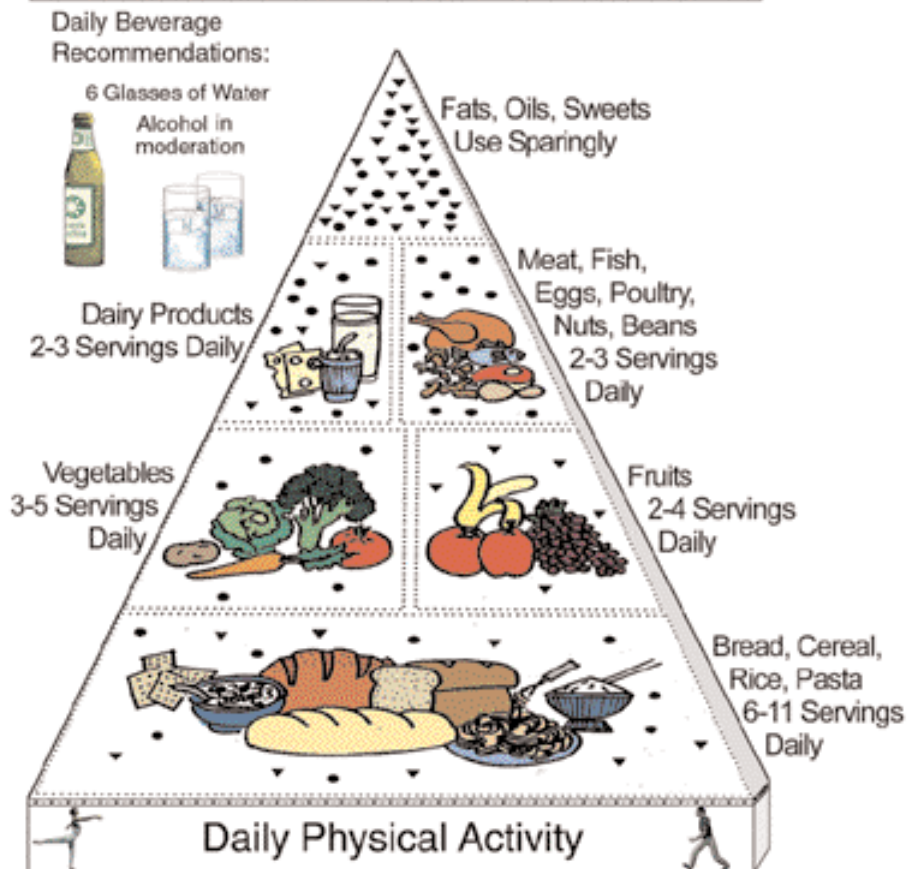
Translating good nutrition to your table takes planning, attention, and some innovation. Let the U.S. Department of Agriculture's Food Guide Pyramid provide a starting point. Each part of the pyramid provides a building block of nutrient-rich foods. The choices are many and they're all yours!

Make a variety of grains, fruits, and vegetables the foundation to your diet plan. Choices from these groups are rich in vitamins, minerals, carbohydrates, and other substances important for good health—most help create a feeling of fullness and satisfaction to keep the snack urge quiet.

Whole grains—such as whole wheat, brown rice, oats and whole grain corn—provide a fiber boost to the carbohydrates in your diet. A single serving from this group provides about 70 calories. You can find that in a half-cup of cereal, rice or pasta, or one slice of bread.

When it comes to fruits and vegetables, enjoy

## The Traditional Healthy DIET PYRAMID



*Variations on the pyramid pictured above can be found on pages 9, 12, 18, and 26. The basic principles can be applied to many traditions. Bon appetite!*

five a day—at least three servings of vegetables and two servings of fruit. It doesn't take much to make a serving—just one cup of raw leafy vegetables, a half-cup of other vegetables or fruit, or six ounces of fruit juice. Choose dark-green leafy vegetables and brightly colored fruits and vegetables often.

Next add low-fat choices from the protein and dairy level of the pyramid to the nutritional groundwork you have laid. This includes lean meats, fish and poultry, low-fat or non-fat dairy products, dried beans, tofu, and other plant sources of protein.

### Choose Sensibly

There are many ways to build a personal pyramid ... and lots of room for choice. When in doubt, go easy on fat, the sugar, and the sodium.

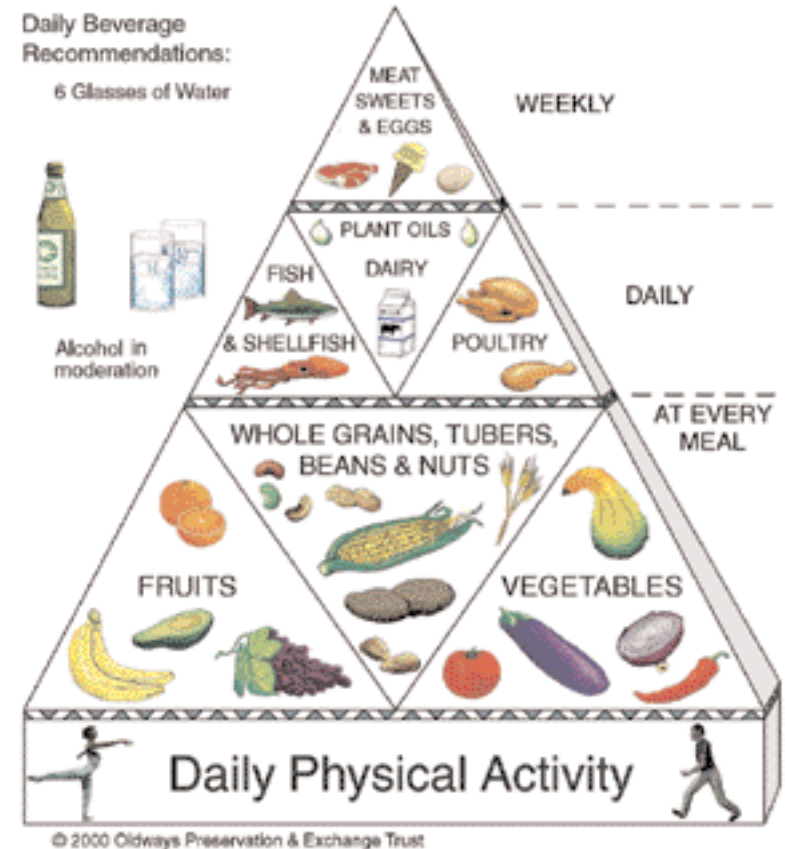
Trimming the fat from your diet—especially saturated fat—not only cuts calories, but may cut your risk for chronic diseases, such as heart disease and stroke. Use vegetable oils as a substitute for solid fats like butter and hard margarine. Choose fat-free or low-fat dairy products and lean meats. Trim the skin from poultry. The Nutrition Fact Label on food

products can be a useful tool for finding foods lower in total fat—as well as sodium and cholesterol.

It's OK to enjoy sweets occasionally. But don't let soft drinks or sweets crowd out important foods you need.

To lower salt or sodium intake experiment with low-sodium condiments, herbs, spices, and seasonings. And if you drink alcoholic beverages, do so sensibly. Make water and decaffeinated beverages your first choice.

## The Traditional Healthy LATIN AMERICAN DIET PYRAMID



## Meeting the challenges of changing your diet

The A-B-C of good nutrition is the goal. But food is not just about nutrition—it's about emotions, culture, socializing. Because what and how we eat is so personal, changing eating habits can be difficult. Special diets and radical fitness programs sometimes promise the quick fix—or even the cure. But the best advice for people with MS continues to be what is recommended for everyone. Eat a low-fat diet with a variety of grains, vegetables, and fruits, along with some high-protein foods like meat or dairy products—and balance calorie intake with physical activity. For more information on special diets, see page 25.

Deciding to change is the first step. But the changes don't have to happen overnight. Start with the easy changes. Then, one by one, add more kinds of vegetables, reduce portion sizes, introduce more low-fat foods.

Here's a checklist:

- ❑ Be realistic. Make small changes over time. Small steps can work better than giant leaps.
- ❑ Be adventurous. Expand your tastes by try-

ing new foods. There are many low-fat recipe books and magazines on the market, as well as televised cooking shows, which can inspire new ideas.

- ❑ Be flexible. Balance what you eat with your physical activity over the span of several days. Don't focus on just one meal or one day.
- ❑ Be sensible. Enjoy what you eat. Practicing moderation doesn't mean crossing all your favorite foods off your list forever. Think smaller amounts, less frequently.
- ❑ Be active. Choose activities that you enjoy and that fit into the rest of your life.

## Make a move!

Physical activity comes in different shapes and sizes. Aerobic activities raise your heart rate and breathing, and help promote cardiovascular fitness. Other activities develop strength and flexibility. For example, lifting weights helps develop strength and can help maintain good bone health. Activities like yoga and gentle stretching can improve flexibility.

- ❑ Have a conversation with your doctor about exercise, your target weight, and special



## The Traditional Healthy ASIAN DIET PYRAMID



needs. If possible, get a referral to a physical therapist to help you begin a program.

- ❑ Commit to doing what you can do on a consistent basis. Choosing activities you enjoy will help you keep to your fitness plan.
- ❑ Start slowly. If you haven't been active, introduce your body to a low level of intensity for short periods of time. As your body adapts, gradually build the intensity and duration of your program.
- ❑ Keep your cool. Overexertion and overheating can temporarily increase MS fatigue and other MS symptoms. Drink plenty of fluids before, during and after your activity. Try exercising in cool water or in air-conditioned space. For some, using a cooling vest or neck wrap helps keep the core body temperature at an appropriate level.
- ❑ Join a group! Exercising with others may give you the motivation and support to keep going. Contact your chapter of the National MS Society for referrals to physical activity programs in your community.

## Feeding your special needs

Good nutrition is essential for everyone, but people with MS may have special considera-

tions and needs. Your MS symptoms or your medications can impact your nutritional well-being. Talk to your nurse or doctor about dry mouth, fatigue, and other symptoms that interfere with eating.

MS symptoms can also reduce mobility or physical activity. If your eating habits remain the same while activity drops off, the usual result is weight gain. Added weight can increase fatigue, further limit mobility, put a strain on the respiratory and circulatory systems, and increase your risk for other chronic illnesses. Ask a registered dietitian or doctor to recommend an optimal weight, and reasonable daily calorie intake. To get extra weight under control, put the physical activity and diet partnership into action!

Being underweight can also compromise your health, especially if it is caused by lack of appetite or fatigue that limits food intake. It's important that you meet your daily nutritional needs to ensure that your body is able to fight off infection.

### Managing fatigue

Everyone gets tired. However, certain types of fatigue, such as neuromuscular fatigue,

depression-related fatigue, and MS lassitude can be particular to people with MS. These types of fatigue can be treated with medications, management strategies and therapy. People with MS also get fatigued from everyday life—like everyone else. Fatigue may result in a decrease in appetite, activity, and less interest in food preparation. If fatigue is interfering with your activities, discuss the problem with your doctor.

Here are some tips to ensure that you get the nutrition your body needs when fatigue becomes a challenge:

- ❑ If the thought of three large meals is too much, try eating more frequently—five to six smaller meals if your appetite is small. Resist the urge for low-nutrient convenience foods. Keep your refrigerator and cupboards stocked with healthful items like string cheese, low-fat crackers, peanut butter, dried fruit or raisins, small cartons of fruit juice, individual cartons of low-fat or non-fat yogurt or cottage cheese, or bagged salads and pre-cut raw vegetables.
- ❑ Keep a stack of menus from places that deliver healthy meals!
- ❑ Make the most of your freezer. Stock up on

flavorful, low-fat dinners that can be quickly microwaved or heated.

When you do shop and cook ... save energy:

- ❑ Make a shopping list before you head out to the store.
- ❑ Stock up on basics. Fill your pantry with chopped tomatoes, prepared sauces, mustards, canned beans, tuna, and other items that you use regularly.
- ❑ If you have difficulty carrying food home, find delivery services, shopping services or friends and relatives who will shop from your list.
- ❑ When you cook, try to make more than you will eat in one meal so you can store or freeze the rest for another meal.
- ❑ Don't want to chop? Packaged pre-chopped vegetables can cut down your preparation time. There are also shredded cheese, jars of minced garlic, ginger root, sliced olives and diced peppers.
- ❑ Streamline cleanup! Paper plates can be a lifesaver when energy is low. Enlist family and friends as extra hands—and save your energy for socializing after the meal.

- ❑ How user-friendly is your kitchen? An occupational therapist can suggest ways to rearrange your kitchen to make meal preparation easier. There are utensils, storage systems, reaching aids, and adapted stovetops that increase efficiency. Ask your doctor for a referral to an occupational therapist who can help you adapt your kitchen to best meet your needs.
- ❑ Removing doors underneath cabinet countertops allows you to sit while fixing food. Just make sure any hot pipes are wrapped with insulation.

### **Eating and emotions**

Many people with MS struggle with depression at one time or another. When depression hits, it can have an adverse effect on motivation, sleeping patterns, eating habits, and energy. Each of these can, in turn, affect nutritional well-being.

Some people turn to food for solace when they are depressed. Certain foods create a sense of comfort. These may be old familiar favorites from childhood—a scoop of mashed potatoes, macaroni and cheese, a cup of steaming soup, a bowl of rice pudding. The danger is going

## The Traditional Healthy MEDITERRANEAN DIET PYRAMID



overboard with these favorites. The extra fat, sugar, and calories can add up.

Other people experience a loss of appetite when they are depressed. It is important to recognize these feelings and understand how they might be affecting your health. Eating with others can help keep you connected. But if self-help strategies don't work, seek professional help. Serious depression is a treatable medical condition.

### Reducing bladder concerns

Bladder problems can be treated. If you have symptoms, consult your doctor at the first sign of trouble. Keep in mind though that what you eat and drink can help.

Pour on the water! Quite often fear of urinary frequency or loss of bladder control causes people with bladder problems to limit their fluid intake. This can contribute to other problems such as dehydration, dry mouth, difficulties with swallowing, loss of appetite, constipation, and even deficiencies in certain nutrients. Be sure to drink 6 to 8 eight-ounce glasses of water or other fluids every day.

Try these strategies to make sure you get the fluid you need:

- ❑ Take water breaks during the day. If you pass a water fountain ... take a drink!
- ❑ Travel with your own personal supply of bottled water.
- ❑ Refresh yourself at meals and snack time with juice, milk, or sparkling water.
- ❑ Limit caffeine-rich beverages like coffee, tea, cola and other soft drinks. Caffeine acts as a diuretic and should be avoided by those with bladder problems.
- ❑ Use alcohol prudently. Alcohol provides little nutrition and many calories. It functions as a central nervous system depressant, and can increase balance and coordination problems. It may also irritate the bladder and aggravate problems with urgency.

If you are prone to urinary tract infections, drinking beverages that help to increase the acid level in urine can help prevent them. These include cranberry, apple, apricot, and prune juices. Limit foods and beverages that make urine more alkaline. These include citrus fruits and juices (orange, grapefruit), tomatoes, potatoes, lima beans, and antacids that contain sodium bicarbonate.

## Bowel management

Whether constipation is a result of your MS or your habits, don't despair. The following tips can help keep things moving.

- ❑ Fiber counts ... add it up! Dietary fiber is a substance found in foods like cereal grains, nuts, seeds, vegetables, and fruits, and is not digested or absorbed by the body. (Animal food products **do not** contain any dietary fiber.)

A diet that provides 25–30 grams of fiber each day is recommended for good bowel function. There's an added benefit for the weight conscious—fiber provides a more lasting sense of fullness, helping you cut back on what you eat.

Start slowly. Fiber should be added into the diet gradually. Adding too much fiber too fast can cause gas, cramps, diarrhea...and discouragement. The foods toward the bottom of the Food Guide Pyramid tend to be the highest in fiber.

These ideas might help you fit fiber onto your plate:

- Start your day with a high-fiber breakfast cereal.
- Switch to whole-grain breads.

- Eat more beans, peas, and lentils.
- Take advantage of ready-to-use vegetables.
- Experiment with whole grains—like brown rice, barley, and whole-wheat pasta.
- Make snacks count—eat dried fruits, raw veggies.
- Eat fruit at every meal.

If you find it difficult to reach the recommended level, fiber supplements can be used. One tablespoon of these commercial products provides 15 grams of fiber. Remember, these are not laxatives but fiber supplements. Be sure to consult your physician before using any of these products.

- Don't forget the fluids. Fiber absorbs water, so as you increase the fiber in your diet, you need to increase your fluid intake as well.
- Just move! In addition to the many other benefits of physical activity, exercise can also aid in preventing constipation.

Bowel incontinence can be aggravated by dietary factors. Surprisingly, in MS, bowel incontinence is often caused by constipation. A sudden loss of control occurs when the stool

breaks through or leaks around a blockage. Be sure to discuss bowel problems with your doctor or nurse. You don't need to accept them as part of your life with MS.

### Preventing bone loss

People with MS may be at risk for **osteoporosis**—a condition where the bones gradually become brittle due to the loss of calcium and other minerals. Lack of weight-bearing activity due to immobility or fatigue, a diet low in calcium, smoking, heavy drinking and use of steroid drugs may all contribute to loss of bone mass. Talk to your doctor to determine if you might be at risk.

To prevent bone loss:

- Count on calcium. Calcium-rich foods include low-fat dairy products, dark green leafy vegetables, fish with edible bones, and some fortified foods like orange juice and cereals. Keep your intake of sodium, caffeine, and protein moderate. They all can interfere with calcium absorption.
- Be sure to get enough vitamin D. This important nutrient helps calcium deposit in the bones. The body makes much of the vitamin D it needs when the skin is

exposed to sunlight. But people with MS often avoid the sun to avoid heat. Food sources are the safest choice. Excess use of vitamin D supplements can cause serious health problems.

- ❑ Be active. Get advice about a regular weight-bearing activity you'll enjoy.

### Chewing and swallowing

Discuss swallowing problems with your doctor. You may be referred to a speech pathologist, a specialist who can suggest changes in the way you prepare foods or in the way you sit and breathe while you eat. You may need to change the form of your foods in order to eat a nutritionally sound diet.

- ❑ Thicker drinks tend to be easier to swallow. Such drinks might include milk shakes, juices in gelatin form, fruit sauces, sherbets, and puddings.
- ❑ Foods that crumble easily can cause choking. Avoid chips, crackers, toast, and cakes.
- ❑ Soft foods need less chewing. Eat mashed or baked potatoes instead of fried, cooked vegetables and stewed fruits instead of raw. Make use of a blender or food processor to get foods to the texture easiest for you to handle.

- ❑ Eat small, frequent meals so that you don't become tired from chewing and swallowing.
- ❑ Taking smaller bites can help reduce fatigue and the risk of choking.

### MS ... plus another diagnosis

People with MS can have other health problems. Diabetes, high blood pressure, or high cholesterol may require special diets or drug treatments. If you have other health problems and more than one doctor, make sure each health-care provider understands your special needs. A registered dietitian can help bring together all the pieces of your dietary puzzle. Dietitians can provide professional, reliable, objective nutrition information, and can help you separate facts from fads.

### A look at “special” diets

Never before have there been more nutrition theories or diets that claim to treat MS. These include diets low in gluten, high in polyunsaturated fats, or high in certain vitamins, as well as diets which assume that every individual is allergic to certain types of food.

Some of these diets, such as Dr. Roy Swank's low-fat diet, are consistent with accepted

## The Traditional Healthy VEGETARIAN DIET PYRAMID



dietary guidelines, and pose no nutritional risk for people with MS. Other diets that claim to be therapeutic may actually work against the principles of proper nutrition. Before considering any special diets, seek information from your doctor or a registered dietitian.

Some researchers do believe that nutrition plays some yet to be determined role in MS treatment, but so far no diet, vitamin, or dietary supplement has been proven to have therapeutic value. There is no evidence that a nutrition-related factor plays a part in the origin or cause of MS.

The best food for thought is a well-balanced and nutrient-rich diet, based on the Food Guide Pyramid. Inform yourself about food choices, make a commitment to healthy eating, and develop menus you enjoy.

Find the diet you can live with ... and then eat well ... for the health of it!



## APPENDIX—FIBER FACTS

Without guidance, it can be difficult to know how to consume 25-30 grams of fiber daily. Use this table to choose a variety of high-fiber foods to boost your daily intake. The foods toward the bottom of the Food Guide Pyramid are usually the highest in fiber. Try to include five to seven servings of fruits and vegetables each day, and at least two servings of whole grain products.

Food	Portion	Fiber (grams)
<b>Breads &amp; Crackers</b> <i>(Check food labels and compare.)</i>		
Seven-grain	2 slices	6.5
Whole wheat	2 slices	6.0
Dark rye (whole grain)	2 slices	5.8
Bran muffin	1 large	4.6
Tortillas, corn	2	4.0
English muffin (wheat)	1 whole	3.7
White	2 slices	1.9
Ry-Krisp	3	2.3
Wheat Thins	6	2.2
Water Crackers	4	0.0
<b>Cereals</b> <i>(Check food labels and compare.)</i>		
All-Bran	½ cup	10.4
Oatmeal	¾ cup	7.7

Food	Portion	Fiber (grams)
Bran flakes with raisins	1 cup	6.0
—without raisins	1 cup	5.0
Shredded wheat		
spoon size	1 cup	4.4
Puffed wheat	1 cup	3.3
Bran meal	1 tbsp	2.0
Cornflakes	¾ cup	2.6
<b>Fruits</b> <i>(Eat fruits with the skin left on when possible.)</i>		
Apple, raw	1 med	4.0
Apricots, raw	1 whole	0.8
—dried	2 halves	1.7
Banana	1 med	3.0
Blackberries, raw	½ cup	5.0
Cantaloupe	¼	1.0
Cherries, sweet, raw	10	1.2
Dates, pitted	2	1.2
Figs, dried	3	10.5
Grapes	20	1.0
Orange	1 large	2.4
Peach, raw	1 med	2.3
Prunes, pitted	3	1.9
Raisins	1 tbsp	1.0
Raspberries, red	½ cup	4.6
Strawberries	1 cup	3.0
Watermelon	1 slice	2.8

Food	Portion	Fiber (grams)
<b>Vegetables</b> (When possible, eat raw and unpeeled for value-added fiber.)		
Artichoke	1 large	4.5
Asparagus	½ cup	1.7
Avocado	2 slices	0.9
Beets, cooked, sliced	½ cup	2.5
Broccoli, cooked	¾ cup	7.0
Brussel sprouts	¾ cup	3.0
Carrots, cooked	½ cup	3.4
Celery, raw	¼ cup	2.0
Corn on the cob	1 ear	3.4
Greens, cooked	½ cup	4.0
Green beans (snap)	½ cup	2.1
Lettuce, shredded	1 cup	0.8
Mushrooms, raw	5 small	1.4
Onion, cooked	½ cup	1.5
Peppers, green, raw	2 tbsp	0.3
Potatoes, baked	1 med	5.0
—boiled	1 med	3.5
—mashed	½ cup	3.0
—sweet, baked	1 med	4.0
—yams, baked in skin	1 med	6.8
Sauerkraut, canned	2/3 cup	3.1
Spinach, cooked	½ cup	7.0
Tomatoes, raw	1 small	1.4
Turnip, cooked		
Zucchini—raw	½ cup	3.0

Food	Portion	Fiber (grams)
<b>Legumes</b> (Dried beans, peas and lentils are also excellent sources of low-fat protein.)		
Baked beans	½ cup	8.0
Black beans, canned	½ cup	9.7
Chickpeas (garbanzos)	½ cup	6.0
Kidney beans, canned	½ cup	9.7
Lima beans, canned	½ cup	5.8
Pinto beans, canned	½ cup	9.4
Lentils, brown, cooked	2/3 cup	5.5
—red, cooked	1 cup	6.4
Green peas	½ cup	9.1
Black-eyed peas	½ cup	8.0
Split peas, cooked	½ cup	6.7
<b>Nuts &amp; Seeds</b> (Sprinkle over dishes and salads.)		
Almonds, sliced	¼ cup	2.4
Chestnuts, roasted	2 large	1.9
Peanuts, dry roasted	1 tbsp	1.1
Peanut butter	1 tbsp	1.1
Walnuts, shelled, chopped	1 tbsp	1.1

## Sources of additional information and other services

**1-800-FIGHT-MS (1-800-344-4867)** can be used to reach the National MS Society chapter nearest you. Your chapter offers local referrals, education programs, counseling, self-help groups, and booklets and brochures on many aspects of living with MS.

If you join the Society, you will receive our national magazine, **InsideMS**, a quarterly packed with news and features of interest to anyone affected by MS, and **MS Connection**, a newsletter from the Society office closest to you, which covers nearby events and resources.

For the best MS information online, consult the National MS Society Web site. You can find information on diagnosis, treatments, medications, clinical trials, research news, issues in coping and management, MS publications, news on advocacy, events and services offered by your chapter, MS clinics, and how you can join the Society. Log on to: **<nationalmssociety.org>**.