500 best Healthy recipes

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500 Best Healthy Recipes

For complete cataloguing information, see page 402.

Disclaimer
The recipes in this book have been carefully tested by our kitchen and our tasters. To the best of our knowledge, they are safe and nutritious for ordinary use and users. For those people with food or other allergies, or who have special food requirements or health issues, please read the suggested contents of each recipe carefully and determine whether or not they may create a problem for you. All recipes are used at the risk of the consumer.

We cannot be responsible for any hazards, loss or damage that may occur as a result of any recipe use.

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Cover image: Chicken Kebabs with Ginger Lemon Marinade (see recipe, page 290)

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about this book

Most people realize that what they eat makes a difference to being healthy and looking and feeling well. But there is so much conflicting information about nutrition in the media that is it difficult to make informed choices. What is the best diet to follow? Are some foods better than others? Can certain foods help fight against disease? This book not only provides you with more than 500 delicious and healthy recipes, but also helps to answer these and other "top of mind" questions about nutrition, and offers tips and strategies to set you on the road to healthy eating.

While a good diet is a vital component of health, a physically active lifestyle is equally important, as it helps to protect against many health conditions. Eating well and keeping active helps you to feel your best at any age.

eating for health

vary your food choices

Your body needs more than 50 different nutrients to function properly, and no one food offers everything you need. Food provides essential nutrients and other health-promoting components. Eating a variety of wholesome foods, in appropriate quantities, and having fewer less-nutritious foods is the best way to ensure you are eating well. In addition, many foods, especially vegetables and fruits, provide other substances, such as antioxidants, that are important to health.

pay attention to food groups

Foods are categorized into certain groups mostly because they provide similar nutrients. Choosing foods from each group on a daily basis helps you get the nutrient mix you need. Avoiding an entire food group or limiting your food choices, either because you eat the same foods all the time or because you're following a strict diet, limits the variety of nutrients you consume. To get the nutrients your body needs in the right amounts, refer to the chart on page 5, which is based on Canada's Food Guide to Healthy Eating and the United States Food Guide Pyramid.

tips for adding variety to your diet

- Choose a food from each group for every meal.
- Add one new or different food to your diet every week.
- Try exotic or unusual fruits or vegetables such as guava, mangoes, parsnips, fennel, bok choy, kale or kohlrabi.
- Experiment with recipes that use less common ingredients such as eggplant, spaghetti squash, sweet potatoes, white beans, water chestnuts, mandarin oranges, sesame seeds, pecans or almonds.
- Enjoy foods from different cultures more often.

Guide to food choices and amounts

Food group	Key nutrients	How much do you need each day?	What counts as a serving?
Grain products (bread, cereal, rice and pasta)	Carbohydrates, fiber, protein, thiamin, riboflavin, niacin, folacin, iron, zinc, magnesium	5 to 12 servings	◆ 1 slice of bread ◆ 1/2 bagel, pita or bun ◆ 1/2 cup to 1 1/4 cup (30 g) of ready-to-eat cereal ◆ 3/4 cup (175 mL) hot cereal ◆ 1/2 cup (125 mL) cooked pasta or rice
Vegetables and fruit	Carbohydrates, fiber, thiamin, folacin, vitamin A, vitamin C, iron, magnesium	5 to 10 servings	◆ 1 medium size vegetable or fruit ◆ 1/2 cup (125 mL) fresh, frozen or canned vegetables or fruit ◆ 1 cup (250 mL) raw leafy vegetables or salad ◆ 1/2 cup (125 mL) juice
Milk products and alternatives (milk, yogurt, cheese, fortified soy beverages and calcium alternatives)	Protein, fat, riboflavin, vitamin B_{12}, vitamin A, vitamin D, calcium, zinc, magnesium	2 to 4 servings milk products OR 6 to 8 servings fortified soy beverages and calcium alternatives	◆ 1 cup (250 mL) milk ◆ 2 oz (50 g) cheese ◆ 3/4 cup (175 g) yogurt ◆ 1/2 cup (125 mL) calcium-fortified soy beverage or orange juice ◆ 1/4 cup (50 mL) firm calcium-set tofu ◆ 1/4 cup (50 mL) almonds ◆ 3 tbsp (45 mL) almond butter ◆ 1 cup (250 mL) cooked or 2 cups (500 mL) raw greens — kale, collards, broccoli or okra ◆ 1 cup (250 mL) beans (soy, white, navy, Great Northern, black turtle beans)
Meat and alternatives (meat, poultry, fish, dry beans, eggs, and nuts)	Protein, fat, thiamin, riboflavin, niacin, folacin, vitamin B_{12}, iron, zinc, magnesium	2 to 3 servings	◆ 2 to 3 oz (50 to 100 g) cooked meat, fish or poultry ◆ 1/2 cup (125 mL) beans or tofu ◆ 2 tbsp (30 mL) peanut butter ◆ 2 to 3 tbsp (30 to 45 mL) nuts

Appropriate for children and adults over 4 years of age. Based on:

- Canada's Food Guide to Healthy Eating (www.hc-sc.gc.ca/hpfb-dgpsa/onpp-bppn/food_guide_rainbow_e.html);
- US Food Guide Pyramid (www.nal.usda.gov/fnic/Fpyr/pyramid.html); and
- *Becoming Vegan: The Complete Guide to Adopting a Healthy Plant-Based Diet*, Brenda Davis and Vesanto Melina (Summertown, TN: Book Publishing Company, 2000).

understanding nutrients

There are two major groups of nutrients: macronutrients, including carbohydrates, fat and protein; and micronutrients, which include the full range of vitamins and minerals. The macronutrients provide energy, or calories, which your body uses to function and for physical activity. Micronutrients are involved in helping your body use energy and in various structural and regulatory functions. Presently there is much confusion about what constitutes a healthy diet and the proper amount or ratio of the macronutrients. The amount of carbohydrates, fat and protein necessary for an optimal diet has become an intense point of discussion, and there are varying opinions as to what is deemed correct. The following sections help set some direction for planning the best diet.

carbohydrates

Carbohydrate foods, specifically whole grains, vegetables and fruit, are an important part of a healthy diet. These foods provide essential vitamins, minerals and fiber, as well as energy. Whole grains, vegetables and fruit also provide antioxidant nutrients and other phytochemicals, which are associated with health benefits such as reduced risk of heart disease and cancer. More highly processed carbohydrate choices, including many baked goods and snack foods, and high-protein or high-fat foods do not offer the same benefits.

A healthy diet should provide 45% to 65% of calories from carbohydrates. At least 130 g of carbohydrate is recommended each day to provide adequate energy (glucose) for the brain and body to function. Many low-carbohydrate diets limit carbohydrate intake to much less than this. If, over the course of a day, you have one cup (250 mL) of spaghetti (42 g), 1 cup (250 mL) of orange juice (28 g), 1 apple (21 g), ¾ cup (175 mL) low-fat fruit yogurt (19 g), 1 cup (250 mL) of 1% or 2% milk (12 g), and 10 baby carrots (8 g), you will have eaten 130 g of carbohydrate.

Carbohydrates are found in most foods as sugars, starches and fiber. Complex carbohydrate foods include bread, pasta, vegetables, fruit and beans. Eating more complex carbohydrate foods, especially whole grains rather than refined products, is recommended for a healthy diet. Simple carbohydrate foods such as table sugar, candy, and honey contribute calories, but little in the way of important nutrients. These foods can be included in small amounts in a healthy diet.

It was previously thought that only sugary foods caused blood sugar levels to spike, but research now shows that some higher-nutrient carbohydrate foods, such as potatoes, can also cause blood sugar levels to rise quickly. Foods that break down quickly in the blood are considered high glycemic foods. Diets containing a lot of high glycemic foods are now believed to be linked to an increased risk of diabetes and heart disease. This association has resulted in a great interest in diets based on the glycemic index of foods.

the glycemic index

The glycemic index (GI) is a system used to classify carbohydrate foods. It measures the speed at which blood sugar (glucose) rises after eating a carbohydrate food. The faster a food breaks down, the more quickly it releases sugar into the bloodstream and the higher its GI. Eating a lot of high-GI foods can cause very rapid increases in blood sugar levels. Therefore, the goal is to eat a diet consisting of mostly low-GI foods, which are absorbed more slowly into the blood stream.

foods and GI

Lower-GI foods

- Whole wheat, oat, bran, rye breads and cereals
- Brown rice, barley, bulgur
- Beans, dried peas, and lentils
- Milk, cheese, yogurt
- Fresh whole fruit (e.g., cherries, grapefruit, apples, pears, plums)
- Meat, fish, poultry, eggs, nuts

Higher-GI foods

- Refined breakfast cereals
- White pasta, bread and rice
- Cake, muffins, croissants, donuts and waffles
- Potatoes, French fries, parsnips
- Bananas, raisins, watermelon, pineapple
- Soft drinks
- Sugar and most candies

In general, most highly processed foods, such as white bread and pasta, have a high GI, while most high-fiber foods, such as whole grains, beans and legumes, have a low GI. Meats, milk and cheese also tend to have a low GI.

It sounds simple: eating a diet that is high in foods with a low GI is one route to health. The problem is that following a GI diet can be quite challenging and not very practical. The glycemic response to foods is influenced by many factors, including how much food is eaten, the way the food is processed or prepared and the ripeness of vegetables and fruits. In addition, any other foods eaten at a meal also influence the GI response.

Consider, for instance, that pasta cooked al dente has a lower GI than overcooked pasta, and that ripe fruits or vegetables have a higher GI than those that are less ripe. Moreover, meat or fat can lower the glycemic response of high-GI foods when included in the same meal. Finally, because most people eat a combination of foods in any given meal, the GIs of single foods will be affected by the GI of other foods eaten, thus changing the GI of the entire meal. Consequently, following a diet based solely on the GI of certain foods can be complicated. The bottom line is that you don't need to follow a GI diet to eat well. You can, however, work toward including more low-GI foods in your diet.

the best advice about carbohydrates

- Choose complex carbohydrate foods, such as whole-grain bread, cereals and pasta and brown rice over highly processed white bread, cereals and pasta to reduce glycemic response.
- Eat more bulgur, barley and legumes such as lentils, kidney beans, chickpeas and other beans, which are digested slowly and add fiber to your diet.
- Include plenty of fruits and vegetables in your diet to take advantage of their beneficial nutrients and fiber.
- Cut back on sweets and baked goods to control your calorie intake and blood sugar levels.
- Eat carbohydrate foods at intervals throughout the day, in small meals or snacks that also include foods containing some protein and fat to help control blood sugar levels.

fat

Fat is part of a healthy diet as it helps to keep you optimally nourished. Not only does fat provide energy, it helps your body absorb the fat-soluble vitamins A, D, E and K and carotenoids such as beta carotene. Fat also provides essential fatty acids, including linoleic acid (n-6 polyunsaturates including vegetable oils) and alpha-linolenic acid (n-3 polyunsaturates found in fish and flaxseeds), which your body doesn't make.

One problem with fat is that it can contribute to weight gain. Fat provides more calories per gram (9 calories) than protein or carbohydrates (4 calories). Eating too many high-fat foods may cause you to consume more calories than you need on a daily basis, and that can make it difficult to maintain an optimum weight. However, the connection between fat and obesity is far from clear. Recent reports on the eating habits of North Americans show that although fat intakes have declined over the past two to three decades, the number of overweight or obese individuals has climbed steadily. The influx of low-fat foods into the marketplace has not had a positive impact on controlling weight gain. Inactivity and larger serving sizes may be more significant contributors to the obesity epidemic than fat.

how much fat do you need?

The amount of fat required in a healthy diet ranges from 20% to 35% of calories per day. This range accommodates different lifestyle needs and variations in daily food choices. For heart health it's generally best to aim for a lower intake of fat, especially saturated fat. People who have high blood cholesterol levels and diabetes are at increased risk of heart disease and may need to monitor their fat intakes more rigorously. These individuals, as well as those with other health conditions, should follow the advice of their physician and dietitian regarding the quantity of fat that is right for them.

measuring fat in food

To meet a dietary objective of 30% of calories from fat, you should be consuming about 65 g of fat if you normally eat 2,000 calories a day (suitable for a woman) or about 90 grams of fat if you normally eat 2,700 calories a day (suitable for a man). It is very easy to use up or exceed your daily limit in one fast-food meal. A meal consisting of a double burger with cheese (36 g), a large order of fries (27 g) and a large shake (25 g) provides 88 grams of fat! If you are a woman, you have exceeded your limit. If you are a man, you have little room left for other fat-containing foods throughout the rest of the day.

From a health perspective, the amount of fat may not be as important as the kind of fat you eat on a regular basis. Although diets high in saturated and trans fat are linked to increased blood cholesterol levels and heart disease, eating the right kinds of fat can actually have significant health benefits.

sample daily intakes of fat

A daily intake of 65 g for a woman could include:

- 2 tsp (10 mL) butter or margarine (8 g)
- ¼ cup (50 mL) almonds (19 g)
- 1 tbsp (15 mL) regular salad dressing (10 g)
- 1 tbsp (15 mL) peanut butter (9 g)
- 2 cups (500 mL) 2% milk (10 g)
- 1 egg (5 g)
- ½ chicken breast (4 g)

If you are a man, you can add a 3 oz (90 g) serving of sirloin steak (8 g) and 2 slices of pepperoni pizza (14 g) to total 87 g of fat.

the different types of fat

Two types of fat are found naturally in food: unsaturated and saturated. Most foods contain a mixture of these fats, but are typically higher in one type.

unsaturated fats

Unsaturated fats fall into two categories, polyunsaturated and monounsaturated. These fats provide many of the essential fatty acids we need to stay healthy. Among their health benefits, they lower total and LDL (bad cholesterol) and increase HDL (good cholesterol), which reduces the risk of heart disease.

Polyunsaturated fats are found in nuts and seeds, soybeans, fish and oils made from corn, safflower and sunflower.

Monounsaturated fats are found in olives, olive oil, canola oil, soft margarine containing these oils, peanuts, peanut oil, peanut butter, most other nuts and avocados.

omega-3 fats

Omega-3s are a type of polyunsaturated fat found in fish oils, some fatty fish, flaxseeds and their oil, walnuts and their oil and omega-3 enriched eggs. These fats have been shown to reduce the risk of coronary heart disease and stroke and may also play a role in preventing cancer. Eating 2 or 3 fish meals a week along with other omega-3 containing foods may be beneficial to your health.

saturated fats

Saturated fats are found in meat, poultry skin, whole milk, cheese, butter, ice cream, egg yolks, tropical oils, coconuts and coconut milk.

Although diets high in saturated fats are linked to heart disease and cancer, there is some evidence that these fats are okay in moderate quantities.

trans fats

Trans fats are found naturally in some foods, such as dairy products and meats. However, the trans fats found in processed foods have been identified as a serious health concern. Trans fats are made when manufacturers add extra hydrogen to highly polyunsaturated vegetable oils to make them more solid and extend their shelf life. They are found in some margarines, vegetable shortenings and partially hydrogenated vegetable oils. They are also found in foods containing these ingredients, including most commercial bakery products, snack foods and deep-fried foods. The problem with trans fats is that they have unknown health risks and no redeeming health benefits. You should aim to reduce your intake of trans fats as much as possible. That means cutting down on most commercially prepared foods.

avoiding trans fats

- Check the fine print on ingredient lists for the words "hydrogenated" or "partially hydrogenated oils" or "vegetable oil shortening." Eat these foods less often.
- Study the "Nutrition Facts" panel on labels to find the amount of trans fat in a product. To be considered "trans fat free" it must contain less than 0.2 g trans fat per serving, and must also be low in saturated fat (less than 2 g per serving).
- If the label does not show the amount of trans fat, add up all the fats listed (mono-, polyunsaturated) and subtract from the total fat. What's left is mostly trans fat.
- Most of the trans fat in our diet comes from soft tub margarines, commercial baked foods, deep-fried foods and snack foods, so limit these in your diet.

good cholesterol/bad cholesterol

High intakes of saturated and trans fat can contribute to high blood cholesterol, which is a risk factor for heart disease. If you've had your blood cholesterol checked, it's also important to know the ratio of lipoproteins in your blood. High levels of low-density lipoprotein (LDL) or "bad cholesterol" and low levels of high-density lipoprotein (HDL) or "good cholesterol" also increase risk of heart disease.

Low-density lipoproteins carry cholesterol from the liver through the blood to the rest of the body. If there is too much LDL cholesterol in the blood, it can be deposited on artery walls and cause blockages or atherosclerosis, which in turn can cause heart attacks or stroke. Decreasing LDL cholesterol levels is good for your heart health. Cutting back on saturated and trans fats can help decrease LDL cholesterol levels.

High-density lipoproteins take cholesterol from the blood back to the liver, and then get rid of it from the body. HDLs help reduce excess cholesterol in the blood, so that less will be deposited in the coronary arteries. Increasing HDL cholesterol levels is good for your heart health. Eating more polyunsaturated and monounsaturated fats in place of saturated and trans fats can help increase HDL cholesterol levels.

Being physically active and having alcohol in moderation can also increase HDL cholesterol levels. Other strategies for controlling and lowering total blood cholesterol levels include losing weight and eating more fiber.

fat and blood cholesterol levels

- Unsaturated fats: Lower LDL and raise HDL
- Saturated fats: Raise both LDL and HDL
- Trans fats: Raise LDL and lower HDL

dietary cholesterol

The cholesterol you get from eating foods is known as dietary cholesterol. It is not strongly linked to blood cholesterol levels, but some individuals, particularly those with heart disease or diabetes, may still need to monitor their intake of high-cholesterol foods.

Although some foods such as eggs, milk and nuts, contain high levels of dietary cholesterol or fat, they are also very nutritious, and healthy people should enjoy them in moderation as part of a balanced diet.

eggs

Eggs are a source of important nutrients, including protein, vitamins A, E, and B_{12}, folate, niacin, riboflavin, zinc and phosphorus. One egg also provides 5 g of fat and 215 mg of cholesterol. While eggs are a higher-cholesterol food, the cholesterol from food has been found to have only a slight impact on blood cholesterol levels for normal, healthy individuals. A recent study of more than 80,000 female nurses found that moderate egg consumption (up to one a day) did not increase heart disease risk in healthy individuals. However, people with heart disease or diabetes should follow the recommendations of their physician or dietitian regarding egg consumption.

READ THE LABEL

"A healthy diet low in saturated and trans fats may reduce the risk of heart disease."

To make this health claim, a food must be low in saturated and trans fats and the amount of saturated and trans fats must be included on the label.

milk

Milk products provide important nutrients, including protein, riboflavin, vitamin B_{12}, vitamin A, vitamin D, calcium, zinc and magnesium. They can also be high in fat. One cup (250 mL) constitutes a serving of milk. Whole milk contains the most fat (9 g/serving) and cholesterol (35 mg/serving). A serving of 2% milk provides 5 g of fat and only 19 mg of cholesterol; 1% milk provides 3 g of fat and 10 mg of cholesterol, and skim milk provides only a trace of fat and 5 mg of cholesterol.

Most of the fat in milk is in the form of saturated fat, but there are other substances in milk that appear to play a role in preventing insulin resistance and hypertension and that may help with weight control. Research has found that overweight individuals with low milk consumption (less than $1\frac{1}{2}$ servings per day) were at greater risk of developing insulin resistance than those who consumed more than five servings a day. Also, a diet that included 2 to 3 servings a day of low-fat milk products and 8 to 10 servings a day of fruits and vegetables lowered blood pressure better than medication. Eating a diet containing milk products and high amounts of dietary calcium (about 1,200 mg from food, not supplements) has been associated with weight loss and fat loss.

nuts

Nuts are nutritious. They are rich in fiber and vitamin E, and supply B vitamins, magnesium, zinc and selenium. They are also cholesterol-free, but they should be consumed in moderation because they are high in fat. However, most of the fat in nuts is monounsaturated or polyunsaturated, which can help to lower blood cholesterol levels, including LDL bad cholesterol, while maintaining HDL good cholesterol.

nut alert

Watch the quantity of Brazil nuts, coconuts and coconut products you eat, as these are higher in saturated fat.

getting the right fats in your diet

- Replace the saturated and trans fats in your diet with monounsaturated and polyunsaturated fats by using soft margarine made without trans fat (look for "non-hydrogenated" and "low in saturated and trans fat" on the label) and using liquid oils (safflower, sunflower, canola and olive) instead of solid fats (lard, solid margarine) for cooking.
- Use salad oils made with olive or canola oil, which contain monounsaturated fat.
- Avoid deep-frying, which adds more saturated and trans fat to foods.
- Include 2 to 4 servings of milk products per day in your diet, including milk or yogurt with 2% or less milk fat and cheese in moderation (a serving of cheese is 50 g or 2 oz).
- Trim the fat from meat and the skins from poultry. Bake, broil or grill, and avoid deep-frying.
- Have omega-3 rich fish (salmon, sardines, tuna, herring, mackerel, rainbow trout) 2 to 3 times a week.
- Eat nuts in small amounts (2 to 3 tbsp/30 to 45 mL).
- Eat fewer high-fat snacks such as cookies, snack crackers and chips, which are high in trans fat. Check the ingredient list and avoid those made with hydrogenated oils. The higher they are on the list, the higher the trans fat content.

protein

Protein is a major structural component of every body cell. In addition to being a source of energy for your body, it is necessary for the growth, repair and maintenance of skin, muscles, bones and organs. It also plays important roles in the functioning of membranes, enzymes and hormones.

Most North Americans get enough protein in their diet — some, especially those following a high-protein diet, may be getting more than they really need. About 10% to 30% of your calories should come from protein. This range varies depending on how much carbohydrate and fat is in your diet. Adults over 19 require 0.8 g of protein per kg of body weight per day. That works out to a daily requirement of about 56 g of protein for men and 46 g of protein for women. If you have 1 egg (6 g), 1 tbsp (15 mL) peanut butter (4 g), ½ cup (125 mL) cooked beans or lentils (8 g), ½ chicken breast (16 g), and 1 cup (250 mL) 2% milk (20 g), you will have eaten 54 g of protein.

protein sources

To make the protein your body needs, you must get essential amino acids in sufficient amounts from the foods you eat. Protein from animal foods such as meat, poultry, fish, eggs, milk, cheese and yogurt supplies all of the essential amino acids, as does the protein from soy products. These foods are typically referred to as "complete" proteins. Other plant foods provide varying amounts of protein, but do not provide all the essential amino acids. These are often referred to as "incomplete" proteins.

plant protein

Legumes (beans, dried peas and lentils), seeds and nuts are much higher in protein than grain products and many vegetables. To get the full range of essential amino acids from a primarily plant-based vegetarian diet, you will have to eat a wide variety of foods. It is not necessary to combine specific foods at each meal to get a complete source of protein, as once thought. Eating an assortment of plant foods (legumes, nuts, seeds, grains, vegetables and fruit) with soy products over the course of a day can provide the essential amino acids you need. You also need to make sure you are getting enough calories to meet your energy needs.

best ways to get the protein you need in your diet

- Eat a variety of protein-rich foods, including meat, fish, poultry, eggs, milk, cheese, yogurt, legumes (beans, dried peas and lentils), peanut or almond butter, nuts, seeds, tofu and soy alternatives.
- If you don't eat meat, fish, eggs or dairy products, choose soy alternatives such as soy meat substitutes or products made with soy to get some complete proteins in your diet.
- Consume the recommended serving sizes (see chart, page 5) to control your calorie intake and weight.

10 best strategies for healthy eating

1. Eat a variety of foods.
2. Pay attention to portion sizes; use those recommended in the food guide to control the amount of food and calories you consume.
3. Eat more whole grains such as whole-wheat, bran and oat breads and cereals, whole-wheat pasta and brown rice to increase the fiber in your diet.
4. Include a variety of vegetables and fruits, especially dark red, orange and green varieties, to get more antioxidant nutrients like beta carotene and lycopene.
5. Have fruit or vegetables more often than their juice to control calories and get more fiber.
6. Keep your meals moderate in total fat and low in saturated and trans fats to promote a healthy heart by eating low-fat dairy products, lean meats and foods prepared without added fat.
7. Balance the amount of food you eat with the amount of physical activity you do to maintain or improve your weight.
8. Limit your consumption of salty foods to keep your blood pressure in a healthy range.
9. If you drink alcohol, have it in moderate amounts, which may help promote a healthy heart (1 drink a day for women, 2 drinks a day for men) or eliminate it altogether, as too much alcohol is linked with liver disease and increased rates of breast cancer in women.
10. Cut back on high-caffeine beverages, which may interfere with bone health and are dehydrating.

losing weight and keeping it off

More than half of North American adults are presently considered overweight or obese, which puts them at risk for a variety of health problems, such as heart disease, some types of cancer, type-2 diabetes, gallbladder disease, respiratory disease, sleep apnea and osteoarthritis. Obesity in children has also become a disturbing trend, as it puts children at risk for adult health problems, including adult-onset diabetes.

Studies show that overweight individuals who reduce their body weight by 5% to 10% reap numerous health benefits, including lower LDL (bad cholesterol), higher HDL (good cholesterol), better blood glucose levels, lower blood pressure (high blood pressure is linked to heart disease), and lower triglycerides (high triglycerides in the blood are linked to heart disease and diabetes). A 160-pound woman who loses 8 to 16 pounds or a 200-pound man who loses 10 to 20 pounds can expect real health benefits.

Being physically active is likely the best way to maintain a healthy weight. Regular exercise also helps to control blood cholesterol, diabetes and high blood pressure. And the good news is that it is never too late to become active. In fact, studies show that sedentary individuals who begin to exercise actually reap the greatest benefits from physical activity. Becoming more physically active on a regular basis even protects people who are already overweight or obese.

Being active helps you burn calories and maintain lean muscle, which burns more calories than body fat. Ideally, you should get aim for an hour or more of activity each day to maintain a healthy body weight. This doesn't mean working out at the gym for an hour every day. It could involve two ten-minute walks to do your errands, twenty minutes of dancing, cycling or home exercise, and twenty minutes playing actively with the kids.

is your weight a health concern?

To determine if your weight puts you at risk for health problems, find your Body Mass Index or BMI. A BMI greater than 25 increases the risk for health problems, a BMI of 30 or greater puts you at an even higher risk. You should also take a waist measurement, as excess weight carried around the middle is another indicator of health risk. A waist measurement equal to or greater than 40 inches (102 cm) for men and equal to or greater than 35 inches (88 cm) for women increases risk for type-2 diabetes, heart disease and hypertension.

To find your BMI, visit:
http://www.hc-sc.gc.ca/hpfb-dgpsa/onpp-bppn/bmi_chart_java_e.html.

the skinny on diets

It's hard to pick up a newspaper or magazine today without reading about the latest diet. We're obsessed with losing weight, and can choose from a variety of methods to do so, ranging from eating a very low-fat/high-carbohydrate diet to eating one that is high in protein and low in carbs. The problem is, there's little evidence to show that these jazzy new diets work better than any other low-calorie diet as far as weight loss is concerned. The trick to rapid weight loss diets is that they're typically very low in calories, and as such may be limited in essential nutrients, which is not the best for your health. Some people can benefit from going on a kick-start diet to help them lose some weight initially, but it's important to assess the diet to ensure that it provides adequate calories and the full range of vitamins and minerals you need. If an entire food group is missing, you can be sure you are missing out some key nutrients.

very low-fat/high-carbohydrate diets

Some diets are very low in fat and high in carbohydrate (10% fat; 70% to 80% carbohydrate). This type of diet, which has been promoted for heart health and lowering blood cholesterol, is very restricted in fat, making it difficult for most people to follow. It seems outdated now because we know that switching to the healthier types of fat is more important than strictly limiting fat.

There are also some negatives associated with eating too much carbohydrate. A diet that's too high in carbohydrates, particularly sugars, can increase blood triglyceride levels. This puts individuals at higher risk for type-2 diabetes and heart disease. People who follow this type of diet may turn to fat-free and reduced-fat foods as a way to reduce fat, but may not realize that these products often provide a significant amount of calories and carbohydrates. For example, fat-free cookies or low-fat ice cream are not calorie-free. These foods still provide a lot of calories in the form of simple carbohydrates, and need to be eaten in moderation, not liberally, to help control calorie intake.

Another problem with very low-fat diets is that they are not very satisfying. Fat-containing foods provide satiety (a feeling of fullness). Followers of low-fat diets may overeat high-carbohydrate foods to fill the void. These diets are also very difficult to stick with for a long time because they are not satisfying and exclude many foods people normally eat.

Rather than following on a strict low-fat diet, it is better to work on changing your current eating habits. You can cut down on your usual fat intake, but focus on changing the type of fat in your diet by replacing saturated and trans fats with polyunsaturated and monounsaturated fats. It's also important to eat more high-fiber foods, such as whole grains, fruits, vegetables and beans, instead of processed white flour or sugary foods.

know the risks

Very low-fat/high-carbohydrate diets may:

- increase blood triglyceride levels, increasing your risk for type-2 diabetes and heart disease;
- increase your consumption of fat-free and reduced-fat foods, which are likely to be high in calories and carbohydrates;
- induce cravings for fat, or food in general, which you are likely to satisfy by overindulging in carbs if you follow the diet rigorously.

high-protein/low-carbohydrate diets

High-protein/low-carbohydrate diets (55% fat; less than 20% carbohydrate) include foods such as red meat, bacon, sausages, whole milk and cheese. People initially enjoy following these diets because they include higher-fat foods that are typically forbidden on other diets, and that helps them to feel more satisfied. However, some people find it difficult to stay on this diet for long, as they miss the foods that provide them with a quick source of energy, namely carbohydrates.

People are often successful at losing weight on these diets because, overall, they tend to be low in calories (about 1,500 calories). Even though these diets are high in fat, a lot of the foods people typically eat are missing, and the net result is fewer calories consumed. These diets are also very encouraging, as during the first few weeks on the diet, people lose weight rapidly. Unfortunately this is due to water loss — one result of reducing carbohydrate consumption, as carbs hold more water than protein and fat.

The main concern with a high-protein/low-carbohydrate diet is that it is high in saturated fat. As discussed earlier, too much saturated fat can increase the level of LDL cholesterol in the blood, which increases the risk of heart disease. These diets also restrict grain products, vegetables and fruits, which mean they lack some important vitamins and minerals. Although preliminary research suggests such diets may not be detrimental to blood cholesterol and triglyceride levels, the studies have been conducted on a limited number of people who have followed the diet for 12 months or less. Another concern is that following a high-protein diet for a long time may increase the risk for osteoporosis and kidney disease, but we won't know this for sure until further studies have been conducted. Until more is known about the real risks and benefits of high-protein/low-carbohydrate diets, they should be viewed with caution.

know the risks

High-protein/low-carbohydrate diets:

- may increase LDL cholesterol levels;
- lack important vitamins and minerals;
- may increase risk for osteoporosis and kidney disease.

high-carbohydrate/moderate-fat diet

A recent review of all diets, conducted by the United States Department of Agriculture (USDA), concluded that a high-carbohydrate/moderate-fat diet (20% to 30% fat; 55% to 60% carbohydrate), which follows the eating pattern outlined in the Canadian and American food guides, promotes healthier calorie and fat intakes than other diets. The study compared the diets, calorie intakes and body mass index (BMI) of more than 10,000 adults. It found that a high-carbohydrate/moderate-fat diet was lower in calories and higher in nutritional quality compared to a high-protein/low-carbohydrate diet. Saturated fat intakes were almost twice as high in the high-protein/low-carbohydrate diet. BMIs were also found to be lower in those consuming a high-carbohydrate diet.

know the benefits

High-carbohydrate/moderate-fat diets:

- lower saturated fat intakes;
- lower BMI;
- are more likely to keep weight off.

the best advice about weight-loss diets

The best advice about diets is that they don't guarantee weight loss. And most people who need to lose weight don't need to follow any particular diet, they simply need to eat fewer calories and exercise more. Calories *do* count!

Any diet that causes you to eat fewer calories than you usually consume will contribute to weight loss. For example, most popular weight loss diets provide around 1,500 calories per day, which is roughly 500 fewer calories than a sedentary woman might consume to maintain her weight. Losing 1 pound a week requires losing 3,500 less calories over the week, or eating roughly 500 fewer calories per day.

Alternatively, burning up 500 calories a day in exercise can also result in a pound of weight loss. When a reduced-calorie diet is accompanied by exercise, additional calories are burned, which helps to speed weight loss.

Unfortunately, most people who are trying to lose weight do not typically reduce calories while increasing physical activity for an adequate period of time. Individuals who don't keep their calories in check and who don't keep physically active are likely to regain any weight they have lost after returning to their usual eating and exercise habits. A long-term commitment to eating right and keeping active is necessary to achieve and maintain a healthy weight.

keeping weight off

The National Weight Control Registry has kept track of the weight-control behaviors of more than 3,000 American adults who have lost an average of 60 pounds and kept it off for an average of six years. Four common behaviors were associated with weight loss:

- eating a lower-fat (20% to30% fat), higher-carbohydrate diet;
- monitoring themselves by weighing in frequently;
- being physically active; and
- eating breakfast.

pay attention to portions

Eating food in portions that are larger than you need sneaks in extra calories and unwanted weight gain over the years. If you are wondering how you gained an extra 10 to 20 pounds over the past decade, take a look at how much you are eating. As we age, our metabolisms slow down and we actually need fewer calories. The problem is, most of us don't make the adjustment and switch to smaller serving sizes.

Studies show that people of all ages are eating larger portions, not only when they eat out, but also at home. Super-sizing foods and offering more food for just a few extra cents is common practice in fast-food restaurants. While it is important to watch what you eat in restaurants, controlling portions at home can be more effective over the long term because the food you eat on a regular basis has the greatest impact on your weight over time.

a calorie is a calorie

As far as the body is concerned, one calorie is the same as another, no matter where they came from. Eat too many calories (whether from fat, carbohydrates or protein) and you'll gain weight.

tips for managing quantities

- Take notice of the size of the plates, bowls and cups you commonly use at home. If you are serving meals on a dinner plate or drinking from a 16-ounce (500 mL) glass, switch to a luncheon plate and use a smaller glass.
- Measure out your usual servings of cereal, pasta, vegetables, juice, milk and so on using a measuring cup. Notice the size of your typical serving of meat or cheese. Compare this quantity to the Guide to Food Choices and Amounts chart on page 5. It might surprise you to find you are eating much more than you really need.
- Watch out for high-calorie beverages. A single serving of 100% juice in a bottle can provide up to 2 cups (500 mL), which is equivalent to 4 food guide servings! Most people don't realize that even "real" juice can be a source of significant calories. If you are thirsty, cut back on the juice and sugary beverages and have water instead.
- Check the serving sizes on food package labels. These provide a guide as to how much to eat and the calories per serving. If you eat twice the serving size, don't forget to double the calories too.
- Cut back, not out. Eating smaller servings means you can have your cake and eat it too. Have two cookies instead of four. Share a large muffin or rich dessert with a friend. Savor one scoop of ice cream instead of devouring a whole bowl.

watch those calories

Drinking fruit juices and other sweetened beverages several times a day can add a lot of calories to your daily diet. Here are the calories contained in a serving (1 cup/250 mL) of some popular drinks:

- freshly squeezed orange juice: 118 calories
- apple juice: 123 calories
- grape juice: 136 calories
- citrus fruit drinks: 121 calories
- cranberry cocktail: 155 calories
- ice teas and soda pop: 104 to 126 calories

10 best strategies for managing your weight

1. Eat breakfast every day! Reduce the amount of fat by using skim or 1% milk or low-fat yogurt. Include high-fiber foods such as whole-wheat bread or bagels, bran or oat cereals, and dried or fresh fruit.
2. Eat 3 to 5 meals or snacks, spaced evenly throughout the day to keep you energized. Avoid skipping meals to reduce the temptation to snack or eat more than you need later in the day.
3. If you eat a high-calorie and/or high-fat meal, balance it with smaller, lower-calorie and/or lower-fat snacks or meals during the day.
4. Watch how much you eat. Try smaller portions of food consistent with the serving sizes recommended on the food guide. If you are still hungry, add vegetables and fruits.
5. Cut back on sugars and sweets and high-calorie and/or high-fat foods that don't offer key nutrients, such as chips, cookies and donuts.
6. Be aware that low-fat foods are not a panacea. Many low-fat foods are actually high in sugar and calories and won't help you lose weight.
7. Fill up on foods that are naturally high in fiber, such as vegetables, fruits, whole grains and legumes such as cooked beans, dried peas and lentils.
8. Get moving! Gradually work up to 60 minutes a day of physical activity — brisk walking, cycling, swimming, strength training or aerobic dancing. Adding a half-hour brisk walk each day is an easy way to start. Once you get into the routine, mix and match your other activities.
9. Set realistic goals — aim to lose 5% to 10% of your body weight. After you achieve that goal, aim for another 5% to 10%. Keep going until you achieve a healthy weight. Breaking weight loss into manageable chunks may take time, but the long-term effort will be easier to manage.
10. Keep track of your weight loss and physical activity on your calendar or in a journal. Reward yourself for achieving your goals and keep going. Set new goals to keep you motivated.

other essentials

In addition to carbohydrates, fats and proteins, you need many other important vitamins and minerals to look and feel your best. Remember, you need over 50 different nutrients to be healthy, and no single one is a magic bullet for health. Here's a rundown of some of the key nutrients you need to function optimally.

vitamins

vitamin A and beta carotene

Vitamin A is a fat-soluble vitamin that promotes good vision and helps maintain healthy skin, teeth and skeletal and soft tissue. Some animal foods contain vitamin A, but most vitamin A comes from plant foods, especially dark green and orange vegetables and fruit. Beta carotene is the component found in these foods that converts to vitamin A in the body. Beta carotene is also an important antioxidant nutrient that may play a role in cancer prevention.

sources:

Carrots, sweet potatoes, pumpkin, cantaloupe, pink grapefruit, tomatoes and tomato products, broccoli and dark green leafy vegetables including spinach, beet greens, Swiss chard and kale.

vitamin C

Vitamin C is a water-soluble vitamin that aids in iron absorption, helps to heal cuts and wounds and maintain connective tissue, which holds muscles, bones and tissues together, and maintains strong blood vessel walls. Vitamin C also acts as an antioxidant, helping to reduce oxidation in cells and cell damage, thereby playing a role in preventing disease processes from starting.

sources:

Oranges and orange juice, grapefruit and grapefruit juice, apple juice, kiwi fruit, strawberries, red, yellow and green peppers, broccoli, Brussels sprouts, potatoes and tomatoes.

vitamin E

Vitamin E is a fat-soluble vitamin that acts as an antioxidant to help reduce oxidation in cells. Vitamin E, especially as a supplement, has been promoted widely as a way to improve heart health. It is also being studied for its potential role in cataract prevention. However, the research on supplements is not conclusive, and high intakes are not recommended. The best way to get vitamin E is to eat foods containing vitamin E.

sources:

Nuts, seeds, vegetable oils, wheat germ, sweet potatoes and papaya.

vitamin B_6

Vitamin B_6 is a water-soluble vitamin involved in many of the chemical reactions of protein and amino acids. It also helps maintain normal brain function and is involved in forming red blood cells. Vitamin B_6 has been found to help reduce symptoms of PMS, but high intakes are neither necessary nor desirable. High doses of vitamin B_6 from supplements, not food, can cause numbness and other neurological disorders. For adults, the safe upper limit is 100 mg of vitamin B_6 per day.

sources:

Meat, fish, poultry, organ meats, legumes (beans and lentils), peanut butter, fortified breads and cereals, bananas and watermelon.

vitamin B_{12}

Vitamin B_{12} plays an important role in helping your body function. It works in combination with folate to make DNA and helps form red blood cells. Vitamin B_{12} also helps maintain the central nervous system. A deficiency of Vitamin B_{12} can cause a disease called pernicious anemia. Older people (we lose our ability to absorb Vitamin B_{12} as we age) and strict vegetarians who do not consume any animal products are at greater risk of deficiency.

sources:

Milk and milk products, meat, poultry, fish and eggs, and foods fortified with Vitamin B_{12}. Strict vegetarians should look for foods fortified with vitamin B_{12}, such as soy and rice beverages and soy-based meat substitutes.

folate

Folate is a B vitamin that works with Vitamin B_{12} to make DNA and red blood cells. It plays an important role in preventing fetal neural tube defects. A lack of folate, along with a lack of vitamin B_6 and vitamin B_{12}, can increase blood homocysteine levels, which are associated with increased risk of heart attack and stroke.

Folic acid is the form of folate used in vitamin supplements. Women who may become pregnant are advised to take a folic acid supplement (0.4 mg or 400 µg per day), as it is difficult to get enough folate in the diet.

sources:

Liver, legumes (beans, dried peas, lentils), dark leafy greens, asparagus, broccoli, corn, green peas, oranges and orange juice, canned pineapple juice, honeydew melon, cantaloupe, strawberries, nuts and sunflower seeds, wheat germ and fortified breads, cereals and pasta.

vitamin D

Vitamin D works with calcium to help build and maintain strong bones. Vitamin D also helps the body maintain normal levels of calcium in the blood. A deficiency of Vitamin D, especially in older adults, is linked to an increased risk of bone fractures and osteoporosis.

how much vitamin D do you need?

19–50 years of age: 5 µg (200 IU)

51–70 years of age: 10 µg (400 IU)

Over 70 years: 15 µg (600 IU)

(Source: National Academy of Sciences, 1997)

Vitamin D is made in the body when the skin is exposed to sunlight. Older individuals who don't get enough dietary vitamin D and who have a limited exposure to sunlight are most at risk of a deficiency. Also, people who live in northern climates (all of Canada and the northern United States) don't get enough sunlight during the winter months to make the vitamin D their bodies need. A vitamin D supplement during the winter months can be beneficial to people who don't get adequate sun exposure.

sources:

Milk, eggs, fatty fish (salmon, mackerel, sardines, tuna, rainbow trout), fish liver oils, margarine, soy and rice beverages enriched with vitamin D.

minerals

calcium

how much calcium do you need?
19–50 years of age: 1,000 mg/day
51–70 years of age: 1,200 mg/day
(Source: National Academy of Sciences, 1997)

Calcium helps with many important body functions, including regulating heart and muscle contractions, nerve transmission, blood clotting and numerous enzyme functions. Calcium is best known for its role in building strong bones and teeth, which it does in conjunction with the other bone-building nutrients, specifically, vitamin D, phosphorus and magnesium. An adequate intake of calcium and vitamin D, as well as regular weight-bearing exercise throughout life helps prevent osteoporosis.

You can get 1,000 mg of calcium in a day by consuming, for example, 2 cups (500 mL) of 1% or 2% milk (630 mg), ¾ cup (175 g) of 1% to 2% yogurt (215 mg), ¼ cup (50 mL) of almonds (75 mg) and ½ cup (125 mL) of cooked bok choy (85 mg).

sources:
Milk, cheese, yogurt, calcium-fortified beverages (soy, rice and orange juice), canned salmon and sardines with bones, sesame seeds, cooked beans, tofu containing calcium sulfate, almonds, bok choy, kale and broccoli.

READ THE LABEL
"A healthy diet with adequate calcium and vitamin D, and regular physical activity, helps to achieve strong bones and may reduce the risk of osteoporosis."
To make this health claim, a food must be a good, high or excellent source of calcium.

phosphorus

Phosphorus is a major component of bones and teeth. It also helps the body produce and regulate energy and form the membranes and genetic material in cells. Phosphorus is widely distributed throughout the food supply. It is found in high amounts in most animal foods and in some plant foods. Phosphorus is also found in food additives and soft drinks.

sources:
Meat, fish, poultry, eggs, milk products, legumes and nuts.

magnesium

Magnesium helps to build and maintain strong bones. It also plays a role in energy production and is involved in many enzyme functions, which maintain normal muscle and nerve function as well as a normal heart rhythm.

sources:
Legumes (beans, dried peas and lentils), nuts and seeds, whole grains such as wheat and oat bran, brown rice, meat and milk products.

potassium

Potassium works with sodium, calcium and magnesium to maintain proper water balance in the body and to help regulate blood pressure. Potassium also helps nerves, muscles, heart and kidneys function properly. A diet high in potassium may help reduce the risk of hypertension and stroke.

sources:
Oranges and orange juice, bananas, melon, papaya, pears, figs, prunes and other dried fruit, tomatoes and tomato juice, potatoes, meat, poultry, milk and yogurt.

READ THE LABEL
"A healthy diet containing foods high in potassium and low in sodium may reduce risk of high blood pressure, a risk factor for stroke and heart disease."
To make this health claim, the food must be low in sodium or sodium-free.

sodium

Sodium is required to regulate blood pressure and water balance in your body. Too much sodium in the diet can cause increased blood pressure in individuals who are sensitive to sodium. High blood pressure in a risk factor for heart disease. Sodium is pervasive in our food supply, especially in processed foods such as canned goods, packaged foods and cured and pickled products. Most North Americans eat more sodium than they really need, which is not a good thing for heart health.

sources:
Table salt, salted processed foods (chips, crackers, pickles, sauerkraut, dry soup and pasta and seasoning mixes, canned soups and foods with added salt) and salt-cured meats such as bacon and many luncheon meats.

tips for lowering blood pressure

- Lower sodium intake by eating fewer salty foods and choosing foods that are labeled "low in sodium" or "sodium reduced." Aim to consume less than 2,400 mg of sodium per day.
- Eat a diet that contains 8 to 10 servings of fruits and vegetables and 2 to 3 servings of low-fat dairy products.
- Maintain a healthy weight, keep physically active and have alcohol in moderation.

(Source: DASH Diet — NEJM 336:1117-1124, 1997. www.nhlbi.nih.gov)

the best ways to cut back on sodium

- Read food labels and choose those labeled "salt-free" or "sodium-free" or "low in sodium/salt."
- Prepare foods without adding salt to the cooking water and omit the salt in recipes.
- Season foods with herbs, spices, lemon juice or garlic instead of salt or mixtures containing salt such as seasoning salt, garlic salt or onion salt.
- Avoid canned, bottled or dehydrated soups, sauces and pasta and rice mixes.
- Limit salty snack foods such as chips, pretzels, crackers and salted nuts.
- Cut back on processed, smoked or salt-cured meats, such as bacon, hot dogs, sausages and luncheon meats.
- Avoid salty vegetable and tomato juices.
- Limit processed cheeses and cheese spreads and pickled foods such as pickles, relish, sauerkraut.

iron

Iron is an essential component of hemoglobin, which carries oxygen to all cells in the body. Inadequate iron intakes can lead to depleted iron stores and iron-deficiency anemia. Women and adolescent girls need to pay special attention to their iron needs, since iron is lost each month during menstruation. This group needs to eat plenty of iron-rich foods, and some individuals may need a supplement.

There are two kinds of iron: heme and non-heme. Heme iron, found in meat, poultry, fish and seafood, is absorbed readily by the body. Non-heme iron, found in eggs, grains, beans, vegetables and dried fruit is less well absorbed by the body. Eating non-heme iron foods with heme iron foods (e.g., beef chili with beans), increases overall iron absorption. Having vitamin C–rich foods (e.g., oranges or tomatoes) with an iron-containing food (e.g., spinach) also increases iron absorption.

sources:

Red meat, dark meat poultry, other meat and poultry, clams, oysters, legumes (beans, dried peas and lentils), iron-fortified breakfast cereals, oat and wheat bran, tofu, flaxseeds, blackstrap molasses, eggs, pasta, bread, nuts and seeds, dried fruit and prune juice.

zinc

Zinc has various structural and regulatory roles in the body. It controls many enzyme functions and helps with the growth and maintenance of cells. It is also needed for taste and smell acuity. A deficiency of zinc can retard growth, impair immune function, reduce appetite and cause hair loss and skin lesions. Strict vegetarians (who may get less zinc from a plant-based diet) and heavy alcohol consumers (who may have impaired zinc absorption) are at greater risk for a deficiency.

sources:

Meats, seafood (especially oysters), whole grains, wheat germ, eggs, milk, cheese and yogurt.

is a vegetarian diet better than a meat diet?

Vegetarian diets offer a number of advantages, including lower levels of saturated fat, cholesterol and animal protein and higher levels of carbohydrates, fiber, magnesium, folate, phytochemicals and antioxidants such as vitamins C and E and carotenoids.

A vegetarian diet can be just as healthy as a meat containing diet, but careful planning is required. To get the necessary nutrients, vegetarians need to eat plenty of whole-grain breads and cereals, vegetables, fruits, legumes, nuts, soy products and calcium alternatives. Some supplements might also be necessary, for example, calcium and vitamin D (if no milk products are consumed), iron (for women with low iron stores) and vitamin B_{12} (which is only found in animal products and meat alternatives fortified with vitamin B_{12}).

beyond vitamins and minerals

Some substances in food go beyond what basic vitamins and minerals can do in terms of promoting health. Substances called phytochemicals, for instance, are chemicals found in plants that are essential to good health. They include flavonoids and carotenoids that have various functions. Some act as antioxidants, protecting cells from damage, others may have a role in preventing cancer or heart disease. Fiber is another non-nutritive substance that carries out functions that are very important for your health. Finally, fluids are crucial for keeping your body hydrated and working properly. Making the right choices with these substances in mind can help you achieve better health.

plant powerhouses

Some plant foods contain biologically active components called phytochemicals, which can affect certain risk factors for disease. These foods should not be considered magic bullets for better health, but rather part of a balanced diet that includes a variety of other healthful food choices.

foods rich in phytochemicals

- Blueberries are high in antioxidants, which help reduce oxidative stress in cells and may help protect against cancer and heart disease.
- Cranberries are a rich source of procyanidins, which help prevent urinary tract infections.
- Dark red, yellow or orange fruits and vegetables contain carotenoids (alpha and beta carotene, lycopene and luetin), which are being studied for their potential role in preventing heart disease, cancer, macular degeneration and cataracts.
- Tomato products, such as ketchup and pizza or pasta sauces, and tomato juice contain lycopene, which has been found to help reduce certain types of cancer, particularly prostate cancer.
- Red grapes and purple grape juice contain some of the same flavonoids as red wine, and resveratrol, which may be good for heart health.
- Flax seeds (not flaxseed oil) contain lignins, which convert to a form of estrogen and are thought to have some protective effect against cancer.
- Soy foods contain isoflavonoids and lignins, which are converted to a form of estrogen in the body. Some women find soy foods help reduce symptoms of menopause.
- Tea (green and black) contains antioxidants, including flavonoids, which may protect against certain cancers and heart disease.

fiber

Fiber is a non-nutritive substance that is not completely broken down by the body. It plays an important role in keeping your digestive system healthy and maintaining regularity. Eating high-fiber foods can also help control blood sugar and blood cholesterol levels. Diets low in fat and high in fruits, vegetables and grain products that contain fiber are associated with a reduced risk of some types of cancers and heart disease.

There are two kinds of fiber — soluble and insoluble. Insoluble fiber, found in whole grains, wheat bran, vegetables and fruits with edible skins and seeds, helps maintain regularity and keep the digestive system healthy. Soluble fiber, found in fruits, legumes, barley, psyllium and oats (oatmeal), helps lower blood cholesterol and control blood sugar levels. A high-fiber diet is also beneficial for weight control, as high-fiber foods are generally low in fat and help to make you feel full.

Most North Americans don't get nearly enough total fiber in their diet. A typical daily intake is about 15 g. Ideally, women should consume 25 g and men 38 g of total fiber per day.

the best ways to add fiber to your diet

- Add fiber-rich foods to your diet gradually to reduce the chances of bloating, gas or cramps.
- Try to eat foods high in both insoluble and soluble fiber at every meal.
- Include 5 to 12 servings of whole-grain products in your diet every day. Choose whole-wheat, bran, oat or rye cereals and breads instead of white bread and processed cereals, and whole-wheat pasta and brown rice instead of white pasta and rice.
- Eat 5 to 10 servings of vegetables and fruit every day. Leave the skins on and have whole fruits or vegetables instead of juice for added fiber.
- Include more legumes (beans, dried peas, lentils) in your meals as spreads or dips, soups, salads and main dishes.
- Read food labels and choose foods that are high in fiber, at least 4 g per serving.

fluids

To be in the best of health, you need to be properly hydrated. You could live for several weeks with no food, but only a few days without water. Over half of your body weight is water, and every cell and process in your body depends on water to function properly. Water is also essential to maintain a normal body temperature.

Dizziness, lightheadedness, muscle cramps, nausea and headaches are all warning signs of dehydration. If left unheeded, dehydration can cause a dangerous increase in body temperature, which can lead to heat exhaustion and, more seriously, heat stroke. Thirst is not a good indication of your body's need for fluids. You may not feel thirsty until you are already dehydrated.

A normal fluid requirement for most people living at moderate temperatures is about 8 cups (2 L) a day. In hot and humid conditions, daily fluid requirements may double or triple. Working strenuously or exercising outside in hot temperatures increases fluid requirements. Sweating helps keep the body cool, but results in lost fluids and electrolytes (sodium and potassium). Drinking adequate fluids and including sodium- and potassium-rich foods (e.g., a snack of orange juice, a banana or salted crackers) helps replace fluids and electrolytes. Eating high-fluid foods such as soup, lettuce, watermelon, cucumbers, tomatoes and oranges can also help keep you hydrated.

what to drink

- *Water:* While water has no calories, it also has no nutrients. Nevertheless, the majority of your fluid requirements should be met by drinking water because that's what your body needs most of all. There are a wide variety of waters on the market today and all — purified, tap or bottled — will meet your fluid needs.
- *Juice:* The best choice is freshly made juice, from fruits or vegetables, with no added sugar or salt. Freshly made juice contains all the nutrients of the plants from which it is made, except for fiber. If you are purchasing juice in a bottle, the kind labeled "100% pure" or "reconstituted" is best for providing more of the important nutrients you need.
- *Fruit juice beverages and cocktails:* These are not to be confused with "real" juice. Although fruit juice beverages often contain added vitamin C, they are higher in sugar than pure or reconstituted juice. Also, most fruit juice beverages contain less than 25% real juice, which means they have fewer nutrients.
- *Fruit-flavored beverages and soft drinks:* These include lemonade, ice tea and other fruit-flavored or soda beverages that are mostly water with sugar and flavorings added. They are lower in nutrients than 100% juice and contain significant calories unless they are calorie-reduced. All of these beverages can help keep you hydrated, but most come in serving sizes that are bigger than one needs. Research conducted by the World Health Organization has found that individuals, including children, who consume a lot of sugary drinks are at risk of excess weight gain. Soft drinks and ice tea also contain caffeine, which can be dehydrating.
- *Coffee and tea:* Drinks that contain caffeine are not good choices for keeping you hydrated because they cause the body to lose water. When these beverages are consumed, intake of other fluids should be increased to compensate for fluid losses. Studies show that coffee is okay in moderation, if you can tolerate it, and can help get you going in the morning. Tea, green or black, contains antioxidants that have been shown to have health benefits. Herbal teas can help increase fluid intake, as most don't contain caffeine. Decaffeinated choices are better for people who may feel jittery or nervous after drinking regular coffee or tea.
- *Sports drinks:* These drinks contain water, carbohydrates (glucose) for energy and the electrolytes sodium and potassium. They are a helpful fluid choice for physically active people. However, these drinks do not contain many nutrients and shouldn't be used to replace more nutrient-dense juices in a daily meal plan. They are higher in sodium and calories than most people, particularly children, need on a daily basis. These beverages are particularly problematic for children who choose them over more nutritious milk and juice and consume them in larger quantities than they really need.

top up your fluids

When you are adding more fiber to your diet, be sure to drink plenty of fluids. Extra fluid is required to help the fiber work properly and to help move high-fiber foods effectively through your digestive system.

shopping for the best nutrition

Getting the best nutrition begins at the grocery store. To make sure you bring home the products that will help you eat well, start by reading labels. Labels can help you choose foods that are higher in fiber, lower in saturated fat, free of trans fat, low in sodium, or packed with more nutrients. Here how labels can help you get the best nutrition.

using food labels

Food labels can help you to make the best food choices to suit your needs, whether you are looking for foods that are low in fat or salt or high in fiber. Food labels can also help you avoid ingredients that might trigger an allergic reaction or find foods that are culturally appropriate, such as kosher foods.

The ingredient list is a good place to start your research. Ingredients are listed by weight, from most to least. Those with the highest weight are listed first. If you are looking for whole-wheat bread, whole-wheat flour, not white flour, should be listed first on the ingredient list.

Food labels also include a nutrition facts table. This tells you about the nutrients you will get from eating the amount of food specified on the label. The % Daily Value is a simple benchmark for assessing the nutrient content of foods quickly. It shows you if the food has a lot or a little of a nutrient. The Daily Values are based on recommendations for a healthy diet. For example, a food that has a % Daily Value of 5% or less for fat, sodium or cholesterol would be low in these nutrients. A food that has a % Daily Value of 15% or more for calcium, iron or fiber would be high in these nutrients.

Nutrition claims on food labels can also help you decide what food is best for you. For example a label can help you find foods that are "lower in sodium or salt," "free of sugars," "free of trans fatty acids," or "a source of omega-3 polyunsaturated fatty acids." Government rules must be met before a nutrition claim can be made on a label or advertisement.

claims for vitamins or minerals

- **"A source of" or "contains":** provides greater than 5% of the recommended daily intake (RDI) of that vitamin or mineral per serving.
- **"A good source of" or "high in":** provides greater than or equal to 15% RDI (except for vitamin C, for which greater than or equal to 30% RDI must be provided).
- **"An excellent source of" or "very high in":** provides greater than or equal to 25% RDI (except for vitamin C, for which greater than or equal to 50% RDI must be provided).

understanding nutrition claims on labels

- **Fat-free:** contains less than 0.5 g fat per serving.
- **Low-fat:** contains 3 g or less fat per serving.
- **Saturated fat-free:** contains less than 0.2 g saturated fatty acids and less than 0.2 g trans fatty acids per serving.
- **Low in saturated fat:** contains 2 g or less saturated fatty acids and trans fatty acids combined per serving.
- **Free of trans fatty acids:** contains less than 0.2 g of trans fatty acids per serving and is low in saturated fat.
- **Source of omega-3 polyunsaturated fatty acids:** contains 0.3 g or more omega-3 fatty acids per serving.
- **Cholesterol-free:** contains less than 2 mg of cholesterol per serving and is low in saturated fat.
- **Low in cholesterol:** contains 20 mg or less of cholesterol per serving and is low in saturated fat.
- **Salt- or sodium-free:** contains less than 5 mg sodium per serving.
- **Low in sodium/salt:** contains 140 mg or less sodium per serving.
- **Sugar-free:** contains less than 0.5 g of sugars per serving.
- **Source of fiber:** contains 2 g or more fiber per serving.
- **High in fiber:** contains 4 g or more fiber per serving.
- **Very high in fiber:** contains 6 g or more fiber per serving.
- **Light (in energy or fat):** food must be reduced in energy or fat.
- **Lean:** contains 10% or less fat per serving of meat or poultry (*not* ground) or fish; for ground meat, not more than 17% fat per serving.
- **Extra lean:** contains 7.5% or less fat per serving of meat or poultry (*not* ground) or fish; for ground meat, not more than 10% fat per serving.

what's better — fresh, frozen, canned or organic?

What kinds of food you choose to buy depends on a number of factors: your personal preferences, availability, price and how fast you can use them. Here are some quick tips to help you choose what's best for you.

fresh

When buying fruits and vegetables, fresh is usually your best choice for nutrients — but only if fruit or vegetables are bought soon after they are picked, look good and haven't spoiled. You must also eat them within a reasonable amount of time. If you let your leafy greens wilt or take more than a few days to eat perishable fruit or vegetables you might be better off with frozen or even canned versions. That's because food loses nutrients as it begins to spoil.

Nutrient loss varies depending on the fruit or vegetable, as well as on how it is stored and how it is prepared and cooked. For example, if you keep asparagus at room temperature rather than in the refrigerator, about half its vitamin C content is lost within a couple of days. Vegetables and fruits lose nutrients when they are cut or shredded ahead of serving, stored in water in the refrigerator, overcooked or cooked in too much water. The more you cook, cut or mix fresh produce, the more you increase its exposure to oxygen and the greater the chances of losing valuable nutrients.

frozen

Frozen vegetables and fruits are a good alternative to fresh. Most vegetables and fruits are flash-frozen soon after they are picked, and therefore retain most of their nutrients, except for small amounts of vitamin C and other water-soluble vitamins.

Frozen vegetables are convenient and easy to use because most of the preparation work has been done. Like fresh vegetables, they need to be cooked properly to reduce nutrient losses. The best way to cooked frozen vegetables is to steam them. They can also be cooked in the microwave. To retain nutrients, add a couple of tablespoons of water, cover and cook at medium heat (60% to 80%). Cooking vegetables at extremely high temperatures, which is a problem with many new microwaves, can cause nutrient losses. Boiling them for too long or in too much water also increases nutrient losses.

Fruits such as strawberries and blueberries that are frozen whole, without sugar, are a good buy, especially when fresh varieties are not in season.

canned

Canned vegetables undergo a heating process that can destroy some of the vitamin C and B vitamins. Some canned vegetables contain a lot of sodium, so it's a good idea to check the label and buy sodium-reduced versions. Canned fruits do not lose as many nutrients as vegetables because they are processed at lower temperatures. Many fruits are packed in juice, which is a source of nutrients if eaten. Fruit packed in syrup is higher in sugar.

organic

Organic foods are increasingly available in food markets and mainstream grocery stores. Certified organic foods are meant to be free of pesticides, fertilizers and genetically engineered plants. But you should be aware that the majority of conventional fruits and vegetables produced today also have very little or no pesticide residues (certainly well below safety standards set by government agriculture and food regulations). Studies show that organic foods provide the same amount of nutrients as conventional foods, but they are not necessarily safer. The potential for microbial contamination during food production exists for both organic and conventional foods, and that depends on good growing, shipping, preparation and storage practices. Organic foods tend to cost more than conventional ones, so the choice is yours.