

Osteoporosis

Osteoporosis is a disease that can affect both women and men. The term “osteoporosis” means that bones may be either softer than they should be or thinner and more brittle than they should be. Osteoporosis is very common in the elderly, but can also be found in much younger individuals.

Active living and healthy eating are especially important during years of rapid growth (late childhood–early twenties). Inadequate bone development may occur during this crucial time if there is a lack of calcium, vitamin D and exercise.

Rethink your drink ... choose water, milk and 100% juice more often.

There are many factors that contribute to developing and maintaining healthy bones:

- a balanced diet (following *Canada's Food Guide*) with adequate calcium and vitamin D
- physical activity, particularly weight-bearing and weight-resistant activities, such as running and dancing
- a lifestyle that avoids practices that deplete calcium from the bones, such as
 - smoking
 - consuming excess sodium (salt)
 - consuming excess caffeine
 - drinking excess alcohol
 - not eating enough fruit and vegetables.

Paying attention to all these factors is the best way to reduce the risk of osteoporosis and bone fractures.

Adapted from the *Osteoporosis Canada Website* (2010), Osteoporosis Canada [www.osteoporosis.ca]

How to Maximize Your Calcium Intake Through Healthy Eating Alone

Make sure that you are getting an adequate amount of calcium every day by following *Eating Well with Canada's Food Guide*. By doing so, you will meet your requirements for both calcium and vitamin D, which will help to build strong bones.

Products from the Milk and Alternatives food group, such as milk or fortified soy beverages, cheese and yogurt, are excellent sources of calcium because they contain large amounts of calcium that is easily absorbed by the body. Milk and fortified soy beverages, and some yogurts and cheeses, also contain vitamin D, a nutrient that helps your bones absorb calcium.

If you do not eat foods from the Milk and Alternatives food group, be sure to choose other food sources of calcium from the other three food groups, such as

- canned sardines and salmon (with the bones)
- leafy green vegetables such as broccoli, kale, bok choy, okra, turnip greens, collard greens
- dried figs
- canned baked beans
- cooked soybeans and other types of beans
- calcium-fortified orange juice, soy beverage and rice beverage
- firm or extra firm tofu, processed with calcium sulphate
- other fortified foods.

And don't forget vitamin D! Most Canadians have inadequate levels of vitamin D, and vitamin D increases calcium absorption.

Vitamin D is found in very few foods. Besides fortified milk, soy beverages and margarine, other food sources are

- fortified orange juice
- egg yolks
- chicken livers
- fatty fish such as salmon, sardines, herring, mackerel and swordfish.

Copied with permission from the *Osteoporosis Canada Website - How Much Calcium Do We Need?* (2010), Osteoporosis Canada, (<http://www.osteoporosis.ca>).

Cancer

Research shows that a diet high in fibre may reduce the risk of colorectal cancer. Eating plenty of fibre may also help you maintain a healthy body weight, which reduces the risk of a number of cancers.

Adapted from the *Canadian Cancer Society Website - Vegetables, fruit and cancer risk* (2010), Canadian Cancer Society, [www.cancer.ca]

Healthy eating includes plenty of fibre. Fibre is the part of plant foods that your body cannot digest. Fibre is what puts the bulk in salads, the crunch in carrots and broccoli and the chewiness in whole grain breads.

Health Canada recommends that adult Canadians get 21 to 38 grams of fibre each day for good health.

Copied with permission from the *Canadian Cancer Society Website - Go for high-fibre foods* (2010), Canadian Cancer Society [www.cancer.ca]

Research shows that up to 35% of all cancers can be prevented by eating well, being active and maintaining a healthy body weight.

Copied with permission from the *Canadian Cancer Society Website - Nutrition and fitness* (2010), Canadian Cancer Society [www.cancer.ca]

The key to eating well, being active and maintaining a healthy weight is to focus on what you add to your life, not what you take away. It's easier to add healthy foods each day rather than take away foods that you enjoy. Do an activity you enjoy, that way you will keep on doing it.

A diet that includes a variety of vegetables and fruit instead of higher fat, higher calorie foods can help you achieve and maintain a healthy weight. People who are overweight are at greater risk for cancer and other health problems such as diabetes, heart disease and stroke.

Vegetables and fruit are:

- excellent sources of vitamins, minerals and phytochemicals.
- high in fibre (to keep your digestive system healthy)
- low in fat and calories

Copied with permission from the *Canadian Cancer Society Website - Vegetables and fruit – mix it up!* (2010), Canadian Cancer Society [www.cancer.ca]

Non-Starchy Vegetables and Cancer Risk

Research shows that a diet high in non-starchy vegetables may reduce your risk of some cancers such as stomach, mouth and throat. Eating lots of these vegetables will also help you maintain a healthy body weight, which reduces the risk of a number of cancers. Examples of non-starchy vegetables include:

- artichokes
- bok choy
- broccoli
- cabbage
- carrots
- eggplant
- lettuce
- okra
- rutabaga
- spinach
- turnip

Other non-starchy vegetables, such as garlic, onions, leeks and chives (allium vegetables), may also reduce the risk of stomach and colorectal cancers.

Fruit and cancer risk

Research shows that a diet high in fruit may reduce your risk of some cancers such as lung, stomach, mouth and throat. Eating lots of fruit will also help you maintain a healthy body weight, which reduces the risk of a number of cancers.

Copied with permission from the *Canadian Cancer Society Website - Vegetables, fruit and cancer risk* (2010), Canadian Cancer Society, [www.cancer.ca]

Diabetes

What is Diabetes?

There are three main types of diabetes. **Type 1 diabetes**, usually diagnosed in children and adolescents, occurs when the pancreas is unable to produce insulin. Insulin is a hormone that controls the amount of glucose in the blood. Approximately 10 per cent of people with diabetes have type 1 diabetes.

The remaining 90 per cent have **type 2 diabetes**, which occurs when the pancreas does not produce enough insulin or when the body does not effectively use the insulin that is produced. Type 2 diabetes usually develops in adulthood, although increasing numbers of children in high-risk populations are being diagnosed.

A third type of diabetes, **gestational diabetes**, is a temporary condition that occurs during pregnancy. It affects approximately 2 to 4 per cent of all pregnancies (in the non-Aboriginal population) and involves an increased risk of developing diabetes for both mother and child.

Copied with permission from the *Canadian Diabetes Association Website - Diabetes Facts* (2010), Canadian Diabetes Association [www.diabetes.ca]

Signs and Symptoms

Signs and symptoms of diabetes include the following:

- Unusual thirst
- Frequent urination
- Weight change (gain or loss)
- Extreme fatigue or lack of energy
- Blurred vision
- Frequent or recurring infections
- Cuts and bruises that are slow to heal
- Tingling or numbness in the hands or feet

It is important to recognize, however, that many people who have type 2 diabetes may not display any symptoms.

Copied with permission from the *Canadian Diabetes Association Website - Diabetes Facts* (2010), Canadian Diabetes Association [www.diabetes.ca]

Plan for Healthy Eating

- Have at least 3 out of the 4 key food groups at each meal from Eating Well with Canada's Food Guide:
 - Vegetables and Fruit
 - Grain Products
 - Milk and Alternatives
 - Meat and Alternatives
- Have a glass of milk and a piece of fruit to complete your meal.
- Eat more vegetables. These are very high in nutrients and low in calories.
- Choose starchy foods such as whole grain breads and cereals, rice, noodles, or potatoes at every meal. Starchy foods are broken down into glucose, which your body needs for energy.
- Include fish, lean meats, low-fat cheeses, eggs, or vegetarian protein choices as part of your meal.
- Have portion sizes that will help you reach or maintain a healthy body weight.
- Include high fibre foods such as whole grain breads and cereals, fresh fruits, vegetables and legumes, and grains (e.g. pasta, rice).
- Make lower fat choices (e.g. use skim milk, lean ground beef, trim fat on meat, chicken etc., and use small amounts of added fat such as oil and salad dressings);
- Healthy eating habits should be built around a healthy lifestyle – keep active every day.
- The Canadian Diabetes Association recommends that all people with diabetes should receive advice on nutrition from a registered dietitian.
- Good management of diabetes includes healthy eating, staying active and taking required medication.

Heart Disease

What is Heart Disease?

Your heart is a muscle that gets energy from blood carrying oxygen and nutrients. Having a constant supply of blood keeps your heart working properly. Most people think of heart disease as one condition. But in fact, heart disease is a group of conditions affecting the structure and functions of the heart and has many root causes. Coronary artery disease, for example, develops when a combination of fatty materials, calcium and scar tissue (called plaque) builds up in the arteries that supply blood to your heart (coronary arteries). The plaque buildup narrows the arteries and prevents the heart from getting enough blood.

Copied with permission from the *Heart and Stroke Foundation Website - What is Heart Disease?* (2009), Heart and Stroke Foundation [www.heartandstroke.ca]

Eat Right

When it comes to your diet, variety is the key. Sample an array of foods that are nutritious, can help prevent disease and taste great. To create balanced meals that are moderate in portion size, follow *Canada's Food Guide*.

- Eat a diet that is lower in saturated and trans fats and includes fresh vegetables and fruit, complex carbohydrates and foods higher in fibre.
- Use less fat in cooking. Bake, broil, steam, boil, microwave or barbeque your food.
- Manage portion size. Divide your plate into four sections. Fill half your plate with vegetables and fill the remaining quarters with whole grains, meat or meat alternatives such as beans.

What You Can Do

Heart disease is preventable and manageable. Your best defence is controlling the risk factors that could lead to coronary artery disease, such as high blood pressure, high cholesterol, diabetes, smoking, stress, excessive alcohol consumption, physical inactivity and being overweight.

If you've been diagnosed with a heart condition, there are treatments to help you manage your illness. You can further reduce your risk by considering these heart-healthy steps:

- Be smoke-free.
- Be physically active.
- Know and control your blood pressure.
- Eat a healthy diet that is lower in fat, especially saturated and trans fat.
- Achieve and maintain a healthy weight without dieting.
- Manage your diabetes.
- Limit alcohol use.
- Reduce stress.
- Visit your doctor regularly and follow your doctor's advice.

Adapted the *Heart and Stroke Foundation Website - What is Heart Disease?* (2009), Heart and Stroke Foundation [www.heartandstroke.ca]

Food Allergy

Food allergies are sensitivities caused by a reaction of the body's immune system to specific proteins in a food. Current estimates are that food allergies affect as many as six per cent of young children and 3 – 4 per cent of adults.

In allergic individuals, a food protein is mistakenly identified by the immune system as being harmful. The first time the individual is exposed to such a protein, the body's immune system responds by creating antibodies called immunoglobulin E (IgE). When the individual is exposed again to the same food protein, IgE antibodies and chemicals such as histamine are released in the body. Histamine is a powerful chemical that can cause a reaction in the respiratory system, gastrointestinal tract, skin or cardiovascular system. In the most extreme cases, food allergies can be fatal. Although any food can provoke an immune response in allergic individuals, a few foods are responsible for the majority of food allergies.

Copied with permission from the *Health Canada Website - Food, Allergies and Intolerances* (2009), Health Canada [www.hc-sc.gc.ca]

Allergens in Schools

Because of the potential seriousness of allergic reactions, many schools have a policy in place to restrict students from bringing certain items in their lunches. It's very important to follow the school's food allergen policy closely, even if you are not allergic. The health and safety of other students depends on all parents and students following the school's food allergen policy. Here are some tips to help you:

- If you are allergic to a certain food, make sure the school knows about the allergy and work with them to come up with a strategy to keep yourself safe. Remember that it is not safe to trade or share food.
- If peanut is on the school policy as a restricted food, try thinking about alternative sandwich-making ingredients. For example, try hummus or apple butter instead of peanut butter.
- Always read the labels on the food you pack in your lunch. Don't pack any food with ingredients that are restricted at your school. Look for warning statements on the label such as "May Contain...". Remember, even trace amounts can cause a severe allergic reaction.

Copied with permission from the *Health Canada Website - Be Food Allergy Aware When Packing School Lunches* (2009), Health Canada [www.hc-sc.gc.ca]

Food Allergies

As many as 1.2 million Canadians may be affected by life-threatening food allergies and this number is increasing, especially among children. Currently, it is estimated that six per cent of children are affected by food allergies.

Although many foods can cause allergic reactions, Health Canada has identified a list of priority allergens that are responsible for the majority of allergic reactions to food in our country. These allergens are peanuts, tree nuts, sesame, soy, seafood (such as fish, crustaceans and shellfish), wheat, eggs, milk and sulphites.

Allergens can cause a reaction in your respiratory system, stomach and intestines, skin or cardiovascular system. The symptoms of allergic reactions vary in type and severity, from mild skin irritations and hives to breathing difficulties and loss of consciousness. Symptoms can also develop at different rates, sometimes getting worse very quickly. The most severe reaction, called anaphylaxis, can be fatal.

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