

Osteoporosis can be prevented

By Robert A. Tripodi,
B.A. LL.B., Nutrition Editor.

Osteoporosis is a preventable disease, yet over 1.4 million Canadians have been diagnosed with it. Given the increasing proportion of older people in our population, this trend is expected to increase steeply over the next few decades. In this feature, **RENEW** has assembled information on Osteoporosis that we hope will inspire and guide you to take action in the prevention and treatment of this disease.

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Osteoporosis can do more than put a curve in your back

Are you at risk? News Canada

Osteoporosis can permanently change, or end, your life. A fracture or crushed bones in your spine may be only the first sign that you have the disease, causing you to gradually shrink and bend. Without treatment, you'll likely fracture again. Maybe you'll break your wrist. You'll miss work. You won't be able to play cards, golf or tennis. Holding the phone may hurt. There will be pain, frustration and inconvenience. You may need others to help you out with daily activities. Most devastating of all, you may break a hip. You'll spend weeks trapped in a hospital. Within a year, you may succumb to one of the deadly implications of hip fracture and the consequences of forced inactivity. You may never walk on your own. You may require permanent nursing care. You may die.

- A woman has a one in six chance of fracturing a hip during her lifetime compared to a one in nine chance of developing breast cancer. She's also more likely to die from the consequences of the hip fracture.
- Each year 25,000 Canadians fracture a hip – 70 per cent of them are osteoporosis related. Up to 25 per cent of people who fracture a hip die as a result. Half of the survivors never walk unaided again.
- Osteoporosis affects one in four women and one in eight men over 50.

Don't let osteoporosis put a curve in your future or your back. Early detection, followed by treatment, can keep you enjoying an active and independent lifestyle. It can also save your life. Take 60 seconds right now and find out if you are at risk (see page 2).

An ounce of prevention

Robert Tripodi

In 1992, I underwent a life-changing experience that required me to drastically change my lifestyle. I received a kidney transplant. Since then, I have consistently worked on my goal to optimize my health by practicing preventative self-care, and have enjoyed great success. Now I am ready to help others in their own quest to wellness through prevention.

My background, experience and education places me in the unique position to inform people of the choices they have to lower their risk of illness and improve their lives. Examples evident in today's medical system, such as government cutbacks resulting in long waits for emergency care, should encourage us to participate more in our well-being through prevention. As nutrition editor, I see **RENEW** as an important tool to guide and empower those individuals who wish to follow this path.

Robert Tripodi, BA, LL.B., is currently enrolled at the Institute of Holistic Nutrition in Toronto where his interest is in preventative nutrition. He is a past chairperson of the Kidney Foundation of Canada, Ontario, Organ Donor Awareness Program.



How strong are your bones?

Take the 60-second Osteoporosis Risk Quiz



News Canada

1. Are you over 65?
 Yes No
2. Have either of your parents broken a bone after a minor bump or fall?
 Yes No
3. Have you broken a bone after a minor bump or fall?
 Yes No
4. Have you taken glucocorticoid pills (cortisone, prednisone, etc.) for more than three months?
 Yes No
5. Have you lost more than 3cm (a little more than an inch) in height since age 25?
 Yes No
6. Do you have a tendency to fall?
 Yes No
7. Do you have primary hyperparathyroidism?
 Yes No
8. Do you have a medical condition (such as celiac disease or Crohn's disease) that inhibits absorption of nutrients?
 Yes No
9. Has a recent x-ray suggested you have low bone density (osteopenia)?
 Yes No

For women

10. Did you undergo menopause before the age of 45?
 Yes No
11. Have your periods stopped for several months or more (other than for pregnancy or menopause)?
 Yes No

For men

12. Have you ever suffered from impotence, lack of libido or other symptoms related to low levels of testosterone?
 Yes No

If you are over 50 and have answered yes to any of these questions the Osteoporosis Society recommends that you talk to your doctor about having a bone mineral (BMD) test.

The questions in the 60-second Osteoporosis Risk Quiz relate to major risk factors for the disease – strong predictors of bone loss. Other minor risk factors may also contribute to bone loss. Since these risk factors are additive, the more of them you have, the more likely you are to develop osteoporosis.

What is Osteoporosis... Quick Overview

Osteoporosis is a disease that is characterized by low bone mass and deterioration of bone tissue, causing bones to become thin and weak. This leads to increased risk and fracture, particularly of the hip, spine and wrist.

- usually without symptoms until severe backache or hip fracture occurs
- most common in postmenopausal women
- spontaneous fractures of the hip and vertebrae
- decrease in height
- demineralization of spine and pelvis, as confirmed by x-ray techniques

When bones are severely weakened by osteoporosis, even simple movements – such as bending over and picking up a heavy bag of groceries – can cause fractures.

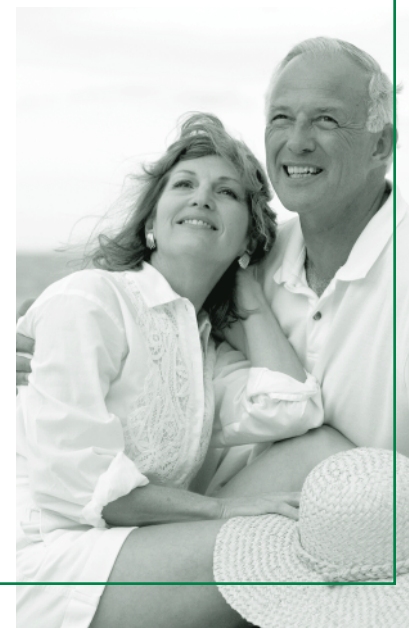
What causes Osteoporosis?

No single cause for osteoporosis has been identified. However, certain factors seem to play a role in the development of osteoporosis. These factors are called “risk factors” because each has been shown to influence our risk of developing the disease. Several of these factors have been shown to be stronger predictors of bone loss than others and are therefore considered major risk factors.

Osteoporosis... Who is affected?

- More than 1.4 million Canadians have osteoporosis. One in four women over the age of 50 has osteoporosis.
- At least one in eight men over 50 also has the disease. In Canada 20-30% of osteoporosis fractures occur in men.
- The disease can strike at any age.

Given the increasing proportion of older people in the population, the incidence of osteoporosis is expected to rise steeply over the next few decades.



Osteoporosis...

Quick Facts

- Osteoporosis is a condition that causes bones to become thin and brittle. The result can be broken bones (fractures) particularly of the hip, spine and wrist.
- Over 90 % of hip fractures are caused by osteoporosis.
- Osteoporosis often goes unrecognized for many years until a fracture occurs.
- There are approximately 25,000 hip fractures in Canada each year. Seventy percent of these are osteoporosis related. Hip fractures result in death in up to 20% of cases and disability in 50% of those who survive.
- More women die each year as a result of osteoporosis fractures than from breast and ovarian Cancers combined.
- The death rate for men (30%) after hip fracture is higher than in women (20%).
- Osteoporosis is the most common bone condition in North America present in about 25% of all women after menopause and in 13% of men over 50.
- Hip fractures are the most common injury from falls in the elderly.
- More than 50% of the broken bones in men over 50 and women over 40 years of age are the result of thinning bones related to osteoporosis (Latin for porous bones).
- Osteoporosis is often called the silent thief because there are no symptoms until the first break (fracture) happens.
- Falls account for 86% of admissions to Ontario hospitals for people age 65 and older.
- 1.4 million Canadians have Osteoporosis... one in four women over 50... one in eight men over 50.

Check List

Major Risk Factors:

- Age 65 or over
- Vertebral compression fracture
- Fracture with minimal trauma after age 40
- Family history of osteoporotic fracture (especially if your mother had a hip fracture)
- Long-term (more than 3 month use) of glucocorticoid therapy such as prednisone
- Medical conditions (such as celiac disease, Crohn's disease) that will inhibit absorption of nutrients.
- Primary hyperparathyroidism
- Tendency to fall
- Osteopenia apparent on x-ray
- Hypogonadism (low testosterone in men, loss of menstrual periods in younger women)
- Early menopause (before age 45)

Minor Risk Factors:

- Rheumatoid arthritis
- Hyperthyroidism
- Prolonged use of anticonvulsants (seizure medication)
- Prolonged heparin use (blood thinners)
- Body weight less than 57 kg (125 lbs)
- If your present weight is more than 10% below your weight at age 25
- Low calcium intake
- Excess caffeine (consistently more than 4 cups a day of coffee, tea or cola)
- Excess alcohol (consistently more than 2 drinks per day)
- Smoker

*The more risk factors you have,
the greater your risk for fracture.*

How do I know if I have Osteoporosis?

Osteoporosis does not develop overnight. You can lose bone mass steadily for many years without experiencing any symptoms or signs of the disease until a bone fractures. For this reason, osteoporosis is often called "the silent thief" – literally stealing our bone mass without giving us any indication whatsoever. Often there is no symptom until a bone fracture occurs. If osteoporosis is first diagnosed at the time a fracture occurs, it is already fairly advanced.

- Early detection of bone loss therefore is critical in preventing osteoporotic fractures.
- A bone mineral density test is the most accurate test for diagnosing osteoporosis. Speak to your doctor.

The Osteoporosis Society of Canada recommends that all post menopausal women and men over 50 be assessed for risk factors for osteoporosis.

Lifestyle Management

The Prevention and Treatment of Osteoporosis



Vitamin D

- Increases calcium absorption
- Is found in milk, margarine, eggs, chicken livers, salmon, sardines and fish oils

Calcium is found in some common foods

- Dairy: milk, cheese, yogurt, ice cream
- Fruits: banana, orange
- Vegetables: broccoli,
- Nuts: almonds
- Fish: sardines, canned with bones; salmon, canned with bones.

Good nutrition and a healthy lifestyle are an essential part of Osteoporosis Prevention. Making healthy choices regarding nutrition, physical activity and lifestyle can help prevent or halt the progression of osteoporosis.

Calcium & Vitamin D

- Good calcium nutrition is an essential part of osteoporosis prevention and management of its progression.
- You need calcium to grow healthy bones while vitamin D helps regulate the absorption of calcium. Bones reach their maximum size and density by early childhood.
- Calcium is essential to the body as just about every cell relies on it.
- Your bones are the only calcium bank in your body.
- Calcium is withdrawn from your "bone bank" when you don't get enough calcium from diet or supplements.

How much calcium & vitamin D do you need per day?

Age	Calcium Requirement	Vitamin D Requirement
4 to 8	800 mg	200 IUs
9-18	1300 mg	200 IUs
19 to 50	1000 mg	400 IUs
50 +	1500 mg	800 IUs
Pregnant or lactating women 18 +	1000 mg	400 IUs

Diet Guidelines

Protein

Protein is recognized as an essential element for bone health. Increasing intake in both men and women with low levels of protein has a positive effect on the risk of hip fracture.

Caffeine

Heavy caffeine consumption (more than four cups of coffee a day) has been linked to an increased risk of hip fracture in both men and women. Caffeine is also commonly found in tea, cocoa and some soft drinks.

Salt

People who consume high levels of salt (NaCl) are advised to cut back, as evidence points to a significant negative effect on bone health when daily salt intake exceeds 2100 mg Na (5g salt). Processed foods often contain high levels of salt such as smoked foods and deli meats.

Fruits and Vegetables

A recent study found that increased fruit and vegetable intake made a positive contribution to bone health. This increased intake was

shown to reduce bone loss in older men and women. Also, that men consuming a rich fruit and vegetable diet had significantly higher bone mineral density at most bone sites; a smaller effect was seen in women. A simple way to ensure that one is consuming enough servings of fruits and vegetables is to follow Canada's Guide to Healthy Eating (the rainbow food guide). The current recommendation is five to ten servings a day.





Physical Activity Guidelines

- Physical activity plays a major role in skeletal health. People of all ages can benefit from exercise to cut down their risk of developing osteoporosis and impede further bone loss.
- Studies suggest certain types of exercise may produce positive changes in BMD and could consequently reduce fractures. Include regular weight-bearing exercises (exercises where you support your body weight, such as walking, dancing or racquet sports).
- Individuals who remain active also improve their functional ability, coordination and balance, in turn reducing their risk of falls leading to fractures.

Bone strengthening activities are advantageous to bone health and therefore the maintenance of an active lifestyle is encouraged.

Older Adults

In older adults, maintaining an exercise program can preserve existing bone health and prevent further bone loss associated with the hormonal changes that go along with menopause. Studies with postmenopausal women, especially those who did impact exercise, show diminished rate of bone loss at the spine. Some benefit was seen in BMD at the hip as well.

Fracture prevention for older adults is associated with maintaining physical activity. Reports suggest that older adults with hip fractures were less active throughout their adult life. Inactive individuals, bed or chair bound, were found to have greater loss of BMD from the hip. Those who participated in weight-bearing activities had fewer fragility fractures.

Avoiding falls in older adults is best accomplished by keeping up physical activity. This will improve their strength and coordination. Studies reported that an active lifestyle in adults over the age of 65 and living independently were a contributing factor in helping to avoid falling. Individually tailored exercise programs – muscle strengthening, balance training, Tai Chi, walking – proved effective in minimizing injuries related to falls.

**Prevention is the key...
Treatments are available.**

**It's never too late to take steps to
protect your bones.**

*... Building Bones
... Building Knowledge*

For more information:

The Osteoporosis Society of Canada...



Provides of up-to-date information. Visit the web site, or call the toll free information line, staffed by trained volunteers who can answer your individual questions. In addition, OSC offices across the country can provide you with information on educational events, resources, self-help and support groups in your area.

Membership...

in the Osteoporosis Society of Canada provides essential information for anyone who has or is at risk of osteoporosis.

To join the Osteoporosis Society of Canada, please contact your local Society office or the National Office at:

Osteoporosis Society of Canada
33 Laird Drive,
Toronto, Ontario M4G 3S9
Canada
416-696-2663
1-800-463-6842
www.osteoporosis.ca



Free Workshops For information & registration, please call (416) 493-3333.

Wed., Apr. 14 "Stay Safe" Program

"Stay Safe" is a free one-hour presentation designed by Crime Concern to help educate women and men in personal safety. Participants will learn what and what not to take with them, how and when to carry a purse, their cash, their keys, their debit and credit cards and their personal identification. The program teaches women how to react when approached by suspicious persons, strategies to decrease their risk of becoming a victim and how to prevent assault and injury.

Times: Cantonese: 11:00 am – 12:00 noon
English: 1:00 pm – 2:00 pm

Location: Seminar Room

Languages: Cantonese/English

Tues., Apr. 20 Origami Workshop

Origami, the ancient art of paper folding. It is artistic, graceful and fun. Come to the workshop where you can learn how to create wedding jewellery, interior decorations, toys, sail boats and flowers just by using paper.

Time: 1:00 pm – 2:30 pm

Location: Craft Room

Instructor: Kathleen Hong Casimir

Languages: Cantonese/English

Wed., Apr. 28

Toronto Crime Stoppers Workshop

Toronto Crime Stoppers works with the Toronto Police Service and the community to assist in solving and preventing crimes. The workshop wants to help you to be aware of door-to-door sales, consumer frauds, home improvement offers, chain-referral schemes, retirement properties, business opportunities and medical frauds.

Times: English: 1:00 pm – 2:00 pm
Cantonese: 2:15 pm – 3:15 pm

Location: Seminar Room

Instructor: Anne Mac Donald

(Toronto Police Constable)

Thurs., May 20

"Speaking of Bones" Program

The Canadian Osteoporosis Society is presenting this educational seminar. Volunteer speakers from "Speaking of Bones" Program will give this one hour presentation. Attendants will learn about the nature and symptoms, the present treatment and practical tips for preventing this disease.

Time: 3:00 pm – 4:00 pm

Location: Recreation Room

Language: English

(Cantonese interpreter available)

Osteoporosis Fitness Programs

Osteoarthritis Friendly Exercise (extra-gentle & seated)

This program is designed for frail persons who may have osteoarthritis or related illnesses. The goals are to relieve stiffness and pain, increase flexibility, restore/maintain muscle strength, improve posture and increase endurance. Research shows that regular physical activity improves fitness, reduces pain, anxiety and depression, which help to prevent disability and loss of independence.

Dates: Apr 8 – Jun 17

Fees: \$20 (member); \$30 (non-member)
(11 lessons)

Time: Thurs., 9:30 – 10:30 am
(Personal fitness consultation
available at 10:30 am)

Location: Sunflower Club

Instructor: Polly Yeung

(Cert. Seniors' Fitness Instructor)

Languages: English & Cantonese

Osteoporosis Prevention Exercise Program

Osteoporosis means "porous bones". It is a condition that causes bones to become frail, possibly leading to bone fractures. Moderate physical activity can reduce the risk of falls and fractures, decrease pain and improve fitness. This program includes low impact aerobics, muscle strengthening exercises, postural training, balance and coordination training, breathing and relaxation exercises.

Dates: Apr 8 - Jun 17

Fees: \$20 (member); \$30 (non-member)
(11 lessons)

Time: Thurs., 1:30 - 2:30 pm
(Personal fitness consultation
available at 2:30 pm)

Location: Recreation Room

Instructor: Polly Yeung

(Cert. Seniors' Fitness Instructor)

Languages: English & Cantonese

"A Gift of Love" Fundraising Dinner

You can make a difference by joining us for our special fundraising dinner. Your contribution will support St. Paul's L'Amoreaux Centre to provide seniors' services in the community.

Friday, April 2, 2004

6 pm - 8 pm (Dinner served at 6:30 pm)

Terrace Restaurant

\$65 per person

(A \$20 donation receipt will be issued & a \$5 Raffle Ticket is included)

Semi-formal Attire

- ♥ Dinner Tickets are on sale at the Information Desk
- ♥ Chances to win hand-sewn silk paintings
- ♥ Further Raffle Tickets can be purchased during the dinner
- ♥ Please contact Food Services for seating arrangements and choice of Entree
- ♥ For information, please contact Maureen Lee at 416-493-3333.



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