

Remember: You can live well with osteoporosis!

Preventing Falls and Fall-Related Injuries

In this issue

- Preventing Falls and Falls-Related Injuries
- Bone Trivia
- Funny Bone
- A Recipe from our Sponsor
- Virtual Education Forum - Cantonese

COPING Archives

[Click here to view the COPING archives](#)

Bone Trivia:

Only about 3% of all animals possess a backbone or spine.

Chantelle C. Lachance¹, Fabio Feldman^{1,2}, Stephen N. Robinovitch¹ and Dawn C. Mackey¹ (1. Department of Biomedical Physiology and Kinesiology, Faculty of Science, Simon Fraser University, Vancouver, B.C., 2. Fraser Health Authority, Seniors Falls and Injury Prevention, Surrey, B.C.)

Falls and the injuries they cause are a major health concern for older Canadians. Over 30% of seniors aged 65+ years and over 50% of seniors aged 80+ years fall at least once per year. Approximately 10-15% of falls cause injuries, which may lead to pain, disability, loss of independence, a reduced quality of life and sometimes death.

Fractures (broken bones) are the most serious type of injury related to falls. Falls cause over 90% of hip and wrist fractures among Canadian seniors. Recovery from hip fracture is particularly difficult. Approximately 28% of women and 37% of men who suffer a hip fracture die within one year; and 50% do not return to their pre-fracture level of mobility, quality of life, or independence.

Thus, the development of improved strategies to prevent falls and fall-related injuries among seniors is a public health priority in Canada. Because they have more fragile bones, individuals with osteoporosis have a higher risk of breaking a bone during a fall than those without osteoporosis. In addition, individuals with osteoporosis may be more prone to falling because of poor balance and weaker muscles compared to

individuals without osteoporosis. Fortunately, falls and fall-related injuries can be prevented.

It is known that poor balance, decreased muscle and bone strength, reduced vision and hearing and unsafe conditions in and around your home increase your risk of falling. As a result, fall prevention strategies that target these issues are very important. The following are interventions that help reduce falls:

1. Regular Exercise

You can significantly reduce your risk of falling by maintaining or improving muscle strength and balance through regular exercise. Group or home-based exercise that targets all the major muscle groups has been shown to reduce falls. In addition, Tai Chi has been shown to reduce the risk of falling in seniors. For more information on exercise and osteoporosis, you can refer to COPN's recently published newsletter series on exercise by clicking [here](#). You can also access Osteoporosis Canada's [Exercise for Healthy Bones](#).

2. Proper Nutrition

Bone strength can be maintained and possibly improved by eating well. This

can be achieved by following Osteoporosis Canada's Fact Sheet on Nutrition or Canada's Food Guide to Healthy Living. Osteoporosis Canada recommends adequate dietary protein and calcium as well as adequate vitamin D supplementation all year round. Vitamin D supplementation has been shown to increase muscle strength and to reduce falls in those with low vitamin D levels. It is also important to eat regularly, as skipping or delaying meals may cause you to feel weak or dizzy, further increasing your risk of falling.

3. Proper Footwear

Make sure you walk safely by wearing proper shoes. Whether walking indoors or outdoors, it is important to wear shoes with a non-skid sole that isn't too thick. An anti-slip shoe device has also been shown to reduce falls in icy conditions. Have your feet measured each time you purchase a new pair of shoes as your foot size can change. If you are walking around the house, avoid wearing the type of slippers that can fall off your feet. Carpeting that is too plush and bouncy can also put you off balance, which may increase your chance of falling. For some individuals with balance impairment, it may also be appropriate to use a mobility aid, such as a cane or walker, to assist with walking.

4. Home Safety

It is important to make sure that your home environment is safe. Home safety assessments done by an occupational therapist have been shown to effectively reduce falls. Some examples of home modifications to reduce the risk of falls include:

- installing a rubber bath mat, grab bars or a shower stool to increase your stability and grip in your bath or shower
- reducing clutter on the floor (such as throw rugs and loose wires) and ensuring the path is clear between the bedroom and bathroom,
- storing commonly used household items, like kitchen pans, in easy-to-reach locations
- having solid handrails on all stairways - handrails on both sides of the staircase are ideal

5. Proper Lighting and Vision

To avoid tripping on objects that are hard to see, keep your home well lit. Place night-lights in your bedroom, bathroom and hallways for times when you need to get out of bed at night. Storing flashlights in easily accessible places is also a good idea in case of a power outage.

Get your vision checked. If you have cataracts, you may need to have them removed. If you need to wear bifocals, try not to wear them while going up and down stairs or when exercising.

6. Checking Your Medications

Some medications can increase your risk of falling. It is important to review your medications with your physician, especially if you have already fallen, to determine if any medication(s) need to be adjusted and how this should be done.

7. Hip Protectors

Hip protectors are foam pads or plastic shields, typically embedded in an undergarment, specifically designed to protect your hips during a fall. They absorb and/or divert the force of a fall away from the hip bone upon impact. When worn properly and regularly, hip protectors can reduce the risk of hip fracture by more than 50% in nursing home settings. However, user compliance tends to be quite poor.

8. Other Risk Factors for Falling

As there are several risk factors for falling, there are many ways of targeting these factors in one program geared to an individual. These may include gait training, balance training, advice on assistive devices, review of medications, exercise programs and treatment of specific medical conditions. Such falls prevention programs are found both in hospital and community-based settings and can be accessed through a referral from your physician.

9. See Your Doctor

You may consult with your doctor for a “falls” check-up. Your pharmacist can also review your medications (including any non-prescription remedies, natural health products or foods) for side effects and interactions that may increase your risk of falling. If you fall, write down as many details as you can about the event (where and how you fell, etc.). This may help you and your doctor determine the cause for the fall and devise specific fall prevention strategies for you. For example, pacemakers can reduce falls in people with specific cardiac conditions. Additionally, having your hearing and eyesight checked annually is important, as certain eye and ear disorders may increase your risk of falls.

FUNNY BONE:

...some are funny, some are witty, some are just plain silly.

A Recipe from our Sponsor Banana Split Smoothie

Course: Beverages & Snacks

Preparation Time: 5 mins

Yields : 5 cups / 1,25 L

1 milk product serving(s) per person

Preparation

2 cups (500 ml) **chocolate milk**

2 cups (500 ml) strawberry **yogurt**

1 cup (250 ml) frozen strawberries

1 banana

Instructions

Purée all ingredients in food processor at high speed until smooth. Garnish glasses with straws and fresh fruit. Serve.

For more information about this recipe:

<http://www.dairygoodness.ca/getenough/recipes/banana-split-smoothie/>



VIRTUAL EDUCATION FORUM: CANTONESE

(ARCHIVE AVAILABLE TO VIEW)

“Health Bones – Medication and Diet

Presented by:

Virginia Kwong, BSc (Pharm), RPh, NCMP

Jessica Lin, BSc (RD), CDE

How to view the Cantonese Virtual Education Forum? Click [here](#).

This issue of COPING is sponsored by Dairy Farmers of Canada



NUTRITION
DAIRY FARMERS OF CANADA



getenough.ca