

**COPN: Proudly Celebrating our 10<sup>th</sup> Anniversary****You *CAN* Prevent Falls and the Injuries they Cause  
Part 2 of 4****In this issue**

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**SAVE THE DATE:****April 2, 2014  
1:30pm ET****Virtual Education  
Forum on  
Falls Prevention****Fracture  
Fact:**

A poor diet can contribute to bone loss, heart disease, diabetes, arthritis, etc. – all of which increase your risk of falling.

**Reducing Personal Health Fall Risks**

Because they have more fragile bones, individuals with osteoporosis have a higher risk of breaking a bone during a fall than those without osteoporosis. Thus, in Canada, it has become a public health priority to develop improved strategies to prevent falls and fall-related injuries among seniors and those with osteoporosis. In Part 1 of this newsletter series we explained how various factors can cause falls by affecting your balance. In this issue we will discuss some measures you can take to reduce your **personal risk** of falling.

Personal health risks were discussed in more detail in Part 1 of this series. To summarize, these include **acute** and **chronic illnesses** as well as **medications** that can affect balance. Age-related **sensory changes**, such as poor vision, reduced hearing or reduced sense of touch in the feet can also increase fall risk. Finally, **alertness** and **mobility** problems can increase the risk of falls as well. Fortunately, there are measures everyone can take to reduce the risk of falls due to the presence of personal health risks. These include:

**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 due to its focus on improving balance and strength. For more information on exercise and osteoporosis, you may refer to COPN's recently published newsletter series on exercise [Boning Up on Exercise](#). You may also access Osteoporosis Canada's fact sheet [Exercise for Healthy Bones](#).

**2. Proper Nutrition**

Bone strength can be maintained and possibly improved by eating well. This can be achieved by following Canada's Food Guide to Healthy Living or Osteoporosis Canada's [Nutrition](#) fact sheet. Osteoporosis Canada recommends adequate dietary protein and calcium and adequate vitamin D supplementation all year round. Vitamin D supplementation has been shown to increase muscle strength and to reduce falls. 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 Hydration**

Many individuals do not drink enough water. They may do this because they forget or purposely because they do not want to have to rush to the bathroom too often. Poor hydration often lowers blood pressure, which can lead to dizziness, falls and fractures. For this reason, it is important to maintain proper hydration by aiming to drink at least 4-6 glasses of water each day or more when temperatures are high or when you are exercising strenuously. If drinking this much (or even less) water makes you incontinent or means that you have to rush to the bathroom more often than you feel comfortable, see your doctor in order to properly address this problem.

### **4. Taking Medications Properly**

Some medications can increase your risk of falling. In addition, as we age or as our health changes, medications that we have been taking for a long time for a chronic condition may need to be adjusted or changed in order to maximize their benefits and minimize their side effects. This is particularly important if you have already fallen. It is very important to take the *correct dose* of your medications *at the right time*. Always bring all of your medications to your doctor at each visit and review all of your medications with your physician or pharmacist regularly (at least annually but more often if needed), including your long-term medications. For more information on medications that can increase the risk of falls and fractures, you can refer to OC's fact sheet [Secondary Osteoporosis: Drugs and Diseases that can Cause Bone Loss, Falls and/or Fractures](#).

### **5. Proper Sleep**

Proper sleep improves alertness, which improves balance and decreases fall risk. Many people may have trouble sleeping from time to time but will make up for it the following night. While it is normal to experience the occasional poor night's sleep, it is not normal to experience this on a regular basis. Poor sleep can include difficulty falling asleep, waking up frequently during the night with difficulty falling back asleep, or both. As we age, our bodies do not need as much sleep - 7 to 8 hours is normal. If you nap for more than an hour during the day, you may expect to need less sleep at night. For example, if you nap for an hour during the day and you go to bed at 10 pm, it would be normal to expect to wake up between 4 to 5 am. If you do not wish to wake up so early in the morning, setting an alarm when you nap will help avoid over-sleeping during the day. If you are frequently having trouble sleeping, or if you regularly have daytime drowsiness, see your doctor to check your sleep and to find solutions to any sleep problems you may have.

### **6. Good Vision and Hearing**

Have your vision and hearing checked regularly because certain eye and ear disorders can increase your risk of falls. If you have cataracts, you may need to have them removed. Cataract removal has been shown to reduce the risk of fractures. If you have new bifocal glasses, take time to adjust to them while walking, going up and down stairs or while exercising. Wear reading glasses only for close work, such as reading, sewing, computer work and so on. Reading glasses are not meant to be worn while walking or exercising. It is also a good idea to have a flashlight, sunglasses and a hat ready to use when needed. A flashlight will improve your vision in poorly lit areas and sunglasses and a hat or visor will help reduce glare.

### **7. Proper Use of Assistive Devices**

If you feel unsteady on your feet and/or have a "bad" leg, a cane or walker can improve your balance and provide you with support. Using an assistive device can also give you more confidence in your daily activities and help you to maintain your independence. Talk with an occupational or physical therapist to ensure that your assistive device is the proper height and/or size for you, that it is in good repair and that you know how to use it properly.

### **8. Proper Footwear**

Make sure you walk safely by wearing proper shoes with good tread and firm support. Avoid walking on slippery surfaces, especially in socks or stocking feet. 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 (also known as ice grippers)

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.

## 9. Hip Protectors

Hip protectors are foam pads or plastic shields that are sewn into an undergarment. They are designed to protect your hips during a fall by absorbing and/or diverting the force of a fall away from the hip bone upon impact. When worn properly and regularly, hip protectors have been shown to reduce the risk of hip fractures by more than 80% among frail older adults.

## 10. Multifactorial Interventions

Because there are multiple interacting risk factors for falls, many healthcare centres have falls clinics that provide interventions to target many of these factors in one program on an individual basis. Examples of these interventions include gait training, advice on assistive devices, review of medications, exercise programs and treatment of specific medical conditions. These programs are found in both hospital and community-based settings and can be accessed through referral from your physician, nurse practitioner or physical/occupational therapist.

If you have fallen or are afraid of falling, do not ignore it or put it down to “just being nervous” or “clumsy” or “in a rush.”

- Consult with your doctor for a “falls” check-up. 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 of the fall and devise specific fall prevention strategies for you.
- 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.
- You may also consider wearing a personal alarm device around your neck or on your wrist. This will allow you to call for immediate assistance just by pressing a button in the event that you fall or get hurt. Some devices actually contact the company automatically if you fall, without your having to push any buttons.

*This concludes Part 2 of our fall prevention series. In Part 3, we will discuss helpful tips on how to help you reduce your indoor and outdoor environmental risk of falls, so stay tuned!*

**FUNNY BONE:** Today is the tomorrow you worried about yesterday.

## A Recipe from our Sponsor

### Mac & Cheese with Broccoli

By Stefano Faita

Course: *Main Dishes*

Preparation Time: *20-25 mins*

Cooking Time: *20 mins*

Yields: *7 to 8 servings*

1 1/3 milk product serving(s) per person



## Ingredients

1 lb (450 g) macaroni  
3 tbsp (45 mL) butter  
1/2 onion, finely chopped  
Salt, to taste  
Pepper, to taste  
2 tbsp (30 mL) flour  
4 cups (1 L) **milk**  
Pinch nutmeg, freshly grated  
1 tsp (5 mL) dry mustard powder  
3 1/2 cups (875 mL) grated **Cheddar cheese**, divided  
1 head broccoli, cut into florets and blanched

## Preparation

Preheat oven to 400 °F. Bring a large pot of water to a boil. Sprinkle with some salt. Cook the pasta until al dente.

Add butter to saucepan over medium heat. When butter melts, add onion, garlic. Cook veggies until they begin to soften, about 3 to 5 minutes. Add flour and stir to combine to make a roux. Continue to cook and stir the roux, about 2 to 3 minutes.

Gradually whisk in milk, making sure to incorporate the roux into the milk. Continue to whisk mixture and bring to a boil.

Reduce heat and simmer, whisking frequently, until sauce thickens, about 5 minutes. Season the sauce with salt and pepper, nutmeg, mustard powder.

Remove bechamel sauce from heat. Stir in 3 cups of Cheddar. Add broccoli and drained pasta to sauce. Stir to combine. Transfer to baking dish. Sprinkle with remaining 1/2 cup of Cheddar. Bake mac and cheese until bubbling and golden brown, about 20 minutes.

### For more information about this recipe:

<http://www.dairygoodness.ca/getenough/recipes/mac-cheese-with-broccoli>

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