



Osteoporosis Canada

Ostéoporose Canada

**COPING**

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***Remember: You can live well with osteoporosis!***

# **The Truth about Lactose Intolerance**

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Dairy products are important sources of nutrients, including calcium and vitamin D. Calcium plays an essential role in maintaining bone health and preventing osteoporosis. Vitamin D has two roles. It helps to maintain bone, which contributes to the prevention of osteoporosis, and it benefits muscle health, leading to fall prevention. However, most dairy products also contain lactose, which a large proportion of the world's population has trouble digesting.

Lactose is the principle carbohydrate of milk, providing about half the calories in a glass of skim milk. Lactose cannot be absorbed directly, but requires the enzyme lactase for digestion. Most babies have enough lactase to digest lactose in breast milk or formula. But for the majority of the world's population, levels of lactase decrease a great deal during childhood. Not having enough of the lactase enzyme reduces the ability to digest lactose, a condition known as lactose maldigestion. (Lactose intolerance is a clinical diagnosis made when the symptoms of lactose maldigestion become severe.) The majority of individuals of Asian, African and Native American descent, as well as about half of Hispanic peoples, experience lactose maldigestion. For people with lactose maldigestion, lactose is broken down by the bacteria in the large intestine. This process of fermentation can cause bloating, gas and abdominal discomfort.

Avoiding milk and other dairy foods due to lactose intolerance can have serious effects on nutrient intake, including lowering intakes of calcium and vitamin D, which leads to an increased risk of osteoporosis. Here are some tips to help you lessen the symptoms of lactose intolerance:

- Consume milk and other dairy products throughout the day rather than having more than one serving at one time.
- Consume milk and milk products with meals.
- Consume milk and milk products every day. This may reduce the symptoms, because the bacteria in the gut get used to the lactose and less gas may be

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produced.

- Try lactose-free or reduced milk and other dairy products; a glass of lactose-free milk provides the very same nutrients as regular milk.
- Enjoy cheeses such as Swiss, Edam, Gouda and Cheddar, which contain very little lactose.
- Choose yogurt. The bacteria in some yogurts may help break down the lactose it contains.
- Try Kefir (a fermented milk drink). It may be better tolerated.
- Use lactase drops/tablets (available at a pharmacy).

If one does not wish to eat or cannot tolerate any dairy products, there are other sources of calcium, such as:

- sardines and canned salmon (with the bones)
- leafy green vegetables (broccoli, kale, bok choy, okra, turnip greens, collard greens)
- dried figs
- baked beans, canned
- soybeans and other types of beans, cooked
- calcium-fortified orange juice, soy beverage and rice beverage
- other fortified foods such as instant oatmeal and cookies - be sure to read the labels for calcium content
- tofu, firm or extra firm, processed with calcium sulfate

### ***How Much Calcium Do We Need?***

<b>Age</b>	<b>Daily Calcium Requirement</b>
4 to 8	800 mg
9 to 18	1300 mg
19 to 50	1000 mg
<b>50+</b>	<b>1200 mg</b>
pregnant or lactating women 18+	1000 mg

If these amounts cannot be achieved through diet, it may be necessary to consider a calcium supplement.

### ***Vitamin D***

And don't forget vitamin D! Most Canadians have inadequate levels of vitamin D and vitamin D increases calcium absorption. Osteoporosis Canada recommends routine vitamin D supplementation for all Canadian adults. Those 19-50, including pregnant or lactating women, require 400-1,000 IU daily. Those over 50 or at high risk (with osteoporosis, recurrent fractures, or conditions affecting vitamin D absorption) should receive 800-2,000 IU.

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

- fortified orange juice, soy and rice beverages
- egg yolks
- chicken livers
- fatty fish (salmon, sardines, herring, mackerel and swordfish) and fish oils (halibut and cod liver oils) all contain small amounts.

Since it is very difficult to get enough vitamin D from food alone, supplements *are* advised.

Finally, it is important to ask: Is it really lactose intolerance? Many individuals mistakenly self-diagnose their gastro-intestinal symptoms as lactose intolerance. Bloating, flatulence and abdominal discomfort may result from consuming any undigested carbohydrate. For example, with a breakfast of oatmeal and milk, intestinal gas production and GI symptoms may be due to the significant fibre content of the oatmeal rather than to lactose. Lactose intolerance must be differentiated from milk allergy, which is a reaction to the protein found in milk. An allergy to cow's milk is rare and needs to be diagnosed by an allergist.

*With thanks to Wendy Joanne Dahl, PhD, RD. Wendy obtained her doctorate from the University of Saskatchewan, College of Pharmacy and Nutrition, and is currently Assistant Professor in the Food Science and Human Nutrition Department at the University of Florida.*

If you have questions about this article or any other aspect of osteoporosis, please call **toll-free 1-800-463-6842** (416-696-2663 in the Greater Toronto Area) to speak to an information counsellor.

**Moved? Changed phone number or e-mail address?  
Let us know by calling 1-800-463-6842 or emailing [copn@osteoporosis.ca](mailto:copn@osteoporosis.ca) and we'll update your information. This will ensure we keep you up to date!**

## **Osteoporosis Canada's New \$1 Million Partnership with Shoppers Drug Mart**

Shoppers Drug Mart is building on its track record as the national leader in women's health by announcing a new \$1 million partnership with Osteoporosis Canada as part of the new Shoppers LOVE YOU program. The new three-year partnership with Osteoporosis Canada aims to build awareness among Shoppers Drug Mart customers about how to reduce the risk of osteoporosis and the broken bones it can cause. It will also support continuing education for Shoppers Drug Mart pharmacists on how to help patients slow the progression of this bone disease through medication, vitamin supplementation and lifestyle changes. Newly created educational resources will be available to Canadians starting in early 2016. This new partnership and the launch of the new Shoppers LOVE YOU program will help women stay focused on making their own health a priority. To read more, click here: <http://www.newswire.ca/news-releases/shoppers-drug-mart-and-osteoporosis-canada-join-forces-for-stronger-womens-health-522032741.html>

# FUNNY BONE:

“Kilometers are shorter than miles. Save gas, take your next trip in kilometers.” - George Carlin

## A Recipe from our Sponsor

### Chili-style sloppy joe with Cheddar

Course: *Main Dishes*

Preparation Time: *10 mins*

Cooking Time: *15 mins*

Yields: *4 to 6 servings*

*1/2 milk product serving(s) per person*

**Calcium:** 30% DV/ 333 mg



Using your favourite bottled barbecue sauce along with a simple combination of ground spices builds authentic flavour into this perennial favourite.

### Ingredients

1 lb (450 g) lean ground beef  
2 cloves garlic, chopped  
1 onion, chopped  
1 green bell pepper, finely diced  
1 can (398 mL) black or kidney beans, rinsed and drained  
1/2 cup (125 mL) tomato paste, no salt added  
1/3 cup (75 mL) barbecue sauce  
1/2 tsp (2 mL) ground cumin  
1/2 tsp (2 mL) chili powder  
1/2 tsp (2 mL) ground coriander  
1/4 cup (60 mL) water  
4 - 6 hot dog buns  
1 1/2 cups (375 mL) **Canadian Medium Cheddar**, grated

### Preparation

In a large saucepan over high heat, brown the ground beef along with the garlic, onion and green pepper for 5 minutes. Add beans and cook another 2 minutes. Blend in tomato paste, barbecue sauce, spices and water. Let simmer 5 minutes.

Toast hot dog buns on the grill. Fill buns with meat mixture and Cheddar.

### Tips

**Cheese alternatives:** Canadian Monterey Jack, Brick cheese, Gouda.

**For more information about this recipe:**

<http://www.dairygoodness.ca/getenough/recipes/chili-style-sloppy-joe-with-cheddar>

**This issue of COPING is sponsored by Dairy Farmers of Canada**

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