Remember: You can live well with osteoporosis!

The Truth About Lactose Intolerance

Milk products are an important source of calcium and vitamin D, nutrients that play an essential role in maintaining bone health and preventing osteoporosis. However, most milk products also contain lactose, which a large proportion of the world's population has trouble digesting.

Lactose is the principle carbohydrate of milk, and it provides about half the calories in a glass of skim milk. Lactose cannot be absorbed directly, and the enzyme lactase is required for digestion. Most babies have enough lactase to digest the lactose in breast milk or formula. However, for the majority of the world's population, levels of lactase decrease significantly during childhood and this can reduce the ability to digest lactose. When lactase levels are low, lactose is broken down by the bacteria in the large intestine. This process of fermentation can cause bloating, gas and abdominal discomfort, and this results in the 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.

If you enjoy dairy products and wish to benefit from their many nutrients, it is possible to lessen the symptoms of lactose intolerance with these simple tips:

- Consume milk and other dairy products throughout the day rather than having more than one serving at a 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 produced.
- Try lactose-free or reduced milk and other dairy products; a glass of lactosefree milk provides the very same nutrients as regular milk.
- Enjoy cheeses such as Swiss, Edam, Gouda and Cheddar, which contain very little lactose.

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Fracture Fact:

OC's guideline
Recommendations for
Preventing
Fracture in LongTerm Care is the
first guideline in
Canada focused
on preventing
fractures among
the frail and
elderly in longterm care.

- 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 you do 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
- almonds
- baked beans, canned
- soybeans and other types of beans, cooked
- calcium-fortified orange juice, soy, almond and rice beverage
- other fortified foods such as instant oatmeal be sure to read the labels for calcium content
- tofu, firm or extra firm, processed with calcium sulfate

How Much Calcium Do We Need?

Age	Daily Calcium Requirement
4 to 8	800 mg
9 to 18	1300 mg
19 to 50	1000 mg
50+	1200 mg
Pregnant or lactating	1000 mg
women 18+	

If these amounts cannot be achieved through diet, it may be necessary to consider a calcium supplement. A supplement should only be taken after discussion with one's healthcare provider.

Vitamin D

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

How Much Vitamin D Do We Need?

Age	Recommended Total Daily Vitamin D Intake
19 to 50	400 – 1,000 IU
50+	800 – 2,000 IU
Pregnant & Lactating Women	400 – 1,000 IU
18+	

Vitamin D is found in very few foods. Because we Canadians live in a northern climate, the sun is an unreliable source of vitamin D. Finally, as we age, the skin is less able to make vitamin D from the sun. For all these reasons, Osteoporosis Canada recommends that all Canadian adults routinely take a daily vitamin D supplement all year round.

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. While some of the symptoms may be similar, lactose intolerance is not the same as a 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 so it can be properly managed.

Lactose intolerant or not, it is possible to have a nutritious, delicious diet that will help you maintain strong healthy bones! For more information on nutrition and osteoporosis, click on this link to Osteoporosis Canada's fact sheet on Nutrition: http://www.osteoporosis.ca/wp-content/uploads/OC Nutrition October 2012.pdf.

We Welcome Your Feedback

- Have a question?
- Is there an osteoporosis-related topic that you would like to see featured in the newsletter?
- Looking for a great volunteer opportunity?

Please contact us by calling Osteoporosis Canada's toll-free number **1-800-463-6842** or emailing copn@osteoporosis.ca.

IOF President's Award Honours Global Osteoporosis Experts and Advocates



The International Osteoporosis Foundation (IOF) has presented awards to individual members in recognition of their dedication to the work of IOF and commitment to advancing education and awareness in their regions. Seven leading osteoporosis experts and advocates have received the 2017 IOF President's Award in recognition of their contributions to IOF and their commitment to advancing education and awareness in the field within their regions. The presentations took place on March 24,

2017 at a special ceremony during the World Congress on Osteoporosis, Osteoarthritis and Musculoskeletal Diseases, held in Florence, Italy from March 23-26, 2017.

Congratulations to **Dr. David Kendler** for his commitment to advancing education and awareness in North America.

Dr. Kendler is a Professor of Medicine (Endocrinology), University of British Columbia Faculty of Medicine; Director of Osteoporosis Centre of British Columbia and Prohealth Clinical Research; and is an active Member of the Scientific Advisory Council of Osteoporosis Canada and the IOF Committee of Scientific Advisors.

SAC Member Honoured with the Dr. Paul D. Miller ISCD Service Award



Left to right: Dr. Angela Cheung, Dr. David Hanley, Anita Colquhoun and Dr. Bill Leslie

Each year at the ISCD's (International Society for Clinical Densitometry) annual meeting, ISCD members are recognized for their service to the ISCD and to the field of densitometry. The Dr. Paul D. Miller ISCD Service Award is presented annually to an ISCD member for distinguished service and dedication to the ISCD. **Dr. David Hanley** (second from left) from the University of Calgary and member of Osteoporosis Canada's Scientific Advisory Council was honoured with this award on April 20, 2017 at the ISCD annual meeting in Orlando, Florida.

SAC Member Receives Distinguished Service Award from the Canadian Geriatric Society

Each year the Canadian Geriatric Society (CGS) presents an award at its annual meeting to recognize an individual who has made an outstanding contribution to the health care of older adults in Canada. Geriatrician **Alexandra Papaioannou** received the 2017 Ronald Cape Distinguished Service Award from the Canadian Geriatric Society. The McMaster University professor of medicine has developed clinical practice guidelines on osteoporosis and preventing fractures in long-term care, and she founded the Geriatric Education and Research in Aging Sciences (GERAS) Centre at Hamilton's Health Sciences Centre and McMaster



University. Dr. Papaioannou's contributions have had a positive and lasting effect on geriatric care in Canada.

FUNNY BONE:

Old age is like a plane flying through a storm. Once you're aboard, there's nothing you can do about it. – Golda Meir

A Recipe from our Sponsor

Smoked Salmon Pasta Primavera

Course: *Main Dishes*Preparation Time: 20 *mins*Cooking Time: 15 *mins*Yields: 4 servings

2/3 milk product serving(s) per person

Calcium: 26% DV/ 263 mg

A little goes a long way in this fresh-tasting spring vegetable pasta, updated with smoked salmon.

For more information about this recipe:

https://www.dairygoodness.ca/getenough/recipes/smoked-salmon-pasta-primavera

Ingredients

12 oz (375 g) linguine

1/2 lb (250 g) asparagus, trimmed and cut into 2-inch (5 cm) pieces

1/4 lb (125 g) halved green beans, about 1 large handful

1 cup (250 mL) sugar snap peas, trimmed 1/2 cup (125 mL) frozen edamame or peas

1 tbsp (15 mL) butter

1 small onion, minced

2 cloves garlic, minced

3 tbsp (45 mL) all-purpose flour

2 1/2 cups (625 mL) milk

1/2 tsp (2 mL) salt

Freshly ground pepper

140 to 200 g pkg smoked salmon, cut into wide strips

1/2 cup (125 mL) coarsely chopped fresh mint 1/2 lemon

Tips

If asparagus or beans are super thin, add during the last 2 min of cooking pasta.



Preparation

In a large pot of boiling salted water, cook linguine 10 min or until al dente, adding asparagus, beans and sugar snap peas during the last 3 min of cooking and edamame during the last min. Drain very well.

Meanwhile, in large saucepan, melt butter over medium heat. Add onion and garlic; cook, stirring 3 min. Stir in flour. Very gradually whisk in milk until smooth; cook, stirring often, for about 5 min until mixture boils and has thickened. Add salt and pepper.

Add pasta mixture, stirring until hot. Stir in salmon and mint just until mixed. Squeeze juice from lemon into pasta and stir.



Nutrition Tip

Yogurt drinks are super handy. Take them anywhere, and you'll always have a thirst-quenching drink to fill the gap when you feel like having a snack!

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

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