

FOUNDATION STRATEGY # 1 - CHOOSE CALCIUM EVERY DAY

This Foundation Strategy focuses on the importance of choosing enough foods and/or drinks each day that are rich in calcium.

Calcium is the most abundant mineral in your body; it is basically what your bones and teeth are made of. Your youth is the most important time for your bones as they are growing in length and in mass (basically, this means that they are getting longer and larger). They are growing to reach the size they will be when you are an adult.

You need to consume enough calcium-rich foods every day to meet the needs of your growing bones. Even when your bones have pretty well stopped growing, you still need to get enough calcium. You never outgrow your need for this very important mineral. In addition to the calcium required by your bones and teeth, a small amount is also needed by your muscles and nerves and to help blood clot as well.

Calcium is often one of the minerals that many people do not get enough of. Many health experts believe that a lack of calcium in your daily eating, even when you are young, can contribute to a disease called osteoporosis. When you have osteoporosis, your bones become brittle. As a result, they can fracture or break more easily – especially the bones of the spine, hips and legs. Although both men and women can develop osteoporosis, it is much more common in women. In order to reduce your chances of developing this disease when you are older, there are 4 major things that you can do right now to help make your bones as strong as possible:

- Make sure you get enough calcium each and every day to help your bones grow as strong as possible.
- Be physically active everyday since this also helps to strengthen your bones. See Foundation Strategy # 5, for more information about physical activity.
- Don't smoke. As it is with heart disease and cancer, smoking can also increase your risk of developing osteoporosis.
- Avoid consuming too much caffeine from things like coffee and some types of soda pop, such as cola drinks. Excessive drinking of cola drinks is also a problem because they contain the mineral phosphorus. Too much phosphorus can interfere with your body's ability to absorb the calcium you take in. If you like soda pop, choose cola-type pop less often and caffeine-free drinks as much as possible.

So, what's the deal? How do you get enough calcium? At this point in your life, nutrition experts recommend that you eat and/or drink 3 - 4 servings of calcium-rich foods each day. The calcium content of foods varies. For example, milk is a terrific source of calcium. To get 1200mg of calcium, you would need to drink about 4 glasses of milk a day. The calcium from other sources can add to the overall total of calcium you need to get each day. So, if you don't like dairy products such as milk or yogurt that are high in calcium, you will need to make sure you are eating enough other foods that contain calcium in order to get your total calcium each day. The two charts below show how much calcium is found in some common foods. The first chart shows foods and drinks that are generally dairy products (milk, yogurt, cheese). The second chart shows the calcium contained in non-dairy foods (mainly vegetables, fruit, fish and nuts).



A Guide for making healthier choices

Table 1

DAIRY SOURCES OF CALCIUM	SERVING SIZE	mg of CALCIUM
Milk – skim, 1%, 2%, homogenized	1 cup / 250ml	300
Buttermilk, Chocolate milk	1 cup / 250ml	285
Skim Milk Powder	3 tbsp. / 50ml	155
Milk with added calcium (see Note 1) (e.g., Natrel Calcium®)	1 cup / 250ml	400-45
Ice Cream	1/2 cup / 125ml	80
Plain Yogurt	3/4 cup / 175ml	300
Yogurt with fruit added	3/4 cup / 175ml	250
Kids’ yogurt (e.g., Yoplait Minigo®)	1/2 cup / 125ml	180
Swiss Cheese (see Note 2)	1 3/4 oz. / 50g	480
Cheddar Cheese (see Note 2)	1 3/4 oz. / 50g	385
Light Cheddar Cheese (see Note 2)	1 3/4 oz. / 50g	360
Grated parmesan cheese	1 tbsp. / 15ml	85
Cream Cheese	1 tbsp. / 15ml	12
Cottage Cheese	1/2cup / 125ml	75

Note 1: This type of milk has had extra calcium added to it during processing. There are various brands of enriched milk available. Check information on nutrition labels for exact amounts of calcium.

Note 2: 1 3/4 ounces (50g) of cheese equals 1 serving. This would be a piece of cheese approximately 3inches (7.5cm) by 1inch (2.5cm) thick by 1inch (2.5cm) wide. Choose cheese with less than 20% M.F.

(Source :Adapted from St. Michael’s Hospital, Toronto)

Table 1 is by no means a complete list. There are many different varieties and brands of milk, cheese and yogurt. Always read nutrition labels to accurately determine calcium levels.

The type of milk you drink – skim, 1%, 2%, homogenized - doesn’t matter as far as calcium is concerned. However, because milk also contains fat, you’ll want to make sure you are choosing the low-fat versions, which means skim, 1% or 2%. Chocolate milk is OK too, as long as it’s 1% milk. However, try to choose regular (white) milk more often because chocolate milk also contains added sugar. Yogurt is another good source of calcium, but like milk, try to choose lower fat versions. Read the label. Choose yogurt with less than 1% milk fat (1% M.F.).

Most types of cheese (except those made from skim milk) are high in fat. Although cheese is a good source of calcium, you should try to choose cheese less often because of its fat content. Choose cheese with 20% milk fat (20% M.F. on the label) or less. Again, read the label and make a healthy choice.

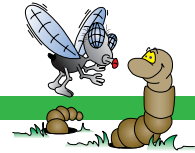


Table 2

NON-DAIRY SOURCES OF CALCIUM	SERVING SIZE	mg of CALCIUM
Canned Salmon (you have to eat the bones, too!)	half of 7 1/2 oz. (213g) can	225
Sardines (you have to eat the bones, too!)	about 8 small sardines (1 1/2 oz. / 45g)	165
Tofu (firm) – made with calcium sulfate	1/2 cup / 125ml	260
Soymilk (fortified with calcium)	1 cup / 250ml	300
Orange	1 medium	80
Calcium-enriched Orange juice (e.g., Tropicana Calcium and Vitamin C orange juice®) – see Note 1	1 cup / 250ml	365
Baked beans	1/2 cup / 125ml	75
Navy beans	1/2 cup / 125ml	62
Almonds	1/4 cup / 62.5ml	95
Hazelnuts	1/4 cup / 62.5ml	65
Broccoli (cooked)	1/2 cup / 125ml	35
Kale (cooked)	1/2 cup / 125ml	80
Bok Choy (cooked)	1/2 cup / 125ml	80
Whole-wheat Bread	2 slices	25-40

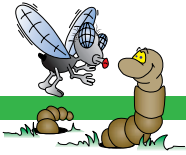
Note 1: There are many brands of orange juice available that have been enriched with calcium (calcium has been added during processing and manufacturing). Always check nutrition labels to determine accurate calcium content.

(Source :Adapted from St. Michael’s Hospital, Toronto)

As you can see from the lists above, not all sources of calcium are created equal. Some foods are better sources than others. If you don’t drink milk or eat yogurt or cheese, then in order to get the calcium your body needs, you’re going to have to eat a lot of beans, tofu, salmon, almonds, broccoli and other sources of calcium. Some types of orange juice (see Table 2 above) have extra calcium added to them.

A few other things you may want to know...

- Soda pop, especially cola, contains the mineral phosphorus. Although your body needs a small amount of phosphorus for good health (which it can get from other foods), too much phosphorus can prevent your body from being able to absorb calcium. So, with this in mind, go easy on the cola drinks.
- There are several other factors that can prevent your body from being able to absorb and use calcium including eating too much protein, too much fat, too much sodium (salt), too much caffeine, or too much fiber. To avoid this, follow a balanced way of eating like the one outlined in the Foundation Strategies™ in this guide.
- You can get calcium from a variety of foods that have cheese added to them as part of the recipe. This includes things like cheese pizza, sandwiches or casseroles.



A Guide for making healthier choices

Help your body build strong bones and teeth and then keep them that way. Calcium is one of the most common nutrients that many people just don't get enough of – DON'T become one of them!!

Choose health – Choose Enough Calcium every day.

Lunchbox # 1: Vitamin D – Besides calcium, milk contains a lot of other nutrients such as protein, vitamins and minerals. However, calcium is probably the most important nutrient found in milk. Your body uses the calcium to build and maintain strong bones and teeth. But in order for your body to do this, it also requires Vitamin D, which can be made by your body by using sunlight. It converts another molecule (a derivative of cholesterol) found in the layers of your skin into Vitamin D. But to do this, there has to be enough sunlight. In Canada and the northern U.S. where the winters do not have a lot of sunlight, this can be a problem. Fortunately, the milk in Canada and the United States has Vitamin D added to it. This is one more reason why drinking your milk is one of the best ways to build strong bones. If you don't drink milk, you may not be getting enough Vitamin D. Check with your doctor if you are uncertain.

Lunchbox # 2: What if I can't drink milk? For some people, drinking milk, or eating cheese or yogurt can cause symptoms such as stomach cramps, bloating, diarrhea or burping. These could be symptoms of Lactose Intolerance.

Lactose is a sugar that occurs naturally in milk products. This sugar is broken down by your body in a chemical reaction involving an enzyme called lactase. (Enzymes "help" certain chemical reactions within the body to occur.) Some people's bodies do not make enough lactase. As a result, their bodies can't break down the lactose in milk products. If you think you may be lactose intolerant, you should see your doctor. You may need to get your calcium in other ways such as:

- Using lactose-reduced products such as Lactaid® or Lacteeze®.
- Eating non-dairy sources of calcium (see Table 2 above).
- Taking supplements of calcium and Vitamin D.

Some people are allergic to milk. If you have a milk allergy, you may have some of the same symptoms as lactose intolerance. However, an allergy to milk is not the same as being lactose intolerant. Again, if you notice any of the symptoms above after drinking milk or eating dairy products, you should check with your doctor who may send you to have your allergies tested.