

## About Calcium and Calcium Deficiency

### *What does calcium do?*

Calcium is very important for the health of your teeth and bones. 99% of the calcium in your body is stored in your teeth and bones. Calcium also helps the heart, brain, nerves, and muscles, and helps our ability to stop bleeding.

### *What happens if my calcium is low/if I don't get enough calcium?*

Most people are not aware of how they feel when they don't have enough calcium. Calcium is so important for keeping your heart beating and your brain going that when we don't have enough in our diets, the body takes it from our bones. This is just like taking money out of the ATM without checking your account balance – you may not know until it is gone. For this reason, sometimes the very first symptom of calcium deficiency is an unexpected fracture or loss of a tooth.

If calcium deficiency is very severe or acute there can be muscle spasm or cramping, tingling, or burning sensation around the mouth and fingers, facial spasms and tics, seizures, and tremors.

The loss of calcium from bone is called osteopenia when it is mild and osteoporosis when it is severe. If calcium deficiency continues over a long time you can have permanent loss of bone that can result in fragility, broken bones, loss of mobility and more.

### *What are other symptoms?*

Some other symptoms of calcium deficiency include:

- Difficulty swallowing
- Faintness
- Anxiety, irritability
- Low blood pressure
- Intestinal cramping
- Hip pain
- Spinal pain
- Compression fracture
- Loss of height
- Spasms of the lungs
- Brittle nails and hair

### *Where can I get calcium?*

Adequate Vitamin D is necessary for maintaining adequate levels of Calcium.

The very best sources of calcium in food are dairy products such as milk, yogurt and cheese. There is also calcium in fortified soy and rice drinks, fortified juice, and fish with edible bones (like sardines).

While some vegetables like leafy greens have calcium in them, this form of calcium is not well absorbed by people. Calcium supplements are found in many forms, such as liquids, powders, tablets, capsules, and soft chews. If you do not get enough calcium in your diet or your calcium is low, your doctor will probably ask you to take calcium supplements as well as to watch calcium in your diet. If you have had malabsorptive weight loss surgery, you may need to take a specific form of calcium like calcium citrate which is better absorbed. You will also need to take supplements in divided doses, because you will only absorb 400-600mg at a time.

**DO NOT TAKE CALCIUM SUPPLEMENT AT THE SAME TIME AS IRON SUPPLEMENTS. THEY BLOCK EACH OTHER AND YOU WILL HAVE DECREASED ABSORPTION OF BOTH SUPPLEMENTS.**

### *Other important things*

Because you can't usually feel calcium deficiency, many people do not know when they are not getting enough. Your doctor may ask you to have a bone density test to look at how much calcium you have in bone. Women who have decreased levels of estrogen are at higher risk for fragile bones. If you have had a hysterectomy or are menopausal, regular bone density studies are recommended. If you have low calcium or loss of bone, it is important that you follow up with your doctor for lab tests and other recommended care.