Food, Nutrition and Health Agent

Spinach for Calcium?

Grandmother might have told you to eat your greens, they were good for your bones. If you can’t drink milk, you can get your calcium there. Then the doctor said to avoid greens because the oxalic acid takes the calcium away. What is this, a mystery story? Which one is right?

Both are partly right, neither is completely right. Greens, as well as broccoli, canned salmon, anchovies and sardines, and fortified juices and cereals all have some calcium. So Grandmother was partly right. Grains also have a little calcium. However, we eat so much grain, in so many forms, that they do give us a significant amount even if they aren’t fortified.

But just because there’s calcium in a food doesn’t mean we can absorb it. Some foods do have oxalic acid, and some have phytates (fi-tates). Both of these will tie onto calcium. When it’s tied onto something else, our bodies can’t absorb the calcium. So, the doctor was partly right too. Too much fiber in a diet can tie up calcium and keep us from absorbing it. Lots of alcohol in our system can also lower the amount of calcium we absorb too.

But let’s look at everyday life and an average diet. If you are depending on spinach for your calcium, you will have to eat pounds and pounds of it, daily, to absorb what you need. Eight cups of cooked spinach has as much calcium as one glass of milk. You need 3 or 4 glasses’ worth of milk in a day. That means 32 cups of cooked spinach! But if you have other sources of calcium in your diet, then don’t worry about
the spinach.

The oxalic acid in spinach only ties up the calcium in the spinach. If you have a glass of milk with the spinach, you'll still be able to absorb the calcium from the milk. In the same way, the oxalic acid in sweet potatoes only affects the little bit of calcium they contain. Even though beans, especially soybeans, have lots of phytic acid, we can still absorb some of their calcium as well as calcium from the rest of the meal.

Fiber, especially wheat fiber, affects all the calcium in the meal. Bread that is high in wheat bran fiber can prevent the absorption of some of the calcium from the slice of cheese in the sandwich.

So, should we avoid spinach, kale, soybeans, whole wheat bread and sweet potatoes? No, please don’t! One researcher called it a “rather impossible combination of circumstances” that would have to happen before spinach and rhubarb affected your health. You would have to be eating very, very little calcium and vitamin D and eating enormous amounts of oxalic acid, for a very long time, before your health would suffer.

There are many calcium fortified juices, cereals and other foods on the market these days. If you don’t drink milk you can get calcium from them as well as vegetables and fish bones. Unless your diet normally has five or six times as much fiber as the typical American diet, the fiber in the bread won’t have any affect on your calcium intake. There is no evidence that a beer or glass of wine with a meal has any measurable effect on how much calcium is absorbed.

If you think you are not getting the 1200 to 1500 mg of calcium a day that is recommended, you can take a supplement. Our bodies can only absorb so much at one time. So you'll get more if you take several smaller tablets throughout the day instead of one big pill. Don’t take them with foods that have lots of calcium. And don’t go over
2500 mg a day from your food plus your supplements, that’s the maximum we should get.

Here’s a recipe that will give you some calcium along with your spinach. If you prefer Egg Beaters or other egg product, use it. You can make this on top of the stove in a frying pan, but be sure to keep the heat very low so the cheese doesn’t get tough. Stick it under the broiler to brown the top. Substitute other vegetables if you like.

Spinach Frittata

1 onion, chopped 1 box frozen spinach, thawed, drained
2 Tbsp oil (olive or other) 6 eggs (or equivalent egg product)
½ C grated, reduced fat Swiss cheese ½ C grated Parmesan cheese
salt, pepper to taste

Preheat oven to 400° F. Saute onion with 1 Tbsp of oil in skillet. Add spinach, stir to heat and combine. In bowl beat eggs with cheeses, add spinach, salt and pepper.

Grease 8 x 8 inch baking dish or deep pie plate with remaining oil. Put egg mixture in dish. Bake until set, about 10 minutes. Serves 4 -6 people.