

Creating Health & Nutrition

Nondairy Foods with Calcium

Tip

Tired of the same old foods? Try at least one new nondairy food high in calcium every month to add variety to your diet.

Nutrition Information

While dairy foods are the best source of dietary calcium, there are other foods that contain this important nutrient. This is good news for individuals with milk allergies or lactose intolerance, vegans, and others who do not consume dairy foods.

Dark green leafy vegetables and canned fish with soft bones are just a few of the nondairy food sources of calcium. Orange juice, soy milk, bread, cereals, and other grain foods may have calcium added by the manufacturer. When fortified, plant-based “milks” offer another source of calcium.

Foods like chard, beet greens, rhubarb, spinach,

and some grains contain oxalates and/or phytates. These make it harder for our bodies to use the calcium in these foods, but they are still fair choices. The following are a few tips to make the calcium in these foods more available to your body:

- Cook dark leafy greens such as kale, collard, mustard, turnip greens, green cabbage, or bok-choy.
- Prepare greens with lemon juice, vinegar, or another type of acid to increase calcium absorption.
- Soak beans (navy, pinto, red) or chickpeas in water for several hours, drain, cover with fresh water, and cook.

Here are some other things to consider for getting the most out of nondairy calcium foods:

- Be sure to maintain optimal levels of vitamin D, which assists in calcium absorption.
- Decrease sodium intake to prevent loss of calcium in urine.
- Avoid excessive amounts of calcium inhibitors such

as coffee, alcohol, and simple sugar.

- Engage in weight-bearing exercise.

Shopping Tips

- Read food labels to know how much calcium is in your favorite food.
- Check the percent daily value for calcium; 10 percent indicates that the food is a good source of calcium, while 20 percent or more is an excellent source.
- Be sure plant-based “milks” such as soy, almond, and rice are

fortified with calcium and vitamin D.

- Choose tofu made with added calcium.
- Look for the words “calcium fortified” or “calcium rich” on the food label.

Tips Affecting Different Age Groups

Consuming nondairy foods high in calcium is important for every age group. The recommended Dietary Reference Intake (DRI) for youth ages 9 to 18 is 1,300 milligrams (mg) per day,

Nondairy Sources of Calcium

FOOD	CALCIUM (MILLIGRAMS)
1 cup soy milk (fortified with calcium)	368
1 cup orange juice (calcium fortified)	351
½ cup tofu (firm, with calcium sulfate)	253
3 ounces sockeye salmon (canned with bones)	200
½ cup spinach (cooked from frozen)	146
2 ounces almonds	129
1 cup navy beans (cooked)	126
1 cup cereal (ready to eat, calcium fortified)	100 to 1,000
½ cup kale (cooked from frozen)	90



Examine Your Choices

FOOD	SOURCE	WHAT I BUY	WHAT I PLAN TO BUY/CHANGE
Fish		Tuna canned in water	Canned salmon with bones
Juice		Orange juice	Orange juice with added calcium

MY GOAL:

Apple Salmon Salad

Serving size: Makes 6 servings

INGREDIENTS

- 1 can (15½ ounces) canned salmon with bones
- 2 red apples, cored and diced
- 1 Tablespoon chopped onion
- 1 cup soy yogurt
- ¼ teaspoon pepper
- ½ teaspoon dried dill
- 2 Tablespoons vinegar

DIRECTIONS

Remove the core, and dice apples into small pieces. Peel and chop onion. In one bowl, mix the salmon with the diced apples. In another bowl, mix the onion, yogurt, pepper, dill, and vinegar. Stir the two mixtures together in the same bowl. Refrigerate until ready to use.

TIP

Instead of yogurt, increase vinegar (any flavor) to 3 Tablespoons and add ½ cup olive oil.

This is a quick and easy meal to prepare on summer days. Serve over dark leafy greens with a whole wheat roll.

NUTRIENT INFORMATION

Per serving: 166 calories, 16 g protein, 6 g fat, 2 g saturated fat, 12 g carbohydrate, 1 g fiber, 49 mg cholesterol, 342 mg sodium, 191 mg calcium.

Source: Penn State Extension Nutrition Links.

and for adults over the age of 70, it is 1,200 mg per day. For people 19 to 70 years old, the DRI is 1,000 mg per day, except women ages 51 to 70, who should

get 1,200 mg per day. While it may take more planning, adequate calcium intake can be achieved through the consumption of these

nondairy foods. If you are not able to consume an adequate amount of calcium from foods, talk with your doctor or a registered dietitian about calcium supplements.

The table on the first page lists nondairy foods and their calcium content. Compare these to 1 cup of nonfat milk with a calcium content of 300 mg.

Sources

Duyff, R. *American Dietetic Association Complete Food and Nutrition Guide*. 4th ed. Hoboken, NJ: John Wiley and Sons, 2012.

Farrell, V., and L. Houtkooper. "Calcium and Calorie Content of Selected Foods." Tucson: Arizona Cooperative Extension, 2011. Retrieved from extension.arizona.edu/sites/extension.arizona.edu/files/pubs/az1128.pdf.

Greer, B. "Non-Dairy Food Sources of Calcium." Knoxville: University of Tennessee Extension, n.d. Retrieved from ewellness.tennessee.edu/Resources/Calcium%20Non-Dairy.pdf.

Haraminac, E., and W. Guo. "Got Calcium? Non-dairy Food Sources of Calcium." East Lansing: Michigan State University Extension, 2013. Retrieved from msue.anr.msu.edu/news/got_calcium_non-dairy_food_sources_of_calcium.

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