



Nutrition for Stronger Bones in Older Adults

Osteoporosis is a disease that causes your bones to become thin and break (fracture) easily. You cannot feel or see your bones getting thinner. The risk of bone loss and osteoporosis increases as you age. The good news is that osteoporosis and broken bones do not have to be a normal part of aging. Osteoporosis is easily diagnosed with a bone density test and there are medications to reduce the consequences of the disease. It is important for you to speak to your healthcare provider about your bone health.

To promote strong bones for life, there are actions you can take. This article will focus on nutrition strategies for stronger bones but it is important to know that being physically active, not smoking or stopping if you do smoke, and taking safety precautions to prevent falls are also important to promote stronger bones and help prevent fractures.

The following nutrition actions will help you promote stronger bones:

Eat a varied, healthy diet that includes the right amount of calories and protein It is common that older adults consume fewer calories and protein than younger adults. This often results in weight loss, muscle wasting, and bone loss, too. It is important to eat regularly throughout the day and not to skip meals.

Build a healthy plate, by choosing:

- A variety of deeply colored vegetables and fruit (half of your plate)
- Whole grains ($\frac{1}{4}$ of your plate)
- Lean protein (meat, poultry, fish, eggs, beans, soy foods, nuts, nut butters and/or seeds): $\frac{1}{4}$ of your plate, and be sure to include
- A calcium rich food and/or a calcium rich beverage at each meal

Consume 1200mg (milligrams) of calcium each day. Calcium is essential for strong bones. When your calcium intake is too low, your body will withdraw the calcium it needs from your bones. It is best to get calcium from the foods you eat. Try to eat a calcium-rich food at each meal. If you cannot get the calcium you need from food alone, speak to your healthcare provider to find out if a calcium supplement is right for you. You need to consume 1200 mg a day from food and supplements combined. More calcium is not better and may be harmful especially if you are taking too much from supplements.

Sources of calcium:

Dairy foods:

- Milk
- Yogurt
- Cheese
- Nonfat dry milk

Heart-smart dairy choices: Low fat (1% or less) dairy foods provide all of the calcium and vitamin D without the fat. Dairy foods are also a good source of protein and other essential vitamins.

Non-dairy foods:

- Canned salmon or sardines (eaten with bones)
- Dark green leafy vegetables (kale, collards, dandelion greens, bok choy, etc.)
- Dried figs
- Nuts (almonds, roasted soy nuts)
- Beans (Rinse well)

Fortified foods:

(Always check nutrition labels to be sure that calcium has been added.)

- Non-dairy milk alternatives (such as almond, coconut, hemp, rice, oat, and soy beverages)
- Juices
- Tofu with calcium added
- Grains such as cereals, waffles, and nutrition bars)

Get the recommended amount of vitamin D. Getting enough vitamin D helps your body absorb calcium and may increase muscle strength to help prevent falls in older adults. Vitamin D is often referred to as the “sunshine vitamin” but that is not the recommended way to get vitamin D. Older adults make less vitamin D from sun exposure than younger adults and it is important for everyone to protect their skin from sun damage. That is why it is recommended to get Vitamin D from other sources. There are only a few good natural sources of vitamin D so most older adults need a vitamin D supplement to get the recommended amount. Older adults need at least 600 to 800 IU (International Units) of vitamin D a day, but your healthcare provider may recommend more for you.

Foods with vitamin D:

- Fatty fish: catfish, eel, flounder, halibut, mackerel, salmon, sardines, swordfish, trout, tuna (light)
- Sun-dried or UV irradiated mushrooms
- Eggs (with yolk)

Fortified foods

(Always check nutrition labels to be sure that vitamin D has been added.)

- Milk (with or without lactose)
- Non-dairy milk alternatives (such as almond, cashew, coconut, hemp, oat, rice, and soy beverages)
- Juice
- Yogurt
- Tofu
- Grains such as cereals and nutrition bars

It is important to read nutrition labels to know how much calcium and vitamin D are in the foods you choose to eat.

To Read Labels for Calcium:

1. Find the serving size.
 2. Read the calcium %
 3. Replace the % with a “0” to find the calcium content in mg per serving
- Example: One 8 ounce serving contains calcium 35% = 350 mg calcium

To Read Labels for Vitamin D:

1. Find the serving size.
 2. Read the vitamin D %.
 3. Drop the %.
 4. Multiply by 4 to find the vitamin D content in IU per serving.
- Example: One 8 ounce serving contains vitamin D 25% = 25 x 4 = 100 IU vitamin D

Nutrition Facts	
Serving Size 8 fl. oz. (240 mL)	
Servings Per Container 7	
Amount Per Serving	
Calories 110	Calories from Fat 0
% Daily Value*	
Total Fat 0g	0%
Sodium 10mg	0%
Potassium 450mg	13%
Total Carbohydrate 26g	9%
Sugars 22g	
Protein 2g	0%
Calcium 35% • Iron 0% • Vitamin C 120%	
Vitamin D 25% • Niacin 4% • Thiamine 10%	
Vitamin B6 6% • Folate 15%	
Not a significant source of calories from fat, trans fat, saturated fat, cholesterol, dietary fiber, vitamin A and iron. Percent Daily Values are based on a 2,000 calorie diet.	

Limit alcohol consumption. Before drinking alcohol, it is important to speak to your healthcare provider about possible interactions with your medication or your medical condition. Too much alcohol may weaken your bones and increase your risk for falls and broken bones.

For more information about promoting stronger bones, contact The New York State Osteoporosis Prevention Education Program (NYSOPEP), an educational initiative within the New York State Department of Health. NYSOPEP is committed to helping build stronger bones for life by providing current evidence-based bone health education to the public and healthcare professionals. For more information about the prevention, diagnosis, and treatment of osteoporosis, visit the NYSOPEP website at www.NYSOPEP.org, or call NYSOPEP- New York State’s Osteoporosis Resource Center at Helen Hayes Hospital at (845) 786-4772.