



Bones play many roles in the body: providing structure, protecting organs, anchoring muscles and storing calcium for use elsewhere in the body. It's important to build strong and healthy bones during childhood and adolescence, but you can take steps as an adult to improve bone health, too. Both diet and exercise play vital roles in maintaining healthy bone mass.

## The importance of healthy bones

As you might remember from high school biology, our bones are continuously changing. New bone is made by one type of cells and old bone is broken down by a different type. When you're young, your body makes new bone faster than it breaks down old bone, and your bone mass increases, but as we age the cells that break down bones start to outnumber the cells that build bones. Most people reach their peak bone mass around age 30. After that, you lose slightly more bone mass than you gain.

### What affects bone health?

A number of factors besides age can affect bone health. For example:

- **The amount of calcium in your diet.** A diet low in calcium contributes to diminished bone density, early bone loss and an increased risk of fractures.
- **Physical activity.** The more active you are (particularly the more weight-bearing exercise you do), the healthier your bones will be.
- **Tobacco and alcohol use.** Research suggests that tobacco use contributes to weak bones. Similarly, regularly having more than two alcoholic drinks a day increases the risk of osteoporosis, possibly because alcohol can interfere with the body's ability to absorb calcium.
- **Gender.** You're at greater risk of osteoporosis if you're a woman, because women have less bone tissue than men do.
- **Size.** You're also at risk if you're extremely thin (with a body mass index of 19 or less) or have a small body frame because you generally have less bone mass to draw from as you age.
- **Race and genetics.** You're at greatest risk of osteoporosis if you're white or of Asian descent. In addition, a family history of osteoporosis puts you at greater risk.
- **Hormone levels.** Too much thyroid hormone can cause bone loss. In women, bone loss increases dramatically at menopause due to dropping estrogen levels. In men, low testosterone levels can cause a loss of bone mass.
- **Eating disorders and other conditions.** People who have anorexia or bulimia are at risk of bone loss as well as other health conditions. Also, stomach surgery (gastrectomy), weight-loss surgery and conditions such as Crohn's disease, celiac disease and Cushing's disease can affect your body's ability to absorb calcium.
- **Certain medications.** Long-term use of certain medications for chronic conditions can cause bone loss or decreased calcium absorption. Your doctor or pharmacist can help you determine if you're taking one of these medications.



## How much calcium and Vitamin D should I get?

### Calcium

The recommended daily intake of calcium changes based on your age and gender. Kids ages 9-18 should get the most calcium, at 1,300 milligrams (mg) per day. After adolescence, that number cuts back to 1,000 milligrams for women up to age 50 and men up to age 70. After 50 for women and 70 for men, you should try for 1,200 milligrams per day.

### Vitamin D

If you're under 70, you should aim for 600 IUs of Vitamin D per day. Over 70, both men and women should aim for 800 IUs per day. It doesn't all have to be from food, as your skin can absorb Vitamin D through sunlight. Just don't forget to put on sunscreen!

### Supplementation

If you're having trouble getting enough calcium or Vitamin D, supplements are available for both. Research shows that calcium supplements are better absorbed in several small doses with food throughout the day. Also, in people with Vitamin D deficiencies, a doctor may recommend taking supplements up to 6 times the amount of the recommended daily intake. Still, it's best to get both calcium and Vitamin D in your diet daily. Fortunately, packaged foods have calcium and vitamin D content listed with the nutritional information, and the calcium content of fruits and vegetables is readily available online.

Source: [NIH](#)

## What can I do to keep my bones healthy?

How likely you are to develop osteoporosis, a condition that causes bones to become weak and brittle, depends on how much bone mass you attain by the time you reach about 30 and how rapidly you lose it after that. The higher your peak bone mass, the more bone you have “in the bank” and the less likely you are to develop osteoporosis as you age. You can take a few simple steps to prevent or slow bone loss. For example:

- **Include plenty of calcium in your diet.** Calcium is the mineral that makes up most of our bones, so it’s vital to get enough calcium on a regular (daily) basis. Good sources of calcium include dairy products, almonds, broccoli, kale, canned salmon with bones, sardines and soy products, such as tofu. If you find it difficult to get enough calcium from your diet, ask your doctor about supplements.
- **Pay attention to vitamin D.** We usually think of calcium when we consider bone health, but your body actually needs vitamin D to absorb that calcium. For adults ages 19 to 70, the daily vitamin D recommendation is 600 international units (IUs) a day. The recommendation increases to 800 IUs a day for adults age 71 and older. Good sources of vitamin D include oily fish, such as tuna and sardines, egg yolks, and fortified milk. Sunlight also contributes to the body’s production of vitamin D. If you’re worried about getting enough vitamin D, ask your doctor about supplements.
- **Avoid substance abuse.** Don’t smoke. Avoid drinking more than two alcoholic drinks a day.
- **Include physical activity in your daily routine.** Weight-bearing exercises, such as walking, jogging, tennis and climbing stairs, can help you build strong bones and slow bone loss. Working out with weights, even light ones, can help improve or maintain bone mass. Daily activity can also help you maintain balance as you age, decreasing the risk of a fall.
- **Prevent falls.** Falling down can cause a bone to break, especially in people with osteoporosis. Many falls can be prevented, however. Check your home for dangers like loose rugs and poor lighting. Have your vision checked. Improve your balance with activities like Tai Chi, yoga, or dancing.



If you’re concerned about your bone health or your risk factors for osteoporosis, talk to your doctor. There are medications to help slow bone loss.

Adapted from [The Mayo Clinic](#) and [NIH](#)



Recipe of the Month:

### Grilled Rosemary-Salmon Skewers

This recipe uses a grill to impart a nice smoky flavor to the meal. Make sure to oil your grill well to prevent sticking, don’t move the kebabs around unnecessarily, and keep a close eye on the fire to avoid flare-ups.

#### Ingredients

2 teaspoons minced fresh rosemary  
 2 teaspoons extra-virgin olive oil  
 ½ teaspoon kosher salt  
 ¼ teaspoon freshly ground pepper  
 2 cloves garlic, minced  
 1 teaspoon freshly grated lemon zest  
 1 teaspoon lemon juice  
 1 pound center-cut salmon fillet, skinned\*  
     and cut into 1-inch cubes  
 1 pint cherry tomatoes  
 Equipment: Eight 12-inch skewers

#### Instructions

Preheat grill to medium-high. Combine rosemary, oil, garlic, lemon zest, lemon juice, salt and pepper in a medium bowl. Add salmon; toss to coat. Alternating the salmon and tomatoes, divide among eight 12-inch skewers. Oil the grill rack\*\*. Grill the skewers, carefully turning once, until the salmon is cooked through, 4 to 6 minutes total. Serve immediately.

**\*How to skin a salmon fillet:** Place skin-side down. Starting at the tail end, slip a long knife between the fish flesh and the skin, holding down firmly with your other hand. Gently push the blade along at a 30° angle, separating the fillet from the skin without cutting through either.

**\*\*To oil the grill rack,** oil a folded paper towel, hold it with tongs and rub it over the rack. (Don’t use cooking spray on a hot grill.)

#### Nutrition per serving (2 skewers, 4 servings):

Calories: 172; Fat: 7 g; Saturated Fat: 1 g; Fiber: 1 g;  
 Carbohydrates: 4 g; Protein: 23 g; Cholesterol: 53 mg;  
 Sugar: 2 g; Sodium: 200 mg

Adapted from [eatingwell.com](http://eatingwell.com)