



The University of Georgia Cooperative Extension Service

## Building Bones to Last a Lifetime

Bones are like a bank account where you deposit calcium and other minerals to build strong bones. You also withdraw calcium from bones when your body needs it elsewhere. You withdraw more calcium from bones than you deposit when you are older. This leaves you with weaker bones that can fracture easily. This is a condition called osteoporosis.

Like you build a strong bank account with good investments over time, you have to deposit enough calcium during childhood and adolescence so withdrawals do not leave you with weak bones when you are older. You can count on these five recommendations to build strong bones for a lifetime.



## 1. Eat a healthy diet that includes milk and other dairy foods for calcium and vitamin D, and fruits and vegetables for other nutrients important for strong bones.

Calcium gives your bones strength and structure; vitamin D helps you absorb and get calcium to your bones. Milk is a rich source of both calcium and vitamin D. Feed your bones:

- ◆ 2 to 4 servings of milk or dairy foods daily; a serving equals 8 ounces of milk, yogurt, pudding or buttermilk; 1/2 cup ricotta cheese; 1 1/2 ounces hard cheese; or 2 ounces American cheese
- foods made with added calcium, like orange juice, soy drinks and breakfast cereals if you
  do not drink milk or eat other dairy foods
- beans, almonds, turnip greens and canned salmon with bones to boost calcium
- calcium and/or vitamin D supplements if diet does not supply enough
- five or more servings of vegetables and fruits daily for magnesium, potassium, vitamin K and vitamin C, nutrients also needed for strong bones

Age	Calcium (mg/day)	Milk Group Servings	Vitamin D (IU/day)	
1 - 3 yrs	500	2	200	MILK MILK
4 – 8 yrs 9 – 18 yrs	800 1,300	3 4	200 200	
19 – 50 yrs 51 – 70 yrs	$1,000 \\ 1,200$	3 4	200 400	L Q
71+ yrs	1,200	4	600	

## Calcium, Milk Group & Vitamin D Recommendations

**2. Get daily sun exposure so your skin can make vitamin D.** Expose your arms or legs to sun for 15 minutes daily, without sunscreen. Apply sunscreen after the 15 minutes. Your skin makes less vitamin D after age 50 and your vitamin D needs increase. So, you have to get enough vitamin D from milk and/or a supplement.

## 3. Maintain an active lifestyle that includes regular weight-bearing exercises, strength-training exercises, and stretching.

- Weight-bearing exercises include walking, running, aerobics classes, stair climbing, tennis, basketball, soccer, and volleyball. Do any of these *at least* 30 minutes a day three times a week.
- Strength-training exercises are weight lifting with dumbbells or weight machines. Push-ups, stomach curls and leg lifts are some strengthening exercises done without machines. Do strengthening exercises 2 times a week.



 Stretching improves balance and flexibility and helps reduce risk of falling. Do stretching exercises at least 3 times a week.

**4. Have bone mineral density testing at the right time in life and take appropriate medications to slow bone loss or build bones when necessary.** Premenopausal women and men with risk factors, and women in menopause or past menopause should talk to their doctor about bone mineral density testing. These tests can help a doctor decide if medications are needed to prevent bone loss, slow bone loss or help rebuild bone.

**5. Avoid habits that can cause bone loss to start too early.** These habits include smoking, drinking excess alcohol and strict dieting that leads to an eating disorder. Consuming too little calcium and getting very little activity or exercise can also prevent you from building strong bones.

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