

# Building Healthy Bones for Life



## Calcium

86% of teen girls aren't getting enough calcium. Since 95% of our bone mass is set by the time we turn 20, getting the right amount of daily calcium as teens is crucial.

### How Much Calcium Kids and Teens Need

4 – 8 years old ..... 1,000 mg  
9 – 18 years old ..... 1,300 mg

### Calcium Booster Ideas

- Use milk instead of water when you cook hot cereals.
- Add shredded cheese to spaghetti sauce, frozen pizza before baking, salads before tossing, and casseroles just before taking out of the oven.
- Substitute plain yogurt for sour cream on baked potatoes.
- Use yogurt as a delicious dip for raw vegetables.
- Try orange juice with calcium and vitamin D.
- Calcium is best absorbed if consumed throughout the day.
- If your child isn't getting enough calcium through diet alone, we recommend using a calcium carbonate supplement.

Best Sources of Calcium					
Milk	Amount	Calcium (mg)	Fruit and Vegetables	Amount	Calcium (mg)
Yogurt	1 cup	415	Kale, cooked	1/2 cup	103
Milk	1 cup	300 – 377	Spinach, cooked	1/2 cup	84
Cheese	1 oz	174 – 272	Broccoli, cooked	1/2 cup	68
Grains			Chard, cooked	1/2 cup	64
Corn tortilla	1 medium	60	Orange	1 med	60
Whole wheat bread	1 slice	25	Carrot, raw	1 med	27
Calcium-Fortified Foods			Raisins	1/4 cup	22
Orange juice	8 oz	300	Meat and Protein		
Calcium-fortified cereals	1 cup	300	Salmon	3 oz	165
Calcium-fortified tofu	4 oz	145	Almonds	1 oz	66

## Vitamin D

Three in four U.S. teens don't get enough vitamin D.

### Vitamin D Facts

- Kids and teens should get 600 IU of vitamin D a day.
- Vitamin D is essential to maintaining strong bones because it helps the body absorb calcium.
- Vitamin D deficiency can cause muscle fatigue and weakness.
- In children, vitamin D deficiency causes rickets, where bones become soft and bend.
- Almost all U.S. milk is fortified with vitamin D, but foods made from milk, like ice cream, are usually not fortified.
- The body makes vitamin D when skin is directly exposed to the sun. The best way to get the daily recommended amount of vitamin D is a 15-minute walk in the sun. If you're spending more time than that in the sun, remember to cover up and wear sunscreen to prevent skin cancer.

### Ways to Get Vitamin D

- Very few foods naturally have vitamin D. Fortified foods provide most vitamin D in American diets.
- Fatty fish such as salmon, tuna, and mackerel are among the best sources of vitamin D.
- Cheese and egg yolks contain small amounts of vitamin D.

### Vitamin D Supplements

- If your child isn't getting enough vitamin D through diet alone, vitamin D3 supplements work best.
- Avoid the upper limit to prevent vitamin D poisoning:
  - 1-8 years old: 2,500-3,000 IU/day
  - 9 years and older: 4,000 IU/day

Recommended Supplements		
Name	Calcium	Vitamin D3
Caltrate 600+D3 Plus Minerals	600 mg	800 IU
Viactiv Calcium Plus D	500 mg	500 IU
Flintstones Complete	100 mg	600 IU
Tums Extra Strength 750	300 mg	–
Nordic Naturals Complete Omega-D3 Junior	–	1000 IU

We help kids and teens build healthy bones, on and off the field. Call us at (844) 41-ORTHO (67846) or visit [ortho.stanfordchildrens.org](http://ortho.stanfordchildrens.org) to learn more about our Orthopedic and Sports Medicine Center.