

# Are You Getting Enough Vitamin D?

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## Introduction

Vitamin D is often called the sunshine vitamin. This vitamin is unique in that sunlight on our skin enables our bodies to make vitamin D. Over the past decade there have been conflicting messages about vitamin D, its benefits, and how much is needed to be healthy. Several studies suggest that most Americans are receiving adequate amounts of vitamin D. It is often suggested that vitamin D provides a range of health benefits, however the Institute of Medicine states that present evidence supports the role of vitamin D only in bone health.

## What is Vitamin D?

Vitamin D is a fat-soluble vitamin. It aids in the absorption of phosphorous and calcium in the body. These minerals are important for bone health. Vitamin D helps bring calcium and phosphorous to our bones and teeth and regulates how much calcium remains in the body. Vitamin D also plays a role in the strength of our immune system and helps regulate cell growth. When the body does not have enough vitamin D, the bones soften. In children this condition is called “rickets,” and

in adults the softening of bones is called “osteomalacia.”

Although the average American consumes about 28 percent of the recommended amount of calcium, as many as 80 percent of Americans have adequate vitamin D levels because of sun exposure.

## Recommendations

Recommendations for vitamin D are based on adequate sun exposure. For children and most adults, the recommended dietary intake for vitamin D is 15 micrograms (mcg) or 600 international units (IU) per day. For adults over the age of 70, the recommended dietary intake is 20 mcg or 800 IU per day. The dietary guideline also recommends not having a dietary intake greater than 100 mcg per day to reduce the risk of negative effects.

## Benefits of Vitamin D

- When calcium blood levels drop, the body changes vitamin D to the active form to encourage greater calcium absorption into the blood and to minimize calcium loss in the urine.

- Consuming the recommended amount of vitamin D each day reduces the risk of hip and other bone fractures.
- Vitamin D reduces the risk of falls by more than 20 percent among older individuals.

**Buying Kentucky Proud is easy. Look for the label at your grocery store, farmers' market, or roadside stand.**



**Table 1. Vitamin D Sources.**

| Natural-occurring                                                                                                          | Fortified                                                                                                                                                                          |
|----------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• Fatty fish (i.e. salmon and tuna)</li> <li>• Eggs</li> <li>• Mushrooms</li> </ul> | <ul style="list-style-type: none"> <li>• Most milk</li> <li>• Orange juice</li> <li>• Yogurt</li> <li>• Cheese</li> <li>• Cereal</li> <li>• Bread</li> <li>• Soy drinks</li> </ul> |

### Tips to Raise Vitamin D Intake

- Drink an 8-ounce glass of low-fat or fat-free milk with meals.
- Eat yogurt with added fruit for breakfast.
- Blend together milk and fruit for a smoothie snack.
- Make oatmeal with milk instead of water.
- Get at least 15 minutes of sun exposure daily. A great way to do this is by going for a walk.
- Add cheese to a tossed salad.
- Add fish to your diet a couple of times a week.
- Winter sunlight is not strong enough for our bodies to make vitamin D, so add a vitamin D fortified food to your diet in the winter time.



### Taking a Vitamin D Supplement

People who have lactose intolerance, dark skin, or little sun exposure may consider a vitamin D supplement. If you are lactose intolerant, you may not eat many products with vitamin D and may be at risk for vitamin D deficiency. People with dark skin do not absorb as much ultraviolet sunlight for their bodies to produce the necessary amount of vitamin D. New research is suggesting people who are overweight and obese may also be at risk for vitamin D deficiency.

If you get little exposure to the sun, you may want to check with your doctor to see if you need a vitamin D supplement. It is a good practice to always check with your doctor before adding any kind of dietary supplement.

Food labels are not required to list the amount of vitamin D in a food unless the food has been fortified with vitamin D (Tables 1 and 2). Foods providing 20 percent or more of the daily value of vitamin D are considered to be high sources, but foods providing lower percentages of the daily value of vitamin D also contribute to a healthful diet.

**Table 2: Selected Food Sources of Vitamin D.**

| Food                                                                                                     | IUs per serving* | Percent DV** |
|----------------------------------------------------------------------------------------------------------|------------------|--------------|
| Cod liver oil, 1 tablespoon                                                                              | 1,360            | 340          |
| Salmon (sockeye), cooked, 3 ounces                                                                       | 447              | 112          |
| Tuna fish, canned in water, drained, 3 ounces                                                            | 154              | 39           |
| Orange juice fortified with vitamin D, 1 cup (check product labels, as amount of added vitamin D varies) | 137              | 34           |
| Milk, nonfat, reduced fat, or whole, vitamin D-fortified, 1 cup                                          | 115-124          | 29-31        |
| Yogurt, fortified with 20% of the DV for vitamin D, 6 ounces                                             | 80               | 20           |
| Margarine, fortified, 1 tablespoon                                                                       | 60               | 15           |
| Sardines, canned in oil, drained, 2 sardines                                                             | 46               | 12           |
| Liver, beef, cooked, 3 ounces                                                                            | 42               | 11           |
| Egg, 1 large (vitamin D is found in yolk)                                                                | 41               | 10           |
| Ready-to-eat cereal, fortified with 10% of the DV for vitamin D, 0.75-1 cup                              | 40               | 10           |
| Cheese, Swiss, 1 ounce                                                                                   | 6                | 2            |

\* IUs = International Units.

\*\* DV = Daily Value.

Source: U.S. Department of Agriculture, Agricultural Research Service.

## Zippy Corn Chowder

### Ingredients

- 1 medium onion, chopped
- 1 green pepper, chopped
- 1 tablespoon butter
- 1 (14.5 ounce) can low-sodium chicken broth
- 2 large red potatoes, cubed
- 1 jalapeno pepper, seeded and chopped
- 2 teaspoons Dijon mustard
- 1 teaspoon basil
- ½ teaspoon paprika
- ½ teaspoon crushed red pepper flakes
- 3 cups fresh or frozen whole kernel corn
- 4 green onions, chopped
- 2 cups skim milk, divided
- 2 tablespoons all-purpose flour
- 1 teaspoon salt (optional)

### Directions

- In a large saucepan, sauté onion and green pepper in butter until tender. Add broth and cubed potatoes. Bring to a boil.
- Reduce heat; cover and simmer for 15 minutes or until potatoes are almost tender.
- Stir in jalapeno, mustard, basil, paprika and red pepper flakes. Add corn, green onions and 1½ cups of milk. Bring to a boil.
- In a separate bowl, combine all-purpose flour and remaining ½ cup milk, stirring until smooth.
- Gradually add mixture to soup. Bring to a boil. Cook and stir for 2 minutes or until thickened and bubbly.

**Yield:** Eight 1-cup servings

**Nutritional Analysis:** 190 calories, 2.5 g fat, 1 g saturated fat, 5 mg cholesterol, 350 mg sodium, 34 g carbohydrate, 4 g fiber, 10 g sugar, 7 g protein

## References

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