

Title:  
Vitamin D Facts

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Date:  
7/11/08

Key words:  
Vitamin D, deficiency, rickets, osteomalacia

Abstract:  
If serum vitamin D levels are low, vitamin D supplementation is encouraged as it is associated with decreased risk of disease, such as rickets, osteomalacia, osteoporosis, cancer, and diabetes. Vitamin D supplementation poses little risk and is low cost.

This document was created by a medical student enrolled in the Primary Care Clerkship at the University of Minnesota Medical School as part of the course project. The aim of the project is to present information on a medical topic in the format of a patient education handout. It does not necessarily reflect the views of the University of Minnesota Medical School physicians and faculty. These materials are provided for informational purposes only and are in no way intended to take the place of the advice and recommendations of your personal health care provider. The information provided may no longer be up to date since it has not been reviewed since the date of creation. The information provided should not be used to diagnose a health problem or disease, or as a means of determining treatment. In the event of a medical emergency, immediately contact a doctor or call 911.

## THE BOTTOM LINE



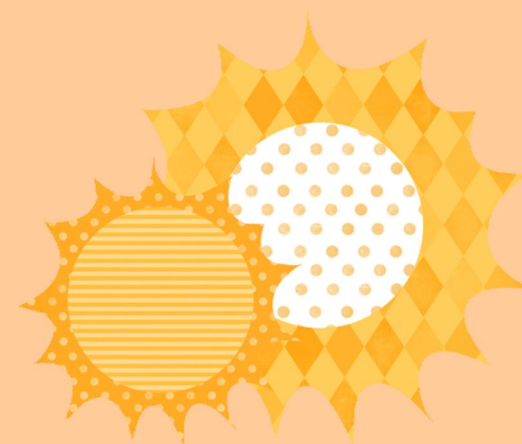
1. Because of limited sun exposure, many people in Minnesota are low in vitamin D or at risk of deficiency. This includes breast-fed infants, older adults, and people with darker skin.
2. Low vitamin D is related to rickets, osteomalacia, and osteoporosis.
3. You can prevent low vitamin D with sun exposure, eating foods with vitamin D, and vitamin D supplements.

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# Vitamin D Facts

Helpful Information About  
Vitamin D



HEALTH AND WELLNESS



## WHAT IS VITAMIN D?

Vitamins are substances found in food. They help the body grow properly.

1. Vitamin D is important for strong bones and teeth.
2. Vitamin D helps you absorb calcium, which helps build strong bones.
3. Vitamin D is also used in cell growth and your body's immune system.

## WHERE DO YOU GET VITAMIN D?

Being out in the sun is the best way to get vitamin D. The sun's UV rays cause a reaction in our skin that makes vitamin D. Vitamin D is also present in milk with vitamin D added, fish, egg yolks, liver, and some cereals. You can also get more through vitamin D supplements.



## VITAMIN D AND YOUR HEALTH

Rickets and osteomalacia are caused by low vitamin D. Osteoporosis has been linked to low vitamin D.

1. Rickets is a disease children get. The bone does not harden and skeletal problems can result.
2. Osteomalacia occurs in adults. Weak muscles and bones result from the loss of bone minerals.
3. Osteoporosis is weak bones. It is due to low calcium. Low vitamin D decreases the calcium the body can absorb.

## DO I HAVE ENOUGH VITAMIN D?

Living in the north makes it hard to get enough vitamin D from the sun. During the winter the sunlight is too weak to make enough vitamin D in our skin. Clouds, darker skin, clothes, and sunscreen decrease the amount of vitamin D we get from the sun.

It is common to be low in vitamin D. Breast-fed infants, older adults, people with darker skin, and people with low sun exposure are at risk of low vitamin D.

## HOW MUCH VITAMIN D DO I NEED?

To get enough vitamin D from sunlight, try 5 - 30 minutes of full sun twice a week. Wear sunscreen at other times as a lot of sun can lead to skin cancer.

You should get 400 – 800 IU of vitamin D daily. If you are at risk of low vitamin D take a supplement or eat foods rich in vitamin D. Some supplements are sold with both calcium and vitamin D.

If you have questions about your vitamin D status, ask your doctor.