

Title: What you should know about vitamin D.

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Abstract:

This piece of literature is a pamphlet designed to serve as a patient education tool for those interested in learning more about vitamin D. Included herein is information regarding daily vitamin D requirements, the disease states resulting from vitamin D deficiency, and instructions on how and where to purchase vitamin D supplements. For patients seeking additional information beyond the scope of this pamphlet, a listing of reliable websites has also provided.

Disclaimer:

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.

# WHAT YOU SHOULD KNOW ABOUT VITAMIN D



## *An Informational Guide for Patients*

**This pamphlet contains:**

**Facts about vitamin D**

**Vitamin D requirements**

**Info on vitamin D deficiency**

**Where to find vitamin D**

### **What does Vitamin D do ?**

- Helps the gut absorb calcium from food.
- Help growing bones absorb important nutrients so they can become strong.
- Vitamin D helps prevent certain diseases:
  - Some cancers
  - Type 1 diabetes
  - Heart disease

### **How does my body get Vitamin D ?**

- Vitamin D is in some foods such as:
  - fortified cereals
  - dairy products
  - eggs
  - mushrooms
  - salmon
  - herring
  - tuna
  - catfish
  - sardines.



- BUT, most of our vitamin D from is made by our skin from sunlight.

- 10 – 15 minutes of sun exposure twice a week without sunscreen should make enough vitamin D for us.
- However, places with smog, cloudy skies, and long winters receive less sunlight.



### **How much Vitamin D do I need ?**

- Babies who are breast feeding, children, and adolescents need 400 IU of vitamin D each day.
- Children who drink at least 32 oz of vitamin D fortified milk each day do not need vitamin D supplements.
- Adults need 800 to 1000 IU per day

### **What happens if I don't get enough Vitamin D ?**

- Your body will have trouble getting the calcium it needs from your food.



- A chemical in your body called the parathyroid hormone will signal your body to take calcium from your bones!
- In children, too little vitamin D leads to a disease called rickets.

- Rickets leads to soft, weak, deformed bones that bend and break easily.



- Adults can develop thin, brittle, and weak bones too. We call this osteomalacia.
- Osteomalacia can lead to a more serious bone disease, osteoporosis.

### **What things put me and my family at risk for having low vitamin D levels ?**

- Dark skin
- Spending little time outside
- Wearing sunscreen all of the time
- Not eating foods containing vitamin D because of need for a special diet
- When you cannot make or use vitamin D because of a medical disorder such as:
  - celiac disease
  - kidney disease

### **How do I know if I am vitamin D deficient ?**

- Vitamin D Level – This is a blood test your doctor can do in the clinic.
- Vitamin D deficiency is linked to many medical problems:
  - chronic muscle aches
  - chronic pain
  - broken bones
  - memory loss
  - trouble concentrating
  - depression
  - high blood pressure
  - disease of the blood vessels



### **Where can I find vitamin D supplements ? How much do they cost ?**

- Vitamin D supplements can be found at health food stores, grocery stores, drug stores, and pharmacies.
- When choosing supplements, make sure the bottle says vitamin D3. This is the most active form of vitamin D.
- Vitamin D is fairly inexpensive. Prices in stores range from \$4.50 to \$14.00 per bottle.

**If you have additional questions about vitamin D, consult your doctor or visit the following websites:**

- For more information about children and vitamin D visit:

<http://www.aap.org/family/vitdpatients.htm>

- For more information on the benefits of vitamin D visit:

<http://ods.od.nih.gov/factsheets/vitamind.asp>

- For more information on rickets visit:

<http://www.mayoclinic.com/print/rickets>

- For more on how to prevent osteoporosis visit:

<http://www.nof.org/prevention/index.htm>