Vitamin D

What is vitamin D?

Vitamin D is a vitamin that is stored in your body's fat tissue. It helps your body absorb calcium, which helps to build strong bones. It also keeps the right amount of calcium and phosphorus in the blood. Low levels of vitamin D may increase the risk of certain diseases such as cancer and autoimmune diseases. Children with low levels of vitamin D are at risk for rickets. This disease is rare and causes bones to not grow properly. Adults with low levels vitamin D are at risk for softening of the bones called osteomalacia.

How much vitamin D do I need?

The current recommended amount that healthy people need each day is:

- 600 International Units (IU) per day for ages 1 to 70 years, including pregnant and lactating women
- 800 IU per day for ages 71 years and older

You may have different needs. Talk to your doctor about how much vitamin D you need each day.

Where can I find vitamin D?

Sun Exposure

The main source of vitamin D for most people is sunshine. For people with light-colored skin, 15 to 20 minutes of sun exposure a day is enough for the body to make vitamin D. For people with dark-colored skin, 30 minutes a day is needed. Sunscreen blocks most of your body's ability to make vitamin D. Talk to your healthcare provider before you increase your amount of time in the sun. Your doctor may want you to

This handout is for informational purposes only. Talk with your doctor or health care team if you have any questions about your care.
take a supplement instead of increasing your time in the sun if you have risk factors for skin cancer or if you are taking certain medicines.

Food
The table below shows vitamin D amounts in some foods. Most people cannot get enough vitamin D from their food alone. However, eating foods that are a good source of vitamin D can be helpful in meeting your total daily needs.

<table>
<thead>
<tr>
<th>Food</th>
<th>Serving Size</th>
<th>IU of Vitamin D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cod liver oil</td>
<td>1 tablespoon</td>
<td>1360</td>
</tr>
<tr>
<td>Salmon, cooked</td>
<td>3 ounces</td>
<td>500 – 1400</td>
</tr>
<tr>
<td>Salmon, canned</td>
<td>3 ounces</td>
<td>465</td>
</tr>
<tr>
<td>Tuna fish, canned</td>
<td>3 ounces</td>
<td>70 – 230</td>
</tr>
<tr>
<td>Shrimp, cooked</td>
<td>4 ounces</td>
<td>165</td>
</tr>
<tr>
<td>Milk, fortified with vitamin D</td>
<td>1 cup</td>
<td>100 – 120</td>
</tr>
<tr>
<td>Yogurt, fortified with vitamin D</td>
<td>1 cup</td>
<td>50 – 100</td>
</tr>
<tr>
<td>Orange juice, fortified with vitamin D</td>
<td>1 cup</td>
<td>100</td>
</tr>
<tr>
<td>Cereal, fortified with vitamin D</td>
<td>3/4 – 1 cup</td>
<td>40 – 100</td>
</tr>
<tr>
<td>Cheese</td>
<td>1 ounce</td>
<td>5 – 20</td>
</tr>
</tbody>
</table>

Dietary Supplement
When sun exposure and food do not provide the amount of vitamin D your body needs, your doctor may recommend a supplement. A blood sample may be taken to check your body’s vitamin D level. If it is low, you will need to take a supplement that is more than the recommended daily amount to get your level up to normal. Your doctor will check your blood again after you take the supplement for a while to make sure the amount of vitamin D in your blood is in the normal range.
Am I at risk for a vitamin D deficiency?
You may have a vitamin D deficiency if you:

- Do not eat enough foods that are good sources of vitamin D like fish and fortified milk.
- Are on a vegetarian diet.
- Are over the age of 50 years.
- Have certain medical problems like kidney disease, melanoma, trouble digesting fats, or problems with your intestinal tract.
- Live somewhere cold in the winter or where there is less sunlight. Your body cannot make vitamin D very well, if at all, during the winter months in northern climates.
- Wear sunscreen regularly.

Do I need to take a vitamin D supplement?
Talk to your doctor or dietitian to help you decide how much vitamin D you need and which supplement is right for you. Tell your doctor about any medical conditions you may have.

Can I take a vitamin D supplement safely with my other medicines?
Tell your doctor about all prescription and over-the-counter medicines, vitamins, minerals, and other supplements you take. Always bring a list of these with you to your appointments.

Here are a few medicines that may interfere with a vitamin D supplement:

- Antacids with magnesium
- Corticosteroids (Prednisone)
- Weight loss drugs (Xenical, Orlistat, Alli)
- Cholesterol reducing drugs (Prevalite/Cholestyramine, Questran, LoCholest)
- Seizure medicines (Dilantin/Phenytoin, Phenobarbitol)
- Thiazide diuretics (HCTZ)
Can I take too much vitamin D?

Yes, especially if you take large doses as a supplement. This can lead to increased calcium levels, which can increase the risk of kidney stones and may weaken bones and muscles. If you feel any unusual symptoms or discomfort while taking supplements, tell your doctor.

You cannot get too much vitamin D from the sun. Your body will slow down or stop the amount it makes to keep you in a normal range. However, you can burn and damage your skin from getting too much sun.

Currently, the recommended dietary allowance of vitamin D is 600 IU (800 IU for adults over 70). The upper safe limit of vitamin D is 4,000 IU a day total (from both food sources and dietary supplements) for adults. You should not go over this amount unless your doctor tells you to take more.