Vitamin D

What is Vitamin D?
Vitamin D is known as the “sunshine vitamin.” It can be made by your body when your skin is exposed to the sun. Your ability to make vitamin D from sunshine depends on your skin color, how far north you live, and season of the year. Too much sunshine can also be dangerous and put you at risk for skin cancer. Talk to your doctor to decide the right amount of sun for you.

Why is Vitamin D Important?
The main role of vitamin D is to help build and maintain strong, healthy bones and teeth. Vitamin D does this by keeping the right amount of calcium and phosphorus in the blood. People who do not get enough vitamin D may get brittle, thin bones. This can lead to bone diseases. It can cause rickets in children and osteomalacia or osteoporosis in adults. Vitamin D may also help with immune and lung function.

Where Can I Find Food Sources of Vitamin D?
Few foods are naturally good sources of vitamin D.
- Egg yolks, beef liver, and oily fish, such as salmon, mackerel, and canned sardines and tuna, as well as fish oils.
- Fortified foods provide most of our vitamin D from foods such as milk, soy and other milk substitutes, orange juices, yogurts, margarines, and ready to eat breakfast cereals.
- Ice cream, cheese, and cottage cheese may not be fortified.
- Because vitamin D is a fat soluble vitamin, it needs fat to be absorbed.

How Much Vitamin D Do I Need?

<table>
<thead>
<tr>
<th>Age</th>
<th>Vitamin D IU (International Units)</th>
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<tbody>
<tr>
<td>Birth – 12 months</td>
<td>400</td>
</tr>
<tr>
<td>1-18 years</td>
<td>600</td>
</tr>
<tr>
<td>19- 50 years</td>
<td>600</td>
</tr>
<tr>
<td>51-70 years</td>
<td>600</td>
</tr>
<tr>
<td>≥ 70 years</td>
<td>800</td>
</tr>
</tbody>
</table>

Although these are the current guidelines for vitamin D, many people may need more vitamin D. This is true for people with increased risk of vitamin D deficiency.

How Do I Know if I am Getting Enough Vitamin D?
Some people are at higher risk for vitamin D deficiency. Check the list below to see if you are at higher risk. Talk to your healthcare team to find out if you are getting enough vitamin D.

People with Increased Risk of Vitamin D deficiency:
- Infants who are breastfed (breast milk is low in vitamin D)
- If you are over age 50
- If you have limited sun exposure
- If you have dark skin
- If you live in the northern half of the US (includes all of the Midwest)
- If you have trouble absorbing fats (Cystic Fibrosis, Crohn’s disease, celiac disease)
- If you are obese

**Medicine Interactions**
Vitamin D supplements can interact with some medicines. These medicines increase your risk of having a low vitamin D level:
- Medicine that suppresses the immune system (prednisone and other steroids)
- Medicine that lowers cholesterol like cholestryamine (Questran, LoCholest, Prevalite)
- Some seizure medicines (phenytoin (Dilantin) and phenobarbital)
- Some weight-loss medicines like orlistat (Xenical, Alli).

Please talk to your health care team about your vitamin D needs if you are taking one of these medicines.

**Can I Get Too Much Vitamin D?**
You can get too much vitamin D from supplements. Symptoms may include
- nausea
- vomiting
- weight loss
- weakness
- poor appetite
- constipation

The current Tolerable Upper Intake (levels thought to be safe) for vitamin D supplements are:
- 1000 IU for infants 0-6 months
- 1500 IU for infants 6-12 months
- 2500 IU for children 1-3 years
- 3000 IU for children 4-8 years
- 4000 IU for all people 9 years and older

Doses greater than those listed here as the Upper Limit may be recommended by your healthcare provider in certain situations.

Too much sun exposure won’t cause you to get too much vitamin D because the body limits how much vitamin D it creates. But too much sun exposure can put you at risk for skin cancer.

**Where and When Should I get my Vitamin D Level Checked?**
Vitamin D levels can be checked with a simple blood test. Ask your health care team if you need to have your vitamin D level checked.

**Supplements**
Vitamin D supplements come in liquid, chewables, tablets and soft gels over the counter, anywhere vitamins are sold. Talk to your doctor to decide the right vitamin D supplement and dosage for you.

**Be sure to choose one with “cholecalciferol” as the vitamin D source and the USP seal on the label.**

**Do not begin taking high doses of vitamin D without first talking to your doctor.**
Teach Back

What is the most important thing you learned from this handout?

What changes will you make in your diet/lifestyle, based on what you learned today?

If you are a UW Health patient and have more questions please contact UW Health at one of the phone numbers listed below. You can also visit our website at www.uwhealth.org/nutrition.

Nutrition clinics for UW Hospital and Clinics (UWHC) and American Family Children’s Hospital (AFCH) can be reached at: (608) 890-5500.

Nutrition clinics for UW Medical Foundation (UWMF) can be reached at: (608) 287-2770.