

Title: Sunscreen usage in theory can significantly reduce cutaneous vitamin D production, but its normal usage will generally not lead to vitamin D deficiency.

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Abstract: Sunscreen is an easy and effective way of preventing overexposure to UV rays and subsequent sunburn. In a systematic review of multiple published studies regarding the use of sunscreen and its effect on Vitamin D levels, it was determined that it's typical usage—under-applying in amount, frequency, and locations over the body compared to what's directed—will not decrease cutaneous vitamin D production.

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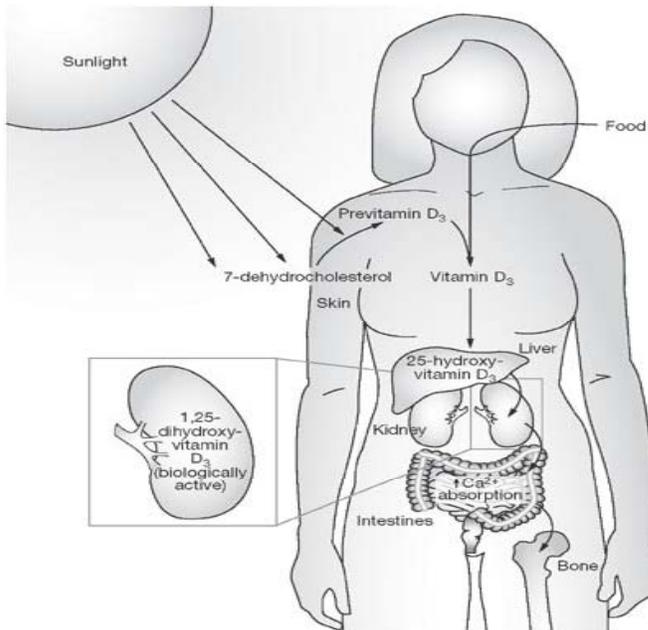
# Vitamin D

## Why Is It Important to Me?



### What is Vitamin D used for?

- Vitamin D is a natural part of our body. It can come from two places:
  - It is made in the skin when our skin is exposed to the sun.
  - We can eat it in our diet in things like fish, eggs, fortified milk, and cod liver oil
- Vitamin D, when we have enough of it, helps absorb calcium from what we eat. Together they are used to make strong, healthy bones.
- Vitamin D helps protect from osteoporosis, osteomalacia and muscle weakness, bone fractures, high blood pressure, cancer, stroke, diabetes, and other diseases



### How common is it to be deficient in Vitamin D?

- Many people, especially people who live in northern latitudes like Minnesota, do not get enough sun exposure and can be Vitamin D deficient (have low level of Vitamin D in their blood).
- You have a higher chance of being Vitamin D deficient if you have any of the following risk factors:
  - Dark skin color
  - Limited sun exposure from veiled or modest clothing
  - Limited sun exposure from living in northern latitudes
  - Limited sun exposure during the winter season
  - Limited sun exposure from minimal outdoor activity
  - Limited sun exposure from excessive use of sunscreen
  - Obesity
  - Older age and Female gender
  - Not consuming adequate Vitamin D or calcium in your diet
  - Certain medical conditions, such as malabsorption
  - Your infant may also be at risk if he or she is only breastfeeding and not using any enriched milk from a bottle.

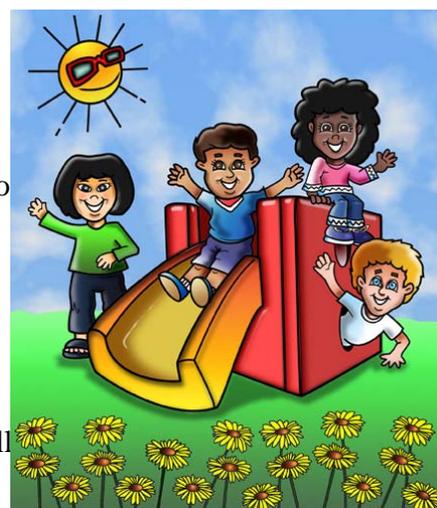
### How can I find out if I am deficient?

- Ask your doctor for more information
- Your doctor can do a simple blood test to find your Vitamin D level.



### Should I have my children tested for Vitamin D deficiency?

- Maybe, talk to your doctor. Your children can also be at risk for Vitamin D deficiency and a condition known as Rickets.
- Vitamin D deficiency in children can affect their bone strength and bone development.
- Your children should also be consuming their required amount of calcium daily.
- Vitamin D supplementation is recommended for all infants, especially during the winter.



### How can I increase my Vitamin D levels?

- Try to get at least 10-15 minutes of exposure to sunlight every day. Remember that it is also important to protect your skin from sunburn, so use sunscreen if you have lighter skin or will be outside for a prolonged period.
- You can also consume Vitamin D in your diet in things like fish, eggs, fortified milk, and cod liver oil
- Your doctor can prescribe a Vitamin D supplement pill to increase the amount of Vitamin D in your blood. It may also contain calcium which can improve bone health. This treatment is usually easy to do and is very well tolerated.