



## Vitamin D during pregnancy and breastfeeding



Getting the right nutrients and eating well when you're pregnant or breastfeeding is important for your baby's growth and development. Vitamin D helps you to develop strong and healthy bones and it does the same for your developing baby.

If you don't get enough vitamin D when you're pregnant, your baby's bones can become soft. This means that they are more likely to break, and your baby is also more likely to develop a bone condition called rickets. Getting enough vitamin D when you're pregnant helps your baby get enough vitamin D too, and also increases your chances of having an uncomplicated pregnancy.

Breastfeeding helps you to bond with your baby, but it also provides your baby with most food and nutrients that he or she needs to grow and develop, including most vitamins and minerals. The foods you eat are important, as the nutrients from these pass from you to your baby in your breast milk.

Depending on how much vitamin D you're getting as the breastfeeding mother, your breast milk may or may not provide vitamin D for your baby. If you're not getting enough vitamin D yourself, then it's very important to give your baby a vitamin D supplement.

Please read this article carefully so you understand vitamin D nutrition during pregnancy and then whether you need to supplement your baby or not with vitamin D, and whether your breast milk has any vitamin D in it.

## **How much vitamin D do I need during pregnancy?**

Many women in the United States don't get enough vitamin D when they are pregnant. You may be more likely to be deficient in vitamin D if you:

Are obese (overweight)

Spend a lot of time indoors, or are covered up when you're in the sun

Have dark skin

How much vitamin D you need when you're pregnant is a complicated subject and one which doctors and scientists have yet to agree on. Not all organizations recommend the same amount of supplement each day.

Here is a list of the current recommendations for pregnant women from organizations in the United States:

### **Recommended daily intakes for pregnant women**

<b>Vitamin D Council</b>	<b>4,000-6,000 IU/day</b>
<b>Endocrine Society</b>	<b>1,500-2,000 IU/day</b>

<b>Food and Nutrition Board</b>	<b>600 IU/day</b>
---------------------------------	-------------------

In two recent studies from the University of South Carolina, a group of researchers found that pregnant women need to take 4,000 IU of vitamin D everyday to make sure that their newborn child has enough when he or she is born.

The researchers also found that women who took 4,000 IU everyday during pregnancy were more likely to have an uncomplicated birth. Whereas women taking less vitamin D than this were more likely to have a baby born early (before the due date) or to develop gestational diabetes, preeclampsia, or infections. Women taking less vitamin D were also more likely to have a c-section.

This research is the reason why the Vitamin D Council recommends taking 4,000 IU to 6,000 IU of vitamin D every day if you're pregnant. This will ensure that you're getting enough vitamin D as a pregnant mother, and getting enough vitamin D to your unborn child.

### **How much vitamin D do I need if I breastfeed and how much does my baby need?**

Here vitamin D gets a little more complicated! The question is whether you should give your baby a vitamin D supplement or whether if you're getting enough vitamin D, your baby can get the vitamin D he or she needs from your breast milk. You can do either, but it's important to make sure that you're getting the right amount of vitamin D, or if you're giving your baby vitamin D, that he or she is getting enough.

Not all organizations recommend the same amount of supplement for babies each day. Here is a list of the current recommendations from organizations in the United States:

#### **Recommended daily intakes for babies**

<b>Vitamin D Council</b>	<b>1,000 IU/day</b>
<b>Endocrine Society</b>	<b>400-1,000 IU/day</b>

<b>Food and Nutrition Board</b>	<b>400 IU/day</b>
---------------------------------	-------------------

## How do I give my baby vitamin D?

---

If you're giving your baby a vitamin D supplement, liquid vitamin D drops are the way to go! They are very easy to give – you can add them to food and drink or give them with a spoon.

The Vitamin D Council's recommendation comes with a condition – that if your breast milk is full of vitamin D, your baby doesn't need a supplement.

So, how do you know if your breast milk has vitamin D? Let us explain:

A group of researchers from the University of South Carolina found that mothers who took a supplement of 6,400 IU every day gave their babies over 800 IU of vitamin D in each liter of breast milk! This was enough vitamin D to give their babies what they needed.

In the same study, mothers who took a supplement of 400 IU of vitamin D every day gave their babies only around 50 IU of vitamin D in each liter of breast milk. This was not enough to give their babies what they needed, so these women had to give a supplement to their baby every day as well.

So, the Vitamin D Council recommends that:

if you take a supplement of 6,000 IU of vitamin D each day you shouldn't need to give your baby any vitamin D supplement. Your breast milk has enough vitamin D for your baby.

if you aren't taking a supplement or getting a good amount of sun exposure, or if you're taking less than 5,000 IU/day of vitamin D, you should give your baby a vitamin D supplement.

## Making sure you the breastfeeding mother are getting enough vitamin D

---

There are two ways to get your vitamin D as a breastfeeding mother; by exposing your bare skin to the sun or by taking supplements.

On days that you get full body sun exposure, you don't need to take a supplement. However, if you don't get full body sun exposure on any given day, you need to take 6,000 IU of vitamin D to make sure your breast milk is rich in vitamin D. For most mothers in the 21<sup>st</sup> century, this means taking a supplement 5-6 days a week.

Be sure not to miss a day of sun exposure or taking your supplement! Breast milk will clear itself of vitamin D very quickly unless you're regularly getting enough.

### **Can I take too much vitamin D or can I give my baby too much?**

Yes you can. Vitamin D is fat-soluble, which means your body has a hard time getting rid of it if you take too much. Here are the upper limits set for babies – the safe maximum amounts of daily supplement:

#### **Upper limit for daily intake for babies**

<b>Vitamin D Council</b>	<b>2,000 IU/day</b>
<b>Endocrine Society</b>	<b>2,000 IU/day</b>
<b>Food and Nutrition Board</b>	<b>1,000-1,500 IU/day</b>

Here are the upper limits for pregnant or breastfeeding mothers set by the same organizations:

#### **Upper limit for daily intake for pregnant women**

<b>Vitamin D Council</b>	<b>10,000 IU/day</b>
<b>Endocrine Society</b>	<b>10,000 IU/day</b>

<b>Food and Nutrition Board</b>	<b>4,000 IU/day</b>
---------------------------------	---------------------

## How much vitamin D is in baby formula?

Depending on the formula milk, there are between 40 and 100 IUs of vitamin D per 100 calories in baby formula. If your baby is 6-months old, depending on how much they weigh, he or she may be getting between 500 to 1000 calories in a day. What does this come out to? It means a 6-month old baby can be getting anywhere from 200 to 1000 IU per day, which is quite a range!

It's best to keep track of how much vitamin D your baby is getting by adding up how much formula he or she has a day and then working out how much vitamin D is in that formula. Based on this result, you can decide if you need to give you baby a vitamin D supplement or not.

## Can my baby get vitamin D from the sun?

Exposing your skin to the sun is a great way to get the vitamin D your body needs, providing you're sensible about how much time you spend in the sun and take care not to burn. However, your baby's skin is extra-sensitive. For this reason, the American Academy of Pediatrics recommends that babies under six months old should stay out of the sun completely.

## References

1. Holick MF, Binkley NC, Bischoff-Ferrari HA, Gordon CM, Hanley DA, Heaney RP, Murad MH, Weaver CM; Endocrine Society. Evaluation, treatment, and prevention of vitamin D deficiency: an Endocrine Society clinical practice guideline. *J Clin Endocrinol Metab.* 2011 Jul;96(7):1911-30.
2. Hollis BW, Johnson D, Hulsey TC, Ebeling M, Wagner CL. Vitamin D supplementation during pregnancy: double-blind, randomized clinical trial of safety and effectiveness. *J Bone Miner Res.* 2011 Oct;26(10):2341-57. doi: 10.1002/jbmr.463
3. Institute of Medicine, Food and Nutrition Board. Dietary Reference Intakes for Calcium and Vitamin D. Washington, DC: National Academy Press, 2010.
4. Wagner CL, Hulsey TC, Fanning D, Ebeling M, Hollis BW. High-dose vitamin D3 supplementation in a cohort of breastfeeding mothers and their infants: a 6-month follow-up pilot study. *Breastfeed Med.* 2006 Summer;1(2):59-70.

5. Wagner CL, McNeil R, Johnson DD, Ebeling M, Hulsey TC, Hollis BW. Health characteristics and outcomes of NICHD and Thrasher Research Fund (TRF): vitamin D (VITD) supplementation trials during pregnancy. Vitamin D Workshop, presented June, 2012.

**Phone Number**  
**1-805-439-1075**

**Email Address**  
**info@vitamindcouncil.org**

**Address**

1241 Johnson Ave. #134,  
San Luis Obispo, CA  
93401

[Home](#) - [About Vitamin D](#) - [Health conditions](#) - [News](#) - [Q & A Forum](#) - [Contact us](#)

Copyright 2017 @ **Vitamin D Council** - All Rights Reserved.



