

Vitamin D

Babies need vitamin D for healthy growth and development. It helps them build strong bones and teeth.

Babies who don't get enough vitamin D are said to have "vitamin D deficiency". If the vitamin D levels are low enough, babies are at risk of rickets, a disease that affects the way bones grow and develop.

You can make sure your baby has enough vitamin D by giving them a daily supplement (a dose of drops every day). This should start as soon as your baby is born.

How do we get vitamin D?

Vitamin D comes from different sources:

- **Sunlight:** Vitamin D is formed naturally when skin is exposed to sunlight. Because Canada is located so far north, sunlight isn't enough at certain times of the year. Also, darker skin, sunscreen and clothing, which protect babies from the harmful effects of the sun, won't allow vitamin D to be formed.
- **Foods:** In Canada, vitamin D is added to cow's milk and margarine during production. Some plant-based beverages (like soy) may have vitamin D added. Some foods —fatty fish like salmon, tuna, trout and whitefish, and egg yolks—are also sources of vitamin D.
- **Vitamin supplement:** For babies, it comes in liquid form and is given daily with a dropper. It's important to give your baby a supplement that is meant for babies. Read the instructions carefully to be sure you give your baby the right amount. If you are unsure, talk to your pharmacist.

Should pregnant women take vitamin D supplements?

How much vitamin D you get while you're pregnant will affect how much vitamin D your baby has at birth. A baby born to a mother who is vitamin D deficient is more likely to also have a deficiency.

You are more likely to be vitamin D deficient if:

- you don't use products like milk and margarine, which in Canada are fortified with vitamin D.
- you don't have much exposure to the sun.
- your skin is covered with clothing or sunscreen much of the time.
- you have darker skin.
- you live in a northern community (north of 55° latitude, which is about the level of Edmonton).

If you are pregnant, talk to your doctor about whether a supplement of up to 2000 IU/day is right for you.

How do I know if my baby is at risk of vitamin D deficiency?

Babies are most at risk of vitamin D deficiency if:

- they are breastfed.
- their mothers don't have enough vitamin D.
- they have darker skin.
- their skin is covered with clothing or sunscreen much of the time.
- they live in northern communities.
- they live in communities where vitamin D deficiency is common.

How much vitamin D should my baby receive?

- Babies who are breastfed should get 400 IU (international units) per day. If they have one or more risk factors listed above (on top of breastfeeding), they require an

additional 400 IU/day.

- Babies in **northern communities** or who have other risk factors (as outlined above) **should get 800 IU per day, year-round.**

If you aren't sure about the right amount to give your baby, talk to your health care provider.

Why do breastfed babies need a vitamin D supplement?

Breast milk is the best food you can offer your growing baby. Even when your baby starts eating other foods, you can continue to breastfeed until 2 years of age and beyond.

But breast milk only has small amounts of vitamin D (4 to 40 IU per litre), which may not be enough to meet your baby's needs. Babies who are breastfed should receive a daily supplement of vitamin D from birth until they get enough from their diet.

If I am breastfeeding and I eat foods rich in vitamin D, do I still need to give my baby a supplement?

Yes. Although some foods are good sources of vitamin D, they won't provide enough vitamin D to enrich your breast milk to the level your baby needs.

If you are breastfeeding, talk to your doctor about whether a supplement of up to 2000 IU/day is right for you. If it is, this will help your baby maintain a healthy vitamin D level.

Do babies who are formula-fed need extra vitamin D?

Since vitamin D is already added to infant formula, most full-term babies who are formula-fed don't need a supplement. However, **formula-fed babies in northern communities** or those with other risk factors (as listed above) should receive a supplement of **400 IU/day, year-round** to ensure they have enough vitamin D.

Reviewed by the following CPS committees

- First Nations, Inuit and Métis Health Committee
- Nutrition and Gastroenterology Committee

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