

## Vitamin D

Babies need vitamin D for healthy growth and development. It helps them build strong, healthy bones and teeth. Babies who don't get enough vitamin D are at risk of getting rickets, a disease that affects the way bones grow and develop. Vitamin D can also help prevent certain illnesses in childhood or later in life. Fortunately, vitamin D deficiency (not having enough) can be prevented by giving a daily supplement (drops) to babies who are at risk.

Vitamin D comes from different sources:

- **Foods:** In Canada, cow's milk and margarine are fortified with vitamin D, which means it's added to them during production. Some foods-like salmon, tuna, liver and kidney-are good sources of vitamin D.
- **Sunlight:** Vitamin D is formed naturally when skin is exposed to sunlight. But because Canada is located so far north, sunlight isn't enough at certain times of the year and in certain places. Sunscreen and clothing, which protect babies from the harmful effects of the sun, won't allow vitamin D to be formed.

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

Babies are at increased risk of vitamin D deficiency if:

- They are exclusively breastfed.
- Their mothers are vitamin D deficient.
- They are not exposed to enough sunlight.
- They have darker skin.
- They live in northern communities.
- These babies should get a daily supplement of vitamin D.

### Why do breastfed babies need a vitamin D supplement?

Breast milk is the best food you can offer your growing baby. For the first 6 months of life, it is all your baby needs. Even when your baby starts eating solid foods, you can continue to breastfeed until 2 years of age and beyond. Breast milk also contains antibodies and other immune factors that help prevent and fight off illness. Breast milk has the right amount and quality of nutrients to suit your baby's first food needs. It is also the easiest on the digestive system, so there's less chance of constipation or diarrhea. But breast milk has only small amounts of vitamin D (4 to 40 IU per litre) and not have enough to meet your baby's needs. That's why babies who are breastfed should receive a daily supplement of vitamin D from birth until they get enough from their diet.

### How much vitamin D should my baby receive?

Babies who are breastfed should get 400 IU (international units) per day until the infants diet includes the same amount from other food sources.

### 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.

### 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.

### Should pregnant women take vitamin D supplements?

A woman's vitamin D status during pregnancy will affect how much vitamin D the baby has at birth. Studies have shown that many pregnant and lactating women in Canada have low vitamin D levels. A baby born to a mother who is vitamin D deficient is more likely to have a vitamin D deficiency. Health Canada suggests 400IU/day, although recent information suggests the need to increase this amount. Most prenatal vitamins contain 400 IU/day per suggested daily dose. One study suggests that supplementing with 4000 IU/day is effective in assuring enough vitamin D in the breastmilk; this amount appears to be safe while pregnant and breastfeeding.

### Sources and for more information:

<http://www.cps.ca/english/statements/ii/fnim07-01.htm#MATERNAL>

<http://www.caringforkids.cps.ca/pregnancybabies/vitamind.htm>