



Vitamin D and your baby (birth to one year)

Why is vitamin D important?

For many years we have known vitamin D is important for the development of bones and providing protection against rickets, a condition in which bones become soft, often leading to bowlegs. New research also suggests vitamin D plays a role in protecting against long-term diseases such as some cancers, diabetes and multiple sclerosis.

Where does vitamin D come from?

1. **The sun:** vitamin D is often called the 'sunshine' vitamin because skin uses sunshine (UV light) to make vitamin D. However, in Canada, sunlight is not a reliable source of vitamin D for many months during the year.
2. **Food:** fatty fish and egg yolks are some of the few foods that have vitamin D in them naturally. In Canada, Vitamin D is added to cow's milk and margarine, and more recently, some other milk products and fruits juices. The following chart is a list of food sources of vitamin D.
3. **Supplements:** liquid vitamin D drops are available in 400 IU or 1000 IU amounts. Unless your baby's health care provider recommends otherwise, give your baby the 400 IU vitamin D version only. Cod liver oil is not recommended for babies or pregnant women because the high vitamin A content can cause health problems.

Food	Serving Size	Vitamin D (IU)
Salmon	1 oz (28 g)	103
Cow's milk	8 oz (250 mL)	100
Margarine	1 tsp (5 mL)	25
Yogurt	3.5 oz (100 g)	25
Egg yolk	1	25
Soft cheese snacks (e.g. Minigo™)	60 g	16-20

Why does my baby need a vitamin D supplement?

All babies living in Canada need extra vitamin D because they:

- Don't get enough vitamin D from what they drink (breast milk or formula) or the food they eat after six months
- Aren't exposed to direct sunlight. Due to their sensitive skin, babies should be kept out of direct sunlight and sunscreen should only be used after six months of age.

Some babies have a higher risk of low vitamin D levels if they:

- Have darker skin pigmentation
- Are born to mothers with low vitamin D status
- Live in the far north (e.g., northern Ontario). In these locations the skin can't make vitamin D from the sun for six months of the year

Vitamin D is added to baby formula; however, depending on how much your baby drinks, they may still need an additional vitamin D supplement.

If your baby is drinking a combination of breast milk and infant formula, a vitamin D supplement may still be needed. See the chart below.

If your baby drinks	Amount of vitamin D to give (daily)
Only breast milk	400 IU
Less than 500 mL (16 oz) of formula	400 IU
Between 500-1000 mL (16-32 oz) of formula	200 IU*
1000 mL or more (32 oz) formula	No additional vitamin D is required

* You can give baby 400 IU every other day

How to give the vitamin D supplement

Follow the dosing instructions on the label. You can give the supplement between feeds or with feeds. Ask your pharmacist about a vitamin D supplement that has no taste.

Vitamin D and your older baby

Once your baby is six months old, and begins to eat solid foods, they will start to get some vitamin D from food. Because there are only a small number of foods containing vitamin D, continue to give the vitamin D supplement daily.

At about one year of age most babies are eating a variety of foods from all food groups and are drinking approximately two cups (500 mL) of cow's milk each day. At this time, you can stop the vitamin D supplement.

What about mom's vitamin D status?

Vitamin D is passed on to baby during pregnancy so it is important that moms-to-be eat a healthy diet and take a prenatal multivitamin supplement. Vitamin D is also passed on through breast milk, so moms need to continue to eat well once their baby is born.

Here are some tips to ensure moms, and moms-to-be are getting enough vitamin D in their diet.

- Drink at least 2 cups (500 mL) of milk each day
- Eat fatty fish (e.g., salmon) twice a week
- Use non-hydrogenated margarine in place of butter
- Choose yogurt or other foods that have vitamin D added
- When pregnant, take a prenatal multivitamin that contains vitamin D

If you are pregnant or breastfeeding and:

- Have dark skin pigmentation
- Don't drink milk or fortified soy beverage
- Get only minimal sun exposure because you cover up most of your skin with clothing (e.g., wear long sleeves all year long)

you likely need a vitamin D supplement. Speak to your doctor and ask them to check your blood levels.

For more information about vitamin D for your baby's health, talk to your baby's health care provider or call a registered dietitian at EatRight Ontario at 1-877-510-5102.