

Vitamin D and Your Baby (Birth to One Year)

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For many years we have known vitamin D is important for the development of bones and preventing 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?

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.

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 chart below is a list of food sources of vitamin D.

Food	Serving Size	Vitamin D (IU)
Salmon	28 g (1 oz)	103
Cow's milk	250 ml (8 oz)	100
Margarine	5 ml (1 tsp)	25
Some yogurts*	100 g (3.5 oz)	25
Egg yolk	1	25

*Check the nutrition label

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. Fish liver oils are not recommended for babies or pregnant women because the high vitamin A content can cause health problems.

Why does my baby need vitamin D?

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

- do not get enough vitamin D from what they drink (breast milk or formula) or the food they eat after solids are introduced at six months;
- are not 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 cannot 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 on back.

How to give the vitamin D supplement

Follow the 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 500 ml (2 cups) of cow's milk each day. At this time, you can stop the vitamin D supplement.

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.

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 500 mL (2 cups) 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.

You likely need a vitamin D supplement if you are pregnant or breastfeeding and:

- Have dark skin pigmentation
- Do not drink milk or fortified soy beverage
- Get only minimal sun exposure (e.g., because you cover up most of your skin with clothing and/or use sunscreen as recommended).

Speak to your health care provider about a vitamin D supplement.

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