

Vitamin D for Babies and Children

Why do babies and children need vitamin D?

Vitamin D has many uses in the body. Its main role is to help build strong bones and teeth. Children can develop a disease called rickets (soft bones) if they don't get enough vitamin D.

Children can get vitamin D from the sun, food, formula, and supplements.

Vitamin D from the sun

Our bodies can make vitamin D when our bare skin is exposed to sunlight during the summer months. However, safe sun practices like wearing sunscreen and staying out of direct sunlight stop vitamin D from being made. In Alberta's northern climate the sun's rays are not strong enough to make vitamin D in the winter months.

How much vitamin D do babies and children need?

All babies and children from birth to 18 years need a 400 International Unit (IU) vitamin D supplement every day. Preterm babies may need more than a 400 IU vitamin D supplement for their first year. Check with your child's healthcare provider.

Children 1 to 18 years old also need to get vitamin D from food. Aim for 200 IU of vitamin D from food each day.

Food sources of vitamin D

Vitamin D is found in very few foods. About 2.5 oz (75 grams) of fatty fish or 2 cups (500 mL) of formula, milk or appropriate fortified plant-based beverages will provide about 200 IU of vitamin D.



Food	Vitamin D
Breastmilk, 1 cup (250 mL)	10 IU
Fatty fish (for example, salmon, herring, rainbow trout), 2.5 oz (75 g)	200 IU
Cow's milk with vitamin D added* 1 cup (250 mL)	100 IU
Goat's milk with vitamin D added* 1 cup (250 mL)	100 IU
Soy or other plant-based beverage* with vitamin D added 1 cup (250 mL)	100 IU
Standard infant formula 1 cup (250 mL)	100 IU
Preterm infant formula 1 cup (250 mL)	130 IU
Yogurt with vitamin D added ¾ cup (175 mL)	50–100 IU
Eggs (only yolks have vitamin D) 2 large	50–100 IU

* Wait until your baby is 9–12 months old before you offer 3.25% (homogenized) milk. Wait until 12 months corrected age for preterm babies.

Wait until your child is 2 years old before you offer plant-based beverages and lower fat milk (2%, 1%, or skim).

Vitamin D supplements

Nutrition Services recommends a daily 400 IU vitamin D supplement for all babies and children from birth to 18 years.

Some babies, such as preterm babies, and children may benefit from higher amounts of vitamin D. Talk to your healthcare provider about your child's vitamin D needs.



Give your baby a vitamin D supplement every day starting when he or she is born.

Why does my child need a vitamin D supplement?

It is hard for babies and children to get enough vitamin D from food sources alone.

- Breastmilk does not contain much vitamin D.
- Infant formula has vitamin D added, but babies may not drink enough to meet their vitamin D needs.
- Food sources of vitamin D are limited. Two cups (500 mL) of cow's milk provides only 200 IU of vitamin D. Most babies and children will not meet their vitamin D needs with food alone.

Choosing a vitamin D supplement

- **Choose a single vitamin D supplement (with no other vitamins)** unless advised differently by your health care provider. Multivitamins are not recommended for most babies and most children don't need them.
- **Look for a Natural Product Number (NPN)** on supplement bottles. This number tells you that Health Canada finds the product to be safe and useful if you follow the directions on the package.
- **Choose a product that comes in a dose of 400 IU (10 mcg).** Be aware that different brands have different amounts of vitamin D.

- **Choose a form of vitamin D that is safe for your child.** Vitamin D supplements come in many forms.
 - Liquid – the best form for babies.
 - Chewable – can use when your child can chew and swallow safely.
 - Tablet – can use when your child can swallow pills safely.
- **Read the label carefully to make sure you give the right dose.** Some brands of liquid vitamin D give the dose in “mL” (for example, 400 IU = 1 mL), while others give the dose in drops (for example, 400 IU = 1 drop).

Too much vitamin D

Too much vitamin D can harm your child.

The chart below shows the maximum safe amount of vitamin D to have each day from food and supplements combined.

Age	Maximum vitamin D from food and supplements each day
0–6 months	1000 IU
7–12 months	1500 IU
1–3 years	2500 IU
4–8 years	3000 IU
9–18 years	4000 IU

Some types of supplements (i.e. probiotics) may also contain vitamin D. Talk to your child's healthcare provider if you have questions.

Always keep supplements out of the reach of children.