

Vitamin D for people over 50

The amount of vitamin D provided by food intake does not meet the Adequate Intake (AI) established for individuals over 50 years of age. Meeting the Adequate Intake for those 51 years and over through food sources alone is almost impossible without recommending unrealistic daily amounts of some foods. Thus, **Health Canada recommends that in addition to following *Canada's Food Guide*, all adults over the age of 50 should take a daily vitamin D supplement of 10 micrograms (400 IU).**

Role of Vitamin D

Vitamin D is involved in bone health. The major role of vitamin D is the maintenance of serum calcium and phosphate concentrations within the normal range. Improved muscle strength, reduced fracture rates, and reduced rates of falling have been associated with higher levels of vitamin D in the body. Vitamin D deficiency impairs normal bone metabolism, leading to osteomalacia (undermineralized bones) or osteoporosis (porous bones) in adults.

Dietary Reference Intakes for Vitamin D (1997)

Age groups	Adequate Intake (AI) (for men and women)	Tolerable Upper Intake Level (UL) (for men and women; chronic exposure)
19-50 years	5 µg (200 IU) per day	50 µg (2000 IU) per day
51-70 years	10 µg (400 IU) per day	
>70 years	15 µg (600 IU) per day	
LTC	800-1000IU per day	

Sunlight and Vitamin D

Vitamin D is synthesized in the skin upon exposure to ultraviolet B (UVB) radiation. However, this synthesis is affected by latitude, season, time of day, age, sunscreen use, and skin pigmentation. In Canada, vitamin D synthesis in the skin is absent during the winter months (October to March), and for an even greater part of the year in far northern latitudes. This means that for a significant portion of the year, Canadians must rely on dietary intake of vitamin D to maintain adequate levels of vitamin D in the body.

Sources of Vitamin D in the Canadian Food Supply

The major sources of vitamin D are fortified foods. In Canada, **cow's milk and margarine must be fortified with vitamin D**. Goat's milk, fortified plant based beverages (ex. fortified soy beverages), and some calcium-fortified orange juices are permitted to be fortified with vitamin D. Cheese and yogurt can be made with vitamin D-fortified milk.

The **only natural sources of vitamin D** in the Canadian food supply are **fatty fish** and **egg yolks**.

Because it is a commonly-consumed food, fluid milk is a major dietary source of vitamin D. **Canada's Food Guide recommends 3 servings of Milk and Alternatives each day for adults over the age of 50.**

Meeting the Adequate Intake for vitamin D for those 51 years of age and older is almost impossible without recommending unrealistic daily amounts of some foods.

Supplements containing vitamin D can be used as a complement to foods to achieve the recommended levels of dietary vitamin D intake.

Needs for Vitamin D

Age groups	Adequate Intake µg (IU)	~ Vitamin D in 500 ml / 2 cups of fluid milk µg (IU)	Vitamin D Supplement needed to meet Adequate Intake µg (IU)
51 -70 y	10 (400)	5 (200)	5 (200)
71 y +	15 (600)	5 (200)	10 (400)

Recommended Amount of Supplemental Vitamin D: [LTC 800-1000 IU](#)

Calcium

Dietary Reference Intake

Nutrient	Age	Unit
Calcium	51 +	1200mg
	LTC	1500mg

Canada's Food Guide

Nutrient	Age	Unit
Milk/Milk Alternatives	19-50	2 servings
Milk/Milk Alternatives	50+	3 servings
	LTC	4-6 servings

Food Guide Serving of Milk and Alternatives?
















All it takes is

- ♦ 250 mL (1 cup) of milk or fortified soy beverage,
- ♦ 175 g (¾ cup) yogurt,
- ♦ 50 g (1 ½ oz) of cheese

to make up one Food Guide Serving of milk and alternatives.

Milk

Milk Alternatives

 <p>Milk, skim, 1%, 2% 250 mL, 1 cup</p>	<p>*Fortified soy beverages are an option for people who do not drink milk.</p>
 <p>Milk, chocolate 250 mL, 1 cup</p>	 <p>Buttermilk 250 mL, 1 cup</p>
 <p>Milk, evaporated, canned 125 mL, ½ cup - undiluted</p>	 <p>Cheese, block (example: cheddar, Mozzarella, Swiss, feta) 50 g, 1 ½ oz</p>
 <p>Milk, lactose reduced 250 mL, 1 cup</p>	 <p>Cheese, cottage or quark 250 mL, 1 cup</p>
 <p>Milk, powdered 25 g, 75 mL, ⅓ cup</p>	 <p>Fortified soy beverage 250 mL, 1 cup</p>
 <p>Milk, powdered 250 mL, 1 cup - reconstituted</p>	 <p>Kefir 175 g, 175 mL, ¾ cup</p>
 <p>Milk, whole 250 mL, 1 cup</p>	 <p>Pudding/custard (made with milk) 125 mL, ½ cup</p>
	 <p>Yogurt (plain and flavoured) 175 g, 175 mL, ¾ cup</p>
	 <p>Yogurt drinks 200 mL</p>