

Vitamin D in Pregnancy

Why is Vitamin D Important for Pregnancy?

- To keep your bones strong
- To help your body absorb other important nutrients like Calcium
- It might help with immunity and prevention of chronic illnesses such as: cancer, auto-immune conditions, cardiovascular disease and infections
- Adequate levels of Vitamin D might reduce risk of preeclampsia and gestational diabetes



Where can I get Vitamin D?

- Supplements (*Most Prenatal Vitamins provide ~400-600IU of Vitamin D*)
- Diet
- Sunshine (the amount of Vit D one can get from the sun depends on the season, latitude, colour of your skin, use of sunscreen, and amount of skin exposed to the sun. Sun is NOT a reliable source in Canada because we recommend sunscreen and because we are in a northern country).

Recommended Amounts of Vitamin D for Pregnancy:

Life Stage	Age	Recommended Amount:	Do Not Exceed This Dose:
Pregnancy and Breastfeeding	14-18 years	600 IU per day	4000 IU per day
Pregnancy and Breastfeeding	19-50 years	600 IU per day	4000 IU per day

Food Sources of Vitamin D from Each Food Group:

- Vegetables and Fruit: dried and fresh Shiitake mushrooms;
- Grain Products: none
- Milk and Alternatives: cow's milk (fluid, powdered or evaporated); fortified soy, rice or almond beverage*; and, yogurt fortified with vitamin D*
- Meat and Alternatives: fatty fish (e.g., salmon, Arctic char, rainbow trout, Atlantic herring, sardines, Atlantic mackerel and anchovies); egg yolk; and, pork

• Other: margarine (fortified with Vitamin D)

Other Important Notes About Vitamin D:

- 1. Although fish liver oil and liver are natural sources of vitamin D, we recommend that women avoid them due to their high vitamin A contents
- 2. Eating Well with Canada's Food Guide recommends that pregnant patients should drink 500 mL (2 cups) of milk every day for adequate vitamin D. If milk is not used, fortified soy, rice or almond beverage is a good milk alternative.
- 3. In Canada, the government requires that all cow's milk (fluid, powdered and evaporated) be fortified with Vitamin D. Yogurt and cheese is NOT necessarily fortified with Vitamin D. *Always check the label for yogurt and milk alternatives to make sure they are fortified with Vitamin D*.*
- 4. First Nations Women are particularly at risk of Vitamin D insufficiency and higher doses of Vitamin D might be recommended
- 5. Talk to your doctor or dietitian if you have questions about Vitamin D.

Sources:

- 1. Healthiest Babies Possible Dietetic Practice Guidelines, Healthy Families 2013
- 2. Canadian Consensus on Female Nutrition: Adolescence, Reproduction, Menopause and Beyond. J Obstet Gynaecol Can 2016;38(6):508-554 No. 333 June 2016
- 3. Zhang, M.X. et al. Vitamin D Deficiency Increases the Risk of Gestational Diabetes Mellitus: A Meta-Analysis of Observational Studies. Nutrients. 2015 Oct 1;7(10):8366-75.
- 4. Palacios, A. et al. Vitamin D supplementation during pregnancy: Updated meta-analysis on maternal outcomes. J Steroid Biochem Mol Biol. 2016 Nov;164:148-155.