



# Three Nutrients to Get Tested Before Your Next Pregnancy

By: Dr. Keshia Kamphuis, BSc, ND

If you have had a baby in the last year or two, chances are you might be thinking ahead to when you will get pregnant again. We weigh out many factors in deciding when to start trying for another baby—our career, personal goals, big events, how far apart we want our kids to be and more. But one crucial factor most of us don't consider is our body's nutrient stores.

Pregnancy is very nutritionally demanding and as a result, many women come out of it depleted of several nutrients. These deficits often go unrealized. Without a focused nutrition plan to correct them, they frequently carry into the next pregnancy, especially if our pregnancies are closely spaced. Once pregnancy is underway, it can be challenging to catch up nutritionally if we start with a deficit. This is important since nutrient deficiencies during pregnancy are a key factor in our risk of complications, the health of our future child and our postpartum recovery.

Giving ourselves the time and necessary supports to replenish our nutrient stores before our next pregnancy can significantly improve our chances of having the health outcomes we hope for. However, the formula to do this is not 'one-size-fits-all.' How much of a nutrient we need each day and for how long depends on multiple factors, such as how depleted we are to begin with, our genetics, digestive health, body weight and more.

Testing our nutrient levels eliminates the guesswork and tells us definitively whether our nutrient stores are ready for our next pregnancy. There are several nutrients that are important to get tested before we get pregnant. In this article, we will look at three—vitamin D, omega-3 and iodine. We will discover that these nutrients are commonly deficient in Canadian women, yet are crucial to the health of a pregnancy. We will learn how to get these nutrients tested and how to improve our levels if they are low with targeted foods.

## Vitamin D

Vitamin D has a spotlight role early in pregnancy. It is essential for the fertilized egg to implant into our uterus successfully. Implantation is underway before getting a positive pregnancy test, so our pre-pregnancy vitamin D levels are critical. Impaired implantation is linked with infertility, miscarriages and even pregnancy complications that only surface months later.

As a result, women who get enough vitamin D may have a lower risk of complications such as gestational diabetes, preterm labour and preeclampsia. Also, babies who are born to moms with adequate vitamin D levels may have a lower risk of allergies, asthma, eczema, infections and language development problems.

Despite vitamin D's importance, most women in Canada start pregnancy below optimal levels. The average woman



## Pregnancy is very nutritionally demanding

who get enough omega-3 are more likely to have a child with better neurological and cognitive outcomes, better attention and sleep patterns and a lower risk of allergies, respiratory tract infections and asthma.

Omega-3 is not just good for our baby—it’s really important for us too! Women with sufficient omega-3 levels in pregnancy may lower their risk of preterm labour, perinatal mortality and postpartum depression.

Yet it is exceedingly common for women in Canada to be way below the level of omega-3 that provides these benefits in pregnancy. In fact, the average Canadian woman’s omega-3 levels are only half of where they need to be for the healthiest outcome in pregnancy.

Most women don’t realize that even if they are taking an omega-3 supplement, it doesn’t mean they are getting enough! Many over-the-counter supplements do not contain enough omega-3 to actually improve levels to the point where mom and baby get the most benefits.

An Omega-3 Index test can tell us with certainty where our levels stand and whether the omega-3 we are getting through supplements and diet is putting us on track for a healthier outcome. Omega-3 testing is available at naturopathic doctors, medical doctors or as a home-based test kit through labs like OmegaQuant (Table 1).

The good news is that if our omega-3 stores are low, we can significantly increase them with focused attention to a few omega-3-dense foods (Table 2). I recommend that women try to include plant-based food sources of omega-3 every day, and keep fish to occasional consumption because of contaminants such as mercury and dioxins.

As you plan the timing of your next pregnancy, it is important to realize that the road to fill up omega-3 stores is one of the longest. Even with focused daily intake,

in Canada is more than 30% below the level of vitamin D that she needs for the healthiest outcome in pregnancy! This is preventable by testing vitamin D before pregnancy and improving levels if they are low. Vitamin D testing is available at family doctors, naturopathic doctors and midwives in Canada (Table 1).

For women who need to improve their vitamin D levels before pregnancy, increasing vitamin D-rich foods in the diet can be a helpful strategy (Table 2). However, the amount of vitamin D in most foods is relatively modest. The majority of women in Canada will need additional vitamin D supplementation to reach the levels that provide the most benefit in pregnancy.

As you consider your timeline to get pregnant again, it is important to know that improving vitamin D stores can take some time. On average, most women need between three weeks and three months to reach optimal vitamin D levels, depending on their daily intake. Getting too much vitamin D is possible however, so it is essential to work with a health care provider to determine a daily dose that works for you and improves your stores within your ideal timeline to conceive.

### Omega-3

Omega-3 is a powerhouse nutrient that is crucial to our developing child’s brain and immune system. Women

**Table 1. Tests for Key Nutrients and Availability by Provider**

Nutrient	Test	Where?
Vitamin D	25-OH Vitamin D	Naturopathic doctor, medical doctor, registered midwife
Omega-3	Omega-3 Index	Naturopathic doctor, medical doctor*, OmegaQuant**
Iodine	Urinary Iodine	Naturopathic doctor, medical doctor*

\* Availability is likely limited to functional medicine or holistic MDs in most regions of Canada.

\*\* No requisition is required; interpretation of results should be done with a health care provider.

it can still take up to five months to get omega-3 to the optimal level for pregnancy, and often additional supplements are needed. Working with a health care provider who is knowledgeable in pre-pregnancy nutrition can

**Table 2. Nutrient-Dense Food Sources of Key Nutrients**

Nutrient	Supportive Foods
Vitamin D	Fortified dairy or non-dairy milk, egg yolk, fatty fish and fish oils (e.g. salmon, trout, herring), sardines
Omega-3	Flax seeds, flax oil, chia seeds, walnuts, canola oil, soybean oil, fatty fish and fish oils (eg. salmon, trout, herring, mackerel), sardines
Iodine	Iodized table salt, kelp, seaweed, seafood, soy nuts, dairy products, eggs

help you determine how much omega-3 you need every day and help you shorten this timeline if you want to conceive sooner.

### Iodine

Iodine is a lesser-known nutrient for pregnancy, but deserves more attention. Canadians are generally considered to have adequate levels in part because of the addition of iodine to table salt. However, recent data estimates that about 12% of Canadians have moderate to severe iodine deficiency, and 32% are mildly deficient.

This poses a major issue for women who are soon to become pregnant. Low iodine levels before pregnancy have been linked with taking longer to get pregnant, lower IQ in the future child and lower thyroid function months after pregnancy is over.

Iodine is also crucial to our child's brain development during pregnancy. Women who get enough iodine are likelier to have a child with better cognitive, language and psychological outcomes.

Given how common iodine deficiency is becoming and how important this nutrient is, testing iodine levels can provide confidence that we are at the most protective levels for pregnancy. Urinary iodine testing is available through naturopathic doctors and medical doctors (Table 1).

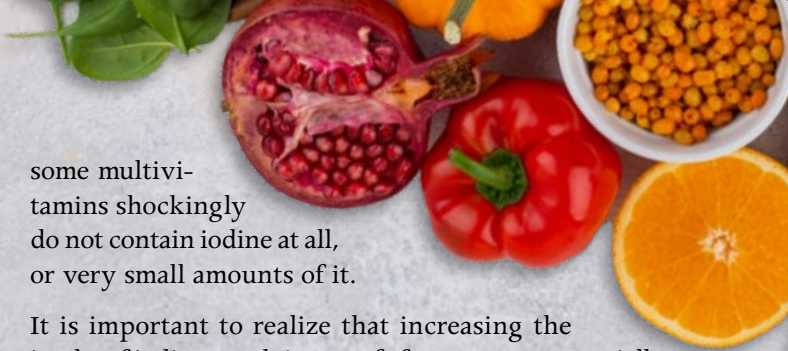
If iodine levels are low, they can easily be improved by eating iodine-rich foods every day (Table 2). However, even with consuming these foods regularly, it is still important for women to take a prenatal multivitamin that contains iodine before pregnancy. Be sure to check labels carefully, as

some multi-vitamins shockingly do not contain iodine at all, or very small amounts of it.

It is important to realize that increasing the intake of iodine or salt is not safe for everyone, especially those with kidney, thyroid or cardiovascular problems. Talk to your health care provider about how much iodine you need daily to move your levels into the optimal range for pregnancy.

### Conclusion

Vitamin D, omega-3 and iodine play a key role in the health of our future pregnancy and child, yet women in Canada are commonly deficient in these nutrients. Testing our levels of these nutrients before we get pregnant can definitively tell us whether we are getting enough, and empower us to take targeted action toward a healthier pregnancy and child. The daily nutrient intake that is required to correct low levels is highly individual, and is best worked out with a health care provider who is knowledgeable in pre-pregnancy nutrition and your ideal timeline to conceive. **B**



**La Leche League Canada**  
Breast/Chest feeding Support

**Got a question?  
Give us a call!**

**LLLC AB/NWT**  
Edmonton: 780-478-0507  
Central AB: 403-348-2410  
Calgary: 403-242-0277  
Lethbridge: 403-331-1003

**Northern Alberta & NWT**  
1-888-LaLeche (525-3243)

**WAYS TO CONNECT**

- Local support groups
- Online meetings
- Phone and email help
- Info at [www.LLLC.ca](http://www.LLLC.ca)

[www.LLLC.ca/get-help](http://www.LLLC.ca/get-help)

Providing information on  
breastfeeding and human milk

[www.LLLC.ca](http://www.LLLC.ca)

Charitable Registration  
# 11900 3812 RR0002