



Optimizing Health for Fertility & Pregnancy

Explore our guide on Optimizing Health for Fertility & Pregnancy. Here, we address common questions and concerns to empower you on your journey to parenthood. Discover expert advice, evidence-based tips, and essential information to enhance

your overall well-being and maximize your chances of a healthy conception and pregnancy. Let's navigate this transformative journey together,

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How much folic acid do I need?

Adequate folic acid is critical to mitigate the risk of fetal neural tube defects (Those intending to carry a pregnancy should take a prenatal vitamin with 400mcg of folic acid as well as 2000 IU vitamin D.

However, certain people need additional folic acid. Persons with a family history of neural tube or certain other congenital anomalies, on certain medications, with diabetes, and with certain other medical conditions need 1mg of folic acid and in some cases more. Speak to your doctor about whether you need additional folic acid.



FOLIC ACID AND NEURAL TUBE DEFECTS



Smoking, vaping, marijuana and other recreational drugs?

Abstaining from smoking, vaping, and recreational drugs is important for sperm and egg health, as well as overall health. Abstain completely if you are pregnant.

SMOKING, VAPING AND TOBACCO

Can I drink coffee?

High levels of caffeine consumption (500 mg; >5 cups of coffee per day or its equivalent) have been associated with decreased fertility. During pregnancy, caffeine consumption over 200-300 mg per day (2-3 cups per day) may increase the risk of miscarriage. Overall, moderate caffeine consumption (1- 2 cups of coffee per day or its equivalent) before or during pregnancy has no apparent adverse effects on fertility or pregnancy outcomes. Caffeine consumption has no effect on semen parameters in men.

OPTIMIZING NATURAL FERTILITY

Can I drink alcohol?

Regarding alcohol, please consider Canada's Low-Risk Alcohol Drinking Guidelines. Abstain from alcohol completely if you are pregnant. There is a continuum of risk associated with weekly alcohol use where the risk of harm is:

- 0 drinks per week— benefits include better health, and better sleep
- 2 standard drinks or less per week— you are likely to avoid alcohol-related consequences for yourself or others at this level
- 3–6 standard drinks per week—your risk of developing several types of cancer, including breast and colon cancer, increases at this level
- 7 standard drinks or more per week— your risk of heart disease or stroke increases significantly at this level.

[!\[\]\(4729e517bc6a7cd81c8025b9646574fb_img.jpg\) CANADA'S GUIDANCE ON ALCOHOL AND HEALTH](#)



How much exercise do I need?

Improving health through diet and lifestyle is important. Canadian guidelines recommend that adults should get at least 150 minutes of moderate to vigorous physical activity per week (i.e. 30 minutes of exercise, 5 days per week). Pregnant women should also aim for 150 min of moderate physical activity per week. In most cases it is safe to continue pre-pregnancy exercise routines. Speak to your doctor about what is safe for you.

[!\[\]\(e474458956c9a37fbf9586ddb60a7fa1_img.jpg\) CANADA'S GUIDE: PHYSICAL ACTIVITY](#)

Do I need to undergo genetic testing?

Your doctor will screen for thalassemia and hemoglobinopathies (i.e. sickle cell) in your routine blood work. Your partner will be screened if you are found to be a carrier.

[!\[\]\(870f5d5e9c0d57485634be3ecf52f3ca_img.jpg\) THALASSEMIA AND PREGNANCY](#)

You may opt to do private pay screening to learn if you are at risk of having a baby with a severe genetic disease. Markham Fertility Centre offers a LIVE Webinar bi-weekly on Fridays at noon.

[!\[\]\(0d5ec72f61334709c3fc9450209b754f_img.jpg\) LINK TO LIVE WEBINAR](#)



Is there a certain diet to optimize fertility?

Clear evidence regarding a specific diet to optimize fertility is lacking, however we have some data from the research regarding this. One study looked at the “fertility diet,” which encouraged higher consumption of monounsaturated rather than trans fats, vegetable rather than animal protein sources, low-glycemic carbohydrates, high-fat dairy, multivitamins, and iron from plants and supplements. The study demonstrated that increasing adherence to the “fertility diet” was associated with a lower risk of infertility related to ovulatory dysfunction.

Although studies have been somewhat inconsistent, some research suggests that multivitamins, folic acid, long-chain omega-3 fatty acids, full-fat dairy, whole grains, vegetables, fish, and soy isoflavones may have beneficial effects on fertility. Conversely, trans fatty acids, meat, carbohydrates, and glycemic load have been reported to have a negative impact on fertility.

🔗 **OPTIMIZING NATURAL FERTILITY**

🔗 **GLYCEMIC INDEX AND GLYCEMIC LOAD**

FOODS WITH A LOW GLYCEMIC LOAD OF 10 OR LESS INCLUDE:

- ¼ cup peanuts (GL of1)
- 8 oz skim milk (GL of4)
- 2 cups watermelon (GL of4.3)
- 1 cup kidney beans (GL of7)
- 1 cup all bran cereal (GL of9)

FOODS WITH A MEDIUM GLYCEMIC LOAD OF 11 TO 19 INCLUDE:

- 1 cup cooked oatmeal (GL of11.7)
- 1 tablespoon (tbsp) honey (GL of11.9)
- 1 large banana (GL of12.4)
- 1 medium donut (GL of17)
- 1 cup boiled brown rice (GL of18)

FOODS WITH A HIGH GLYCEMIC LOAD OF 20 OR MORE INCLUDE:

- 1 cup corn flakes (GL of21)
- 10 large jelly beans (GL of22)
- 1 Snickers candy bar (GL of22.1)
- 1 medium baked russet potato (GL of23)
- 2 tbsp raisins (GL of27.3)

What are my risks with a higher BMI?

While debate exists as to whether BMI is an accurate reflection of health and/or an ideal measure, it is the measure that has been most widely studied. Thus, to consider risks to pregnancy, BMI is a measure for which there is a lot of compelling data. It is recommended by the Society of Obstetricians and Gynaecologists of Canada that women with a BMI >30 should be informed of the benefits of weight loss before conception, notably on reproductive function, obstetrical outcome, and maternal health.

If you would like a referral to consider medical or surgical weight loss options prior to trying to conceive please speak to your doctor.

That said, BMI is an imperfect measure, and many women with a higher BMI achieve pregnancy and healthy maternal and fetal outcomes. A recent study done at Markham Fertility Centre showed that women with a BMI ≥ 40 had no statistically significant difference in live birth rate or clinical pregnancy rate as women with a BMI <25.

The chart below outlines pregnancy risks stratified by BMI.

YOUR WORTH AND VALUE AS A MOTHER IS NOT LINKED TO YOUR WEIGHT. YOUR PHYSICIANS BELIEVE IN BODY POSITIVE AFFIRMING HEALTH CARE.

ODDS RATIO COMPARED TO WOMEN WITH BMI <25

Odds ratio indicates how much more likely something is to happen, for example, an odds ratio of 2 means you have double (or twice) the chance of the specified outcome

| | BMI 25-29.9 | BMI 30-39.9 | BMI ≥ 40 |
|---|-------------|-------------|---------------|
| GESTATIONAL DIABETES | 3* | 4.5* | 7.4 |
| HYPERTENSION | 2 | 4.5* | 4.9 |
| PREECLAMPSIA | 1.5* | 3* | 4.8 |
| VENOUS THROMBOEMBOLISM (BLOOD CLOT, I.E. DVT, PE) | 1.8 | 9.7 | no data |
| RECURRENT MISCARRIAGE | no data | 3.5 | no data |
| C-SECTION | 1.5 | 2* | 2.5 |
| STILLBIRTH | no data | 2* | 2.8 |
| SHOULDER DYSTOCIA | no data | 2.8 | 3.1 |
| FETAL DISTRESS | no data | 2* | 2.5 |
| FETAL MORTALITY | 1.3 | 2* | 2.5 |
| MACROSOMIA | 1.5* | 2.5* | 3.5* |

**Average based on various studies, rounded to nearest 0.5*

 **SOGC CLINICAL PRACTICE GUIDELINE**