Supplements and Herbal Teas in Pregnancy

Iron supplements in pregnancy

Research has shown that it is not necessary to routinely take extra iron supplements in pregnancy unless blood tests show that a woman’s iron levels are low. Iron is often difficult to digest and absorb and can increase constipation and nausea and vomiting in pregnancy. The blood tests for iron are usually done at the beginning of pregnancy and then a repeat test is discussed at 28 to 32 weeks gestation. If a client’s iron levels are abnormally low for pregnancy levels, the midwife will discuss extra iron supplementation with the client. If a client is diagnosed as being anemic (low iron), the midwife may recommend supplementing with iron up to 120 mg per day.

For a normal, healthy woman, the amount of iron found in a prenatal vitamin is sufficient. This amount varies with different prenatal vitamins, but is usually between 20-30 mg per day (this is “elemental iron, or the iron that your body will absorb). Research has shown that a vitamin that divides the daily dose into two pills (such as Preg-Vit), one pill with the calcium dose and one pill with the iron dose, results in less stomach upset for women. Calcium can suppress the absorption of iron, so separating the dose of calcium from the dose of iron allows the prenatal vitamin to have a lower iron dose but with higher absorption. The smaller size of the divided dose pills also makes them easier to take when a woman is experiencing nausea and/or vomiting.

Iron can also be found in foods. Heme iron, found in animal products, is easier to digest and absorb than non-Heme iron. Some examples of iron rich foods are:

Heme iron:
- Clams, oysters (must be cooked to be safe in pregnancy)
- Beef
- Chicken, ham, lamb, pork, veal, halibut, perch, salmon (canned or fresh)
- Shrimp, canned sardines, tuna

Non-heme iron:
- Dried seaweed
- Quinoa or amaranth grains
- Cooked beans (white beans, soybeans, lentils, chick peas)
- Pumpkin, sesame and squash seeds
- Breakfast cereals enriched with iron
- Tofu
- Canned beans (lima, red kidney, chick peas, split peas)
- Dried apricots
- Nuts
- Cooked pasta or egg noodles
- Wheat germ

Things that increase the amount of iron you absorb include:
- Eat high iron meals (or take your iron supplements) with vitamin C or foods rich in vitamin C such as orange juice;
• Cooking with cast iron pans increases the amount of iron in food, especially if the food you are cooking is acidic (such as tomato sauce);
• Iron supplements are best taken with food. This slows the movement of the supplement through the digestive tract, which allows more time for the nutrients to be absorbed.

Things that may decrease the amount of iron you absorb include:
• caffeine in teas, coffee and pops;
• Antacids (such as Tums) inhibit iron absorption, so if you are taking antacids for heartburn, take your vitamins at a different time;
• Dairy products decrease the absorption of iron by neutralizing stomach acidity levels, so do not take your vitamins or eat your iron rich foods at the same time as dairy products;
• Calcium supplements inhibit iron absorption, so if you are taking extra calcium supplements, take them at a different time than your vitamins that contain iron.

Large amounts of iron can be dangerous, so keep supplements away from children

Essential Fatty Acids
Some research has shown that essential fatty acids (sometimes called omega fatty acids, often from fish oils or flax seed oil) can have a positive benefit in prevention of high blood pressure, benefit vision in preterm infants, and benefit cognitive function in babies. However, studies have shown conflicting results, and also have studied different doses and types of essential fatty acids, which makes it difficult to make a recommendation to pregnant women about how much, or what type to take. Some studies have shown that there is no benefit to taking these supplements. Currently, there is not sufficient evidence to clearly recommend essential fatty acids as a supplement to pregnant women. As a result, Motherisk does not recommend this supplement and instead recommends eating fish and fortified foods such as milk and eggs to get your intake of essential fatty acids. Many women are still choosing to take essential fatty acid supplements during pregnancy- if you do so, be aware of the following concerns:

• one study showed a link between flaxseed oil and preterm labour, so we are recommending that our clients avoid essential fatty acid supplements with flaxseed oil in them.
• Cod liver oil (or any fish liver oil) is not recommended in pregnancy because of the potential for toxic levels of vitamin A and a higher concentration of heavy metals.

Resources
Nutrition in Pregnancy: Separating the Myths from Reality. L. Vesik and A. Biringer. Plenary Session, 7th Annual Refresher in Primary Maternity Care, May 2009, Mt Sinai Hospital and the University of Toronto Department of Family Medicine and Department of Obstetrics & Gynecology
Vitamin D

Vitamin D was previously thought just to prevent rickets, but is now known to contribute to the regulation of cell growth, stimulation of the immune system and growing evidence suggests an association with a range of diseases, including multiple sclerosis and cancer. Vitamin D is called the “sunshine” vitamin because our bodies make it when our skin is exposed to the sun. Research shows that if a woman is deficient in vitamin D during her pregnancy, this can affect the health of her child later in life including decreased bone density in 9 year olds, increased asthma in 3 year olds, increased susceptibility to type 1 diabetes, more dental cavities and an increase in autoimmune diseases such as rheumatoid arthritis and multiple sclerosis.

Food Sources:
- fatty fish, liver, egg yolks,
- fortified milk (250 ml of milk = 100 IU),
- fortified milk alternatives and orange juice (250 ml + 90 IU),
- fortified margarine (1 tsp = 30 IU),
- most yogurts and cheeses do not have vitamin D unless they are made with fortified milk products.

The following women are more at risk for vitamin D deficiency: women that do not go outside very often, women that wear concealing clothing, women that always wear sun block, obese women, women with darker skin pigmentation, women with malabsorption problems, women living in aboriginal communities and northern communities.

Current Vitamin D recommendations (as of March 2012):
Health Canada: 600 IU for pregnant and breastfeeding women (upper limit 4000 IU) (2010 report)
Osteoporosis Canada: 400- 1000 IU for adults including pregnant women (2010 update)
Canadian Cancer Society: 1000IU for all adults, during fall and winter (2007)
Canadian Pediatric Society: up to 2000 IU for pregnant women, to help prevent vitamin D deficiency in newborns (2007)

Resources
Nutrition in Pregnancy: Separating the Myths from Reality. L. Vesik and A. Biringer. Plenary Session, 7th Annual Refresher in Primary Maternity Care, May 2009, Mt Sinai Hospital and the University of Toronto Department of Family Medicine and Department of Obstetrics & Gynecology

Health Canada: Vitamin D: Recommendations and Review Status (2010)
http://www.hc-sc.gc.ca/fn-an/nutrition/vitamin/vita-d-eng.php

Osteoporosis Canada, Vitamin D: A Key factor in Calcium absorption (2010)
http://www.osteoporosis.ca/index.php/ci_id/5536/la_id/1.htm

Canadian Cancer Society, Canadian Cancer Society Announces Vitamin D recommendation (2007)

Canadian Pediatric Society, Pregnancy and Babies: Vitamin D (2007)
http://www.caringforkids.cps.ca/handouts/vitamin_d
**Vitamin B12**

Low levels of B12 can contribute to some kinds of anemia. Vegans are more at risk for this deficiency (defined as levels below 150 pmol/L). Women with low B12 are also more at risk for open neural tube defects.

Recommendations: 2.6 mcg/d in pregnancy (most prenatal vitamins provide this amount). Your midwife can check your blood level if you are at a higher risk for a deficiency.

**Herbal Teas**

The official list (from Health Canada) of safe herbal teas during pregnancy is quite short. If an herbal tea is not on this list it doesn’t necessarily mean that it is unsafe, it may just mean that there haven’t been sufficient studies done yet to investigate its use in pregnancy. The recommendation from Health Canada is to limit intake of herbal teas to 2-3 cups per day. Talk to your midwife about red raspberry leaf tea as she may recommend increasing the dose of this tea later in the pregnancy.

**Safe herbal teas:**
- Citrus peel
- Lemon Balm
- Rose Hip
- Linden Flower
- Ginger
- Orange Peel
- Red Raspberry Leaf

**Herbal teas that have been shown to have adverse effects during pregnancy:**
- Chamomile
- Blue Cohosh
- Devil's Claw
- Ephedra
- Gentian
- Hawthorne
- Motherwort
- Pennyroyal
- Shepherd’s Purse
- Black Cohosh
- Feverfew
- Dong Quai
- Fenugreek
- Ginseng
- Licorice Root
- Nettle
- Senna
- Yarrow

*Note: some of these herbs may be used to treat specific symptoms in pregnancy under the supervision of a naturopath. If you have a question about a specific tea, you can call the Motherisk hotline at (416)813-6780 or consult your naturopath, if you see one.*

**Resources**

Nutrition in Pregnancy: Separating the Myths from Reality. L. Vesik and A. Biringer. Plenary Session, 7th Annual Refresher in Primary Maternity Care, May 2009, Mt Sinai Hospital and the University of Toronto Department of Family Medicine and Department of Obstetrics & Gynecology.

Health Canada: Drugs and Health Products. [Http://www.hc-sc.gc.ca/dhp-mps/prodnatur/index_e.html](http://www.hc-sc.gc.ca/dhp-mps/prodnatur/index_e.html)

Health Canada: Nutrition for a Healthy Pregnancy- National Guidelines for the Childbearing Years. [Http://www.hc-sc.gc.ca/fn-an/nutrition/prenatal/national_guidelines-lignes_directrices_nationales-06g_e.html](http://www.hc-sc.gc.ca/fn-an/nutrition/prenatal/national_guidelines-lignes_directrices_nationales-06g_e.html)