

Eating Well in Pregnancy

Healthy eating plays a very important role in a healthy pregnancy. You need to eat foods from a variety of sources to make sure you get all the vitamins, minerals and nutrients you and your developing baby need.

Start with the basics!

Follow Canada's food guide. Aim for 3 meals a day with healthy snacks in between.

To account for the increased nutritional needs, most women need to eat an extra 2 or 3 food guide servings daily. For example:

- A yogurt and fruit for a snack
- An extra slice of toast with peanut butter at breakfast and a glass of milk at dinner
- Almonds as an afternoon snack and a carton of chocolate milk for lunch

Vegetables and fruits: Choose a wide variety of brightly coloured vegetables and fruits with little or no added fat, sugar or salt

Grains: Choose whole grains

Milk: Choose lower fat varieties of milk and yogurt which will give you the protein and calcium you need without the extra fat and calories

Meats: Choose lean meats as well as vegetarian items like beans, tofu or nuts

Healthy snack ideas:

Cottage cheese with fruit
Cheese and whole grain crackers
Peanut butter on whole wheat toast
Cereal and milk
Granola mixed with yogurt and fruit
Vegetable juice
Fresh fruit salad
Hard boiled egg
Raw vegetables dipped in hummus
Mixed nuts and dried fruits
Bran muffin and milk
Fruit smoothie

How much weight should I gain during pregnancy?

It is important that you eat well and gain weight throughout your pregnancy to support your baby's growth and development and for you to stay healthy. Not gaining enough weight during pregnancy could lead to having a pre-term birth and a low birth weight baby who is at greater risk for having poor health. Gaining too much can lead to a high birth weight baby that can make delivery more difficult and also put the baby's health at risk.

Women who have healthy babies gain varying amounts of weight during pregnancy. The suggested amount of weight gain during your pregnancy will depend on your pre-pregnancy weight. Most women should gain between 25 to 35 lbs.

Women who are underweight before becoming pregnant should gain slightly more and overweight women slightly less.

A weight gain of between 2 lbs and 8 lbs is recommended during the first trimester, and then about one pound a week during the 2nd and 3rd trimesters.

Do I need a vitamin supplement?

Sometimes even if you meet all the food guide requirements, you may not get enough of the nutrients you need. A vitamin supplement can help you to meet your needs, but it can not take the place of healthy eating.

Health Canada recommends that all pregnant and breastfeeding women take a daily multivitamin containing at least 0.4 mg of folic acid. Prenatal vitamins have between 0.4 to 1.0 mg of folic acid. For many women it can be difficult to meet their needs for calcium and iron through their diet and they may need to take extra supplements of these nutrients as well.

**** Do not take more than one prenatal multivitamin tablet per day because you will get too much vitamin A which could harm the fetus.**

Why is folate important and how much do I need?

Folate is one of the B vitamins found naturally in food. **Folic acid** is the form of folate found in vitamin supplements and added to fortified foods.

Folate is essential for cell division, fetal growth and in making our genetic material (DNA). Women need more folate during pregnancy to support their expanding blood volume and the growth of maternal and fetal tissues. It is especially important in the normal development of the spine and brain of the fetus.

Women who take folic acid supplements and eat a diet rich in folate before becoming pregnant and in the first few weeks of pregnancy have a lower risk of having a baby born with a Neural Tube Defect (NTD). NTDs are a group of serious birth defects that occur when the tissues and bone around the brain and spine of the fetus do not develop properly. Spina bifida is the most common NTD.

Sources of Folate

- Green vegetables: asparagus, spinach, romaine lettuce, broccoli and bok choy
- Legumes: chickpeas, lentils and kidney beans
- Folic acid fortified foods: enriched white flour, pasta and breakfast cereals

Health Canada recommends that women take a daily multivitamin with at least **400 mcg (0.4 mg) folic acid** if they could become pregnant. Continue to take the supplement throughout pregnancy.

Do not increase your dose of folic acid beyond 1000 mcg (1.0 mg) without talking to your doctor first.

Why is calcium important and how much do I need?

It is important that women consume enough calcium during pregnancy to help maintain the health of their bones and teeth as well as to support the development of the fetal skeleton. Calcium requirements during pregnancy are 1000 mg per day.

Dairy products are the best source of calcium. Three cups of milk will meet your daily needs (300 mg each). The calcium in dairy products is absorbed much better than the calcium in plant-based products.

Good Sources:	Other Sources:
Fortified soy beverages, yogurt, cheese, canned salmon or sardines (with bones), milk puddings	Tofu made with calcium, almonds, bok choy, chickpeas, broccoli, oranges, baked beans, lentils

Do I need extra Vitamin D?

Vitamin D plays an important role in helping the body absorb and use calcium. It is found naturally in fatty fish like salmon, in liver and in egg yolks. It is added to milk, soy beverages and margarine. We can also produce vitamin D on our skin through exposure to sunlight.

Health Canada currently recommends that adults, including pregnant women, should get 600 IU (international units) daily. Prenatal vitamins contain at least this amount.

There is increasing evidence that Canadians are not getting enough vitamin D. This may be due to a low intake of vitamin D containing foods, or because we have decreased exposure to sunlight. There is concern that Canadian women may have vitamin D deficiency and that this may affect fetal development.

The Canadian Pediatric Society has suggested that pregnant women may need up to 2000 IU of vitamin D (especially during winter months) to maintain adequate vitamin D levels. Speak with your doctor if you have questions or concerns about how much vitamin D you should be taking.

Why is iron important and how much do I need?

Dietary requirements are higher during pregnancy. Women need more iron during pregnancy to make red blood cells to carry oxygen to the growing fetus. It is common for iron levels to drop during pregnancy due to the increased demand. This is more common in the 2nd and 3rd trimesters.

It is important to try to build up your iron stores with foods that are high in iron.

Dietary iron has 2 forms. **Heme** iron and **non-heme** iron.

- Heme iron is found in meat, poultry and fish and it is well absorbed.
- Non-heme iron is found in plant foods and is not absorbed as easily. It can be found in beans, lentils, nuts, seeds, tofu, and enriched breads and breakfast cereals. To help increase the absorption of iron from these foods, eat them with a food that is high in vitamin C (e.g. berries, tomatoes, peppers, citrus fruit). Avoid coffee or tea with meals as it will decrease the absorption of iron.

The recommended daily intake for iron for pregnant women is 27 grams. Prenatal multivitamins contain adequate iron. You don't need to take extra unless it is recommended by your doctor.

How much caffeine can I have?

During pregnancy, caffeine passes from mother to baby. Too much caffeine during pregnancy may increase the risk of miscarriage or having a low birth weight baby. Health Canada recommends that pregnant women limit their intake of caffeine to 300 mg per day. The Motherisk program at Sick Kids recommends no more than 150 mg per day. See below for approximate values.

	<u>Caffeine in mg:</u>
1 cup coffee	100-180
1 cup decaf coffee	3-5
355 ml can cola	35-50
1 cup chocolate milk or hot chocolate	5-8
1 cup tea (black or green)	30-45
1 oz (28g) dark chocolate	25-58
1oz milk chocolate	7

Do I need extra Omega 3 fats?

Omega 3 fats are a part of all the cells of our body. They are important for brain development and vision. The plant form of omega 3 is ALA and it is found in walnuts, flaxseed, canola and soybean oils. Fish contain the omega 3 fats DHA and EPA.

- DHA helps the brain, eyes and nerves of your fetus develop. Fish is an excellent source of high quality protein and it is low in saturated fat. Health Canada recommends that all pregnant women should have at least 2 food guide servings (2 x 75 grams) of fish each week to provide a good source of DHA. This should be from low-mercury fish choices.
- There is controversy whether women should take extra Omega 3 fats during pregnancy. Some studies have found that women who take omega 3 have babies with better vision and higher cognitive functioning. However, there are just as many studies showing that the supplements have no impact.

Motherisk is recommending that until more evidence is available, pregnant women should not be encouraged to take supplements of fish oils.

There is no guarantee that fish oil supplements are safe and there may also be concern with contamination. If you do decide to take a supplement, ensure that it has an NHP (natural health product) number on the label. This shows that the supplement is government-approved for safety and quality.

***Pregnant women should avoid taking cod liver oil. These supplements may contain too much vitamin A and they may have higher levels of other contaminants.

But is Fish Safe?


Some types of fish contain unhealthy levels of mercury. When you are pregnant or breastfeeding you should avoid eating fish that are high in mercury. Too much can affect the development of the fetus.

Health Canada recommends that pregnant women:

- Limit their intake of high mercury fish to no more than 150 grams per month (2 food guide servings or about 5 oz). Examples of high mercury fish are: tuna (fresh or frozen), shark, swordfish, marlin, tilefish, King mackerel, orange roughy and escolar
- Limit their intake of canned albacore (white) tuna to 300 grams per week (4 food guide servings or about 10 oz)

In the United States, the FDA has more restrictive guidelines that recommend that pregnant women should not eat any high mercury fish and should limit intake of albacore tuna to no more than 6 oz per week.

Low Mercury Fish:



Pollock
Salmon
Tilapia
Anchovies
Clams
Herring
Sardines
Sole
Squid/Octopus
Tuna (canned light)
Scallops
Shrimp
Atlantic cod
Haddock
Rainbow Trout

What food safety precautions are important during pregnancy?

It is especially important when you are pregnant, to avoid food-borne illnesses such as Salmonella and E. coli.

- Keep hot foods hot and cold foods cold. Do not eat cooked foods that have been out of the fridge for more than 2 hours.
- Always wash your hands well before handling food.
- Avoid cross contamination between raw and cooked foods. Do Be sure to wash your cutting board and utensils well in hot, soapy water after handling raw meats.
- Wash fruits and vegetables thoroughly

Pregnant women should avoid eating the following foods:

- ✗ Raw fish, including oysters, mussels, clams, sushi and sashimi
- ✗ Undercooked meats
- ✗ Raw or lightly cooked eggs (Eggs Benedict)
- ✗ Unpasteurized juices (apple cider)
- ✗ Raw sprouts, especially alfalfa sprouts
- ✗ Unpasteurized milk and cheese

Toxoplasmosis

Cats are a host for a parasite that can lead to an illness called toxoplasmosis. Have another family member change your cat's litter box if possible. Wear gloves while handling the litter box or when gardening (to avoid garden soil that main contain cat droppings).

It is also important to avoid raw or undercooked meats and unpasteurized dairy products.

Listeriosis

This is a rare disease caused by the bacteria *Listeria monocytogenes*.

Food contaminated with listeria may not look, smell or taste different. Symptoms of listeriosis include flu-like nausea, vomiting, headache, fever and muscle aches. It is possible for *Listeria* to cause miscarriage, premature birth, still birth.

How to avoid it:

- Eat only foods and drink liquids that are pasteurized (milk, juice, honey, or cheese)
- Avoid hot dogs or deli meats unless they are reheated until steaming hot. Cooking foods to 74C (165F) kills listeria.
- Avoid soft, unpasteurized cheeses such as Brie, Camembert, Roquefort, blue-veined cheeses, goat cheese, feta, and Mexican-style cheese such as queso fresco, queso blanco and panela. However, these cheeses can also be found in pasteurized forms. Read labels carefully to make sure they are safe to eat.
- Do not eat pâtés and meat spreads
- Avoid uncooked meats, fish and poultry

Can I use artificial sweeteners?

Several artificial sweeteners have been approved by Health Canada. Some of these sweeteners are safe to use in pregnancy, while others are not. Read food labels well to see if artificial sweeteners have been added. It is best to use them sparingly so that they do not replace healthier, nutrient-dense foods.

Safe	Avoid
<ul style="list-style-type: none">• Aspartame (found in Equal and Nutrasweet)• Sucralose (Splenda)• Acesulfame-potassium (Ace-K)	<ul style="list-style-type: none">• Saccharin (Hermesetas)• Cyclamate (Sucaryl), found in Sugar Twin and Sweet 'N Low

Are herbal teas safe to use during pregnancy?

There is little information available about herbal teas and their possible effects on pregnancy. Teas are often mixtures of different herbs and unless you know that all the herbs in the tea are safe for pregnancy, you should avoid the product. Chamomile tea has a harmful effect on the uterus and should not be consumed while you are pregnant.

According to Health Canada, the following teas are generally considered safe if taken in moderation. A moderate amount would be no more than 2-3 cups a day.

Citrus peel	Linden flower*
Ginger	Orange peel
Lemon balm	Rose hip

* not recommended for women with pre-existing heart conditions

Herbal teas should not take the place of more nutritious drinks, such as milk. Remember that some herbal teas have caffeine and should be counted towards your total caffeine intake for the day. If you like hot beverages, you may want to try hot water with lemon, hot milk, hot apple juice or Ovaltine, which do not contain caffeine.

Other resources

Books:

Better food for Pregnancy - Daina Kalnins and Joanne Saab. Publisher: Robert Rose Inc. 2006.

Leslie Beck's Nutrition Guide to a Healthy Pregnancy - Leslie Beck. Publisher: Penguin Canada. 2004.

Websites:

Dietitians of Canada: www.dietitians.ca

Health Canada: www.hc-sc.gc.ca

Motherisk: www.motherisk.org