



GUIDE



Prenatal Food Guide



The Ottawa | L'Hôpital
Hospital | d'Ottawa



Disclaimer

This is general information developed by The Ottawa Hospital. It is not intended to replace the advice of a qualified healthcare provider. Please consult your healthcare provider who will be able to determine the appropriateness of the information for your specific situation.

Dietitian _____

Phone Number _____

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Introduction

Congratulations!

Healthy eating is very important throughout the lifecycle and we hope that it will continue or start here for you and your baby.

This booklet offers a basic guide to nutrition during pregnancy and provides information about important nutrients. It also refers you to other booklets and readings. If you have any concerns once you have read the booklet, please discuss them with a health care team member who will be happy to help you and refer you to the dietitian.

Canada's Food Guide

“Eating well with Canada’s Food Guide” is a great tool. The examples below show how many servings from each of the four food groups an adult female between 19 and 50 years of age needs every day.

**Pregnant and breastfeeding women need
2–3 additional servings per day.**

Food Groups	1 Serving	Selected Nutrients	Tip
Vegetables and Fruit <i>7–8 servings per day</i>	<ul style="list-style-type: none"> • Fresh, 1 medium • Frozen, canned 125 mL (½ cup) • Tossed salad 250 mL (1 cup) • Juice 125 mL (½ cup) • Dried fruit 60 mL (¼ cup) 	<ul style="list-style-type: none"> • Vitamin A, E, K • Folic acid • Vitamin C • Potassium • Iron – dried fruits • Fibre • Calcium – fortified juice 	<ul style="list-style-type: none"> • Eat at least one dark green and one orange vegetable each day • Have vegetables and fruit more often than juice
Grain Products <i>6–7 servings per day</i>	<ul style="list-style-type: none"> • Bread, 1 slice • Cooked pasta, rice, grains 125 mL (½ cup) • Cereal: cold 30 g, hot 175 mL (¾ cup) • Bagel, Pita, Naan ½ • Roti, chapati, tortilla taco, ½ • Wheat germ 30 g • Muffin, 1 small 	<ul style="list-style-type: none"> • B vitamins • Folic acid • Iron • Zinc • Fibre 	<ul style="list-style-type: none"> • Make at least half of your grain products whole grain each day

Food Groups	1 Serving	Selected Nutrients	Tip
Milk and Alternatives <i>2 servings per day</i>	<ul style="list-style-type: none"> • Skim, 1%, 2% 250 mL (1 cup) • Cheese 50 g (1½ oz) • Yogurt 175 g (¾ cup) • Milk desserts 250 mL (1 cup) • Evaporated milk 125 mL (½ cup) 	<ul style="list-style-type: none"> • Calcium • Protein • B₁₂ • Vitamin A, D, Riboflavin 	<ul style="list-style-type: none"> • If you have lactose intolerance, try lactose free products • Have 500 mL (2 cups) of milk every day for adequate vitamin D or the equivalent amount from yogurt
Meat and Alternatives <i>2 servings per day</i>	<ul style="list-style-type: none"> • Lean meat, fish, poultry 75 g (2½ oz) • Cooked legumes 175 mL (¾ cup) • Nuts or seeds 60 mL (¼ cup) • Peanut butter 30 mL (2 tbsp) • Eggs, 2 • Tofu 150 g (¾ cup) 	<ul style="list-style-type: none"> • Protein • Iron • B₆ • B₁₂ • Folic acid – nuts, legumes, liver • Zinc 	<ul style="list-style-type: none"> • Aim for small quantities spread throughout the day. • Have meat alternatives such as beans, lentils and tofu often • Eat at least two Food Guide Servings of fish each week

Buy and prepare foods with less fat, sugar and salt.

Important Nutrients

Calcium

Pregnancy need: 1000 mg per day

To equal one serving a food should contain at least 275 mg of calcium. Some foods will only contain enough calcium to count for a partial serving. Low fat foods usually have the same amount of calcium as regular ones. Prenatal supplements usually contain about 250 mg.

Calcium Content (mg)

50 g (1½ oz)	firm cheese	350
250 mL (1 cup)	milk (fortified)	315
175 g (¾ cup)	yogurt	275
75 g (2½ oz)	canned sardines with bones	200
75 g (2½ oz)	canned salmon with bones	170
125 mL (½ cup)	orange juice with calcium	170
150 g (¾ cup)	tofu	150
175 mL (¾ cup)	ice cream	130
60 mL (¼ cup)	almonds	100
175 mL (¾ cup)	cooked lentils, legumes	75
4	figs	61
60 mL (¼ cup)	sesame seeds	50
125 mL (½ cup)	cooked broccoli	38

Daily Pregnancy need:



250 mL
milk

+



50 g
cheese

+



175 g
yogurt

Iron

Pregnancy need: 27 mg per day

Heme iron (from meat) is much better absorbed than non-heme iron (from vegetables). To enhance the absorption of iron, eat foods rich in vitamin C at the same meal. Avoid drinking tea with meals as it interferes with iron absorption.

	<u>Heme Iron Sources</u>	<u>Iron Content (mg)</u>
75 g (2½ oz)	Clams	21
75 g (2½ oz)	Oysters	9
75 g (2½ oz)	Beef liver	6.0
75 g (2½ oz)	Steak	3
75 g (2½ oz)	Pork	1.5
75 g (2½ oz)	Chicken breast	1.0
75 g (2½ oz)	Sole	.5

	<u>Non-heme Iron Sources</u>	<u>Iron Content (mg)</u>
175 mL (¾ cup)	Cream of Wheat	11.5
125 mL (½ cup)	Branflakes with raisins	5
175 mL (¾ cup)	Dried beans, cooked	4.6
125 mL (½ cup)	Prune juice	1.7
2	Eggs	2.0
30 mL	Wheat germ	1.3
1 slice	Whole wheat bread	.9
125 mL (½ cup)	Spinach	.8

If you are anemic, you will need iron supplements; they should be taken with water or juice, NOT milk, coffee or tea. They are best taken between meals or at bedtime.

For more information about iron, ask for the booklet!



Folate

Pregnancy need:	600 µg or .6 mg per day
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Folic acid is needed for the prevention of neural tube defects (NTD) and other important functions. You need more during pregnancy and despite eating well you should take a prenatal supplement.

		<u>Folic Acid Content (µg)</u>
125 mL (½ cup)	cereals, cold	85 – 650
75 g (2½ oz)	liver, chicken	575
75 g (2½ oz)	liver, beef	195
125 mL (½ cup)	spinach, cooked	130
125 mL (½ cup)	rice	110
60 mL (¼ cup)	sunflower seeds	100
125 mL (½ cup)	broccoli, cooked	85
250 mL (1 cup)	Romaine lettuce	80
175 mL (¾ cup)	dried beans, cooked	65
2	eggs	55
125 mL (½ cup)	pasta	50
30 mL (2 Tbsp)	wheat germ	50
60 mL (¼ cup)	peanuts, roasted	40
125 mL (½ cup)	orange juice	40
30 mL (2 Tbsp)	peanut butter	25
1	banana, small	25
1 slice	whole wheat bread	12

Vitamin D

Pregnancy need: 5 µg (200 I.U.) per day

Vitamin D helps the absorption of calcium for its use in the body. Food sources are most milks and dairy beverages, margarine, fatty fish, egg yolks and fortified products (i.e. yogurt). Read the label carefully. Prenatal supplements usually contain about 400 I.U. From April to September a short exposure to the sun (about 10 minutes) provides more than 10,000 I.U.

Vitamin C

Pregnancy need: 85 mg per day

Vitamin C promotes healthy gums, helps iron absorption and is a powerful antioxidant. Good sources are citrus fruits, berries, melons, broccoli, peppers, spinach, tomatoes and potatoes.

Vit C Content (mg)

1 med. grapefruit	85
1 cup strawberries	85
1 med. orange	80

Vit C Content (mg)

1 cup broccoli (raw)	82
1 cup cantaloupe	70
1 med. green pepper	65

Vitamin B₁₂

Pregnancy need: 2.6 µg per day

Very low B₁₂ intake can cause anemia (low red blood cells) and nervous system damage. Vitamin B₁₂ is found in foods from animal sources (meat, fish, poultry, eggs and dairy) and in fortified products (soy beverages, breakfast cereals, margarines, yeast extracts, textured vegetable protein).

Lacto-ovo vegetarians should be able to meet their needs through diet alone. Vegans may require a supplement.

B₁₂ Content (µg)

2 eggs	1.4
250 mL (1 cup) milk	.9
50 g (1½ oz) cheese	.4

B₁₂ Content (µg)

125 mL (½ cup) cereal	10
250 mL (1 cup) soy	3.0
5 mL (1 tsp) nutritional yeast	1.0

Essential Fatty Acids

Pregnancy need for omega 3: 1.5 – 2 g per day

Essential fatty acids are needed for healthy cell membranes and proper development of the eye and brain tissue. Fatty acid requirements increase slightly during pregnancy. It is wise to avoid fried, fatty and high fat foods. Remember to have “good” sources of fat in your diet daily, including omega-3 fatty acids below.*

For more information about EFA, ask for the booklet!



Data suggests that until evidence accumulates, no recommendation should be made to encourage pregnant women to take omega-3 fatty acid supplements.

Good sources of fatty acids:

- Canola oil*, soybean oil*, flaxseed oil*
- Fish*, seafood*
- Walnuts*, pumpkin seeds*
- Wheat germ*
- Non-hydrogenated margarine
- Safflower oil, sunflower oil, corn oil



Fibre

Health professionals have suggested a daily intake of 25 – 30 g per day.



For more information about fibre, ask for the booklet!



Food sources are whole grain breads, pasta, cereals, barley, brown/wild rice, oats and quinoa, fruit, vegetables and legumes.

Caffeine

Health Canada recommends a limit of 300 mg per day. This is equal to less than 500 mL (2 cups) of percolated coffee per day.

For more information about caffeine, ask for the booklet!



Weight Gain

A healthy weight gain is important to help mom stay in good physical health and have a better outcome. Data shows that a proper weight gain will decrease maternal and fetal health risks on a short and long term basis.

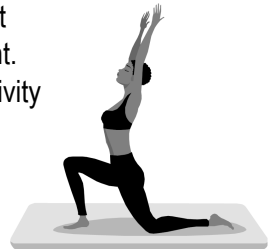
Weight gain is recommended as follows:

<u>BMI</u>	<u>(kg)</u>	<u>(pounds)</u>
< 18.5	12.5 – 18	28 – 40
18.5 – 24.9	11.5 – 16	25 – 35
25 – 29.9	7 – 11.5	15 – 25
≥ 30	5 – 9	11 – 20

Weight gain is based on your pre-pregnancy body mass index (BMI). It will be suggested to restrict your weight gain if your BMI \geq 40. You might also be referred to the dietitian. Ask for your personalized chart.

Physical Activity

Eating sensibly will help you manage your weight gain, but continuing your favourite fitness regime is just as important. Medical experts now recommend that regular physical activity is beneficial during pregnancy. Health Canada suggests to follow the vitality approach of doing regular physical activity. You can perform activity in 10 minute intervals throughout the day, for a total of 30 – 60 minutes per day, most days of the week.



Notes

References/Websites

- Health Canada – Nutrition for a Healthy Pregnancy – National Guidelines for the Childbearing Years
<http://www.hc-sc.gc.ca/fn-an/nutrition/prenatal/index-eng.php>
- Health Canada – Canada’s Food Guide
<http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/index-eng.php>
- Public Health Agency of Canada – Healthy Pregnancy
<http://www.phac-aspc.gc.ca/hp-gs/index-eng.php>
- Folic Acid Alliance Ontario
<http://www.folicacid.ca/>
- Motherisk
www.motherisk.org/prof/index.jsp
- Society of Obstetricians and Gynaecologists of Canada
<https://sogc.org/>
- Institute of Medicine
<http://www.iom.edu.np/>
- Eat Right Ontario (1-877-510-5102)
www.ontario.ca/eatright

