

Healthy Eating & Active Living

● FOR PREGNANCY ●

EVERY PREGNANCY IS DIFFERENT
EAT WELL. BE ACTIVE.



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Alberta

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Thinking About Getting Pregnant?

Here's your healthy lifestyle checklist

You're thinking about getting pregnant, but what exactly do you need to do to prepare yourself? Here is a quick list:

- ☐ I have talked to my health care provider about getting pregnant.
- ☐ Every day, I am taking a multivitamin for women or prenatal vitamin that has 0.4 milligrams of folic acid and 18 milligrams of iron.
- ☐ I am not smoking, drinking alcohol or using any drugs that have not been approved by my health care professional.
- ☐ I am at a healthy body weight or have discussed body weight concerns with my health care provider.
- ☐ I am not on a fad diet or very low calorie diet to lose weight quickly.
- ☐ I am eating a variety of foods from all four food groups: Vegetables and Fruit, Grain Products, Milk and Alternatives, and Meat and Alternatives.
- ☐ I eat at least three meals per day and do not skip meals.
- ☐ I drink plenty of fluids each day: water, juice, milk and eat foods high in fluid such as soup, vegetables and fruit.
- ☐ I have spoken to my health care professional about how much physical activity is safe during pregnancy.
- ☐ I know that incorporating regular physical activity will help ensure a healthy pregnancy.
- ☐ I know how much physical activity is safe during each trimester of pregnancy.
- ☐ I am aware of which foods, beverages and medications I should avoid during pregnancy.

Take a Prenatal Vitamin Everyday of Your Pregnancy

Start a prenatal supplement before you get pregnant

Generally, foods are the ideal source for vitamins and minerals because they are in a form which is absorbed easily by our bodies. It is important to choose a variety of foods everyday from Canada's Food Guide however, when you're pregnant it's difficult to reach all the vitamin and mineral requirements by food alone. This is where a prenatal vitamin/mineral supplement plays an important supportive role in your health and the health of your baby.

Take a prenatal supplement that contains at least 4 mcg (micrograms) or 0.4 mg (milligrams) of folic acid and 18 mg of iron several months before you are pregnant and then continue throughout your pregnancy. Do not take more than 10,000 IU (international units/3.33 RE (retinol equivalents) of vitamin A. Excess vitamin A can cause birth defects in your baby.

Note: Supplements do not take the place of food and healthy eating.

If you have food restrictions or follow a vegan diet, talk to your health care professional for other supplement recommendations.



Important vitamins and minerals

Folic acid (folate)

Your folic acid (folate) requirements increase during pregnancy to prevent neural tube defects in the baby. All prenatal vitamins contain enough folic acid.

Foods high in folic acid: Whole grain breads, leafy green vegetables, legumes, citrus fruits and juices. Most cereals in Canada are fortified with folic acid.



Iron

Your blood supply increases an additional 2 kg/4lbs during pregnancy! To make the extra blood, you need fluids and iron. The average prenatal multivitamin contains a large dose of iron (typically 30-60 mg). While this is above the recommended amount for pregnancy, it is done to ensure you get enough.

Best sources of iron: Clams, liver*, oysters, mussels, beef, shrimp, sardines, poultry and fish.

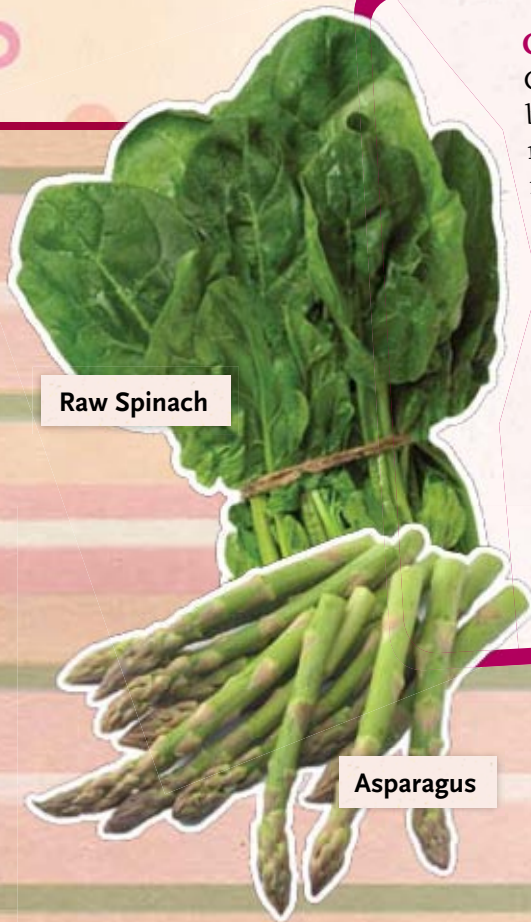
*Pregnant women should limit their liver intake to once per month as it is very high in vitamin A which can be harmful to the baby in large doses.

Good sources of iron: soy foods, whole grain and enriched cereals, legumes, swiss chard and asparagus.

Tea and coffee may interfere with the absorption of iron; therefore avoid drinking these with meals and at the time you take your prenatal supplement.

Vitamin C increases iron absorption.





Raw Spinach

Asparagus

Calcium

Getting enough calcium during pregnancy is important to help build your baby's new bones, produce milk for feeding baby and maintaining your own healthy strong bones. Calcium also helps muscles and nerves to work properly, helps you to manage your weight and blood pressure and decreases your risk of colon cancer.

Foods high in calcium: Dairy products such as milk, yogurt and cheese; enriched orange juice and rice milk, fortified soy beverages and soy products like tofu; canned fish like salmon with bones, sardines, and oysters; beans, legumes and lentils, almonds, broccoli, spinach, and kale.

Make sure you have three servings of fluid milk or fortified soy beverage everyday. Most prenatal vitamins contain about 300 mg of calcium which is about the same as one cup (250 ml) of milk or fortified soy beverage.



Cooked chickpeas



Avocado

Vitamin D

Vitamin D is known as the “sunshine vitamin” since the sun helps us produce vitamin D through our skin. Vitamin D has the important role of helping you absorb calcium through your intestine and is therefore important for keeping our bones strong. As the sun is an unreliable source of vitamin D, foods and supplements become important sources.

Foods high in vitamin D: Fatty fish, liver* and egg yolk. Due to the few foods that naturally contain vitamin D, the Canadian food industry has added vitamin D to many products such as milk, soy/rice beverages and margarine.

All prenatal vitamins will contain an adequate amount of vitamin D.

*Pregnant women should limit their liver intake to once per month as it is very high in vitamin A which can be harmful to the baby in large doses.



Healthy Weight Gain

Weight gain goals for your pregnancy will help to keep you healthy during and after your pregnancy, and are best for your baby's growth and development.

Too little?

When you do not gain enough weight you risk:

- Low-birth weight for your baby which increases the baby's risk for health issues such as developmental problems, other serious illnesses or even death.
- That your baby and you may not get enough nutrition to be healthy.

Too much?

When you gain too much weight you risk:

- A difficult delivery of your baby.
- Having a large baby (more than 9 lbs (4.1 kg)) which can result in an increased risk of weight gain as a teenager and additional health-related problems such as heart disease and diabetes.
- Increased high blood sugars and high blood pressure during your pregnancy.
- Difficulty with weight loss after you have the baby.



Special cases

Weight gain goals for pregnant teens:

- If you have had regular menstrual periods for more than two years follow the general guidelines on the next page.
- If you have had your menstrual period for less than two years, consult your health care provider.

Weight gain goals for women carrying twins:

- Total weight gain guidelines are 35-45 lbs (16-20.5 kg).
- A good rate is about 1.5 lbs (0.7 kg) per week after the first trimester.

Weight gain goals for women carrying triplets:

- Weight gain guidelines are 45-65 lbs (20.5 – 30 kg) by delivery.
- A good rate is about 2.2 lbs (1 kg) per week after the first trimester.

How much weight is healthy for you?

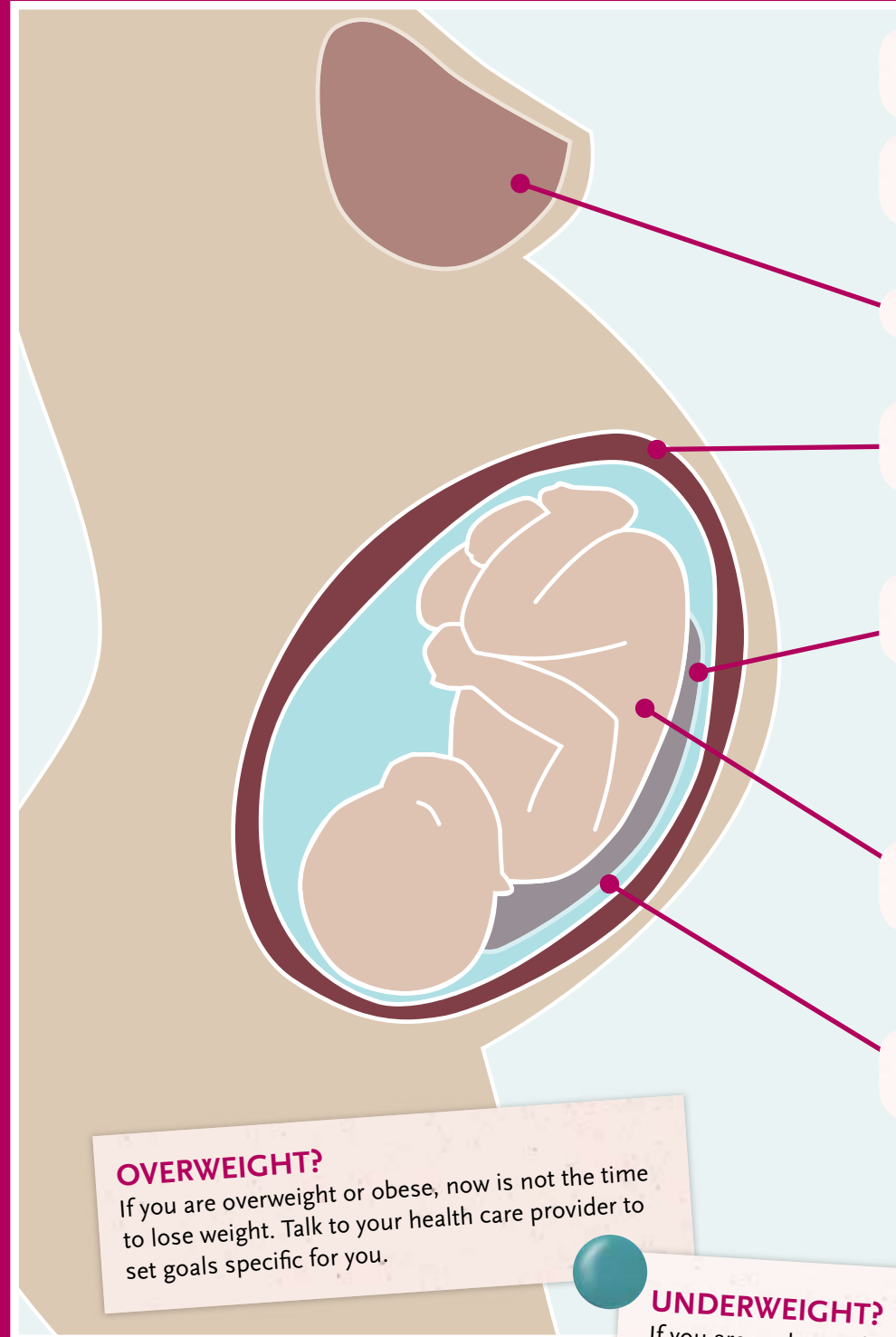
Weight category	General guidelines for weight gain for a healthy pregnancy	Weight gain rate in 2nd and 3rd trimesters
Underweight	28-40 lbs (12.5 – 18 kg)	1 lb/week (0.5 kg/week)
Healthy Weight	25-35 lbs (11.5 – 16 kg)	0.75 lbs/week (0.4 kg/week)
Overweight	15-25 lbs (7 – 11.5 kg)	0.5 lbs/week (0.3 kg/week)
Obese	At least 15 lbs (7 kg)	As recommended by your health care provider

My pregnancy weight



Week #	Your Weight	Date	Week #	Your Weight	Date
Week 1			Week 22		
Week 2			Week 23		
Week 3			Week 24		
Week 4			Week 25		
Week 5			Week 26		
Week 6			Week 27		
Week 7			Week 28		
Week 8			Week 29		
Week 9			Week 30		
Week 10			Week 31		
Week 11			Week 32		
Week 12			Week 33		
Week 13			Week 34		
Week 14			Week 35		
Week 15			Week 36		
Week 16			Week 37		
Week 17			Week 38		
Week 18			Week 39		
Week 19			Week 40		
Week 20			Week 41		
Week 21			Week 42		

Where is the Weight Going?




OVERWEIGHT?

If you are overweight or obese, now is not the time to lose weight. Talk to your health care provider to set goals specific for you.

UNDERWEIGHT?

If you are underweight or struggling with an eating disorder, talk to your health care professional about working with a counsellor and dietitian throughout your pregnancy.

Healthy Eating



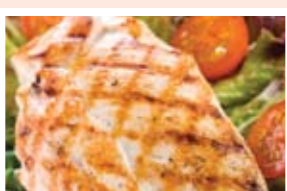


The foods you eat before and during pregnancy prepare your body to support the growth and development of your baby. Eating nutritious foods gives your baby the best chance of a healthy beginning.

Eat small meals and snacks throughout the day

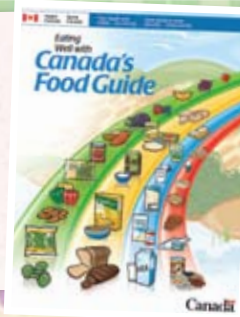
It is best to eat every two to four hours to keep your energy up and to get all the healthy foods you need to provide a steady supply of nutrients to your growing baby. Most pregnant women find that having three meals with snacks in between meals is ideal. Don't skip meals or go longer than six hours without food in the daytime.

Plan Your Meals

	Monday	Tuesday	Wednesday
<div>Breakfast</div> <div></div>	<ul style="list-style-type: none">• Whole wheat bannock• Peanut butter• Milk• Pear• Coffee• Grapefruit	<div>Avoid peanuts? It's unknown if avoiding peanuts or any food during pregnancy helps to reduce allergies in your baby. Some health professionals suggest avoiding certain foods during pregnancy if you, your partner, or your other children have a history of allergies.</div>	
<div>Morning snack</div>	<div>Small amounts of caffeine during pregnancy appear to be fine for most people. In general the recommendation for pregnant women is to consume no more than 300 mg/day or a little over two small (8 oz/237 ml) cups of coffee.</div>		<ul style="list-style-type: none">• Dried cereal and dried fruit mix• Grapefruit juice• Cheddar cheese and crackers
<div>Lunch</div> <div></div>	<ul style="list-style-type: none">• Butternut squash soup• Tuna melt with cheese (whole wheat Bun)• Orange• Milk	<ul style="list-style-type: none">• Spaghetti and tomato sauce• Meatballs• Mixed green salad (oil and vinegar)• Milk• Grapes	
<div>Afternoon snack</div>	<ul style="list-style-type: none">• Whole wheat pita wedges• Hummus	<ul style="list-style-type: none">• Celery stick• Peanut butter	<div>Herbal teas as harmful drugs? Many herbal teas and herbs can act like harmful drugs which may affect your baby. In moderation (2-3 cups per day) citrus peel, orange peel, ginger, lemon balm, linden flower and rosehip herbal teas are considered safe.</div>
<div>Dinner</div> <div></div>	<ul style="list-style-type: none">• Baked chicken• Rice broccoli• Small glass of tomato juice• Whole wheat bun• Pear slices	<div>All meats, fish, poultry and eggs need to be thoroughly cooked. Avoid these foods raw or undercooked. Avoid hot dogs and deli meats unless reheated until steaming hot.</div>	
<div>Evening snack</div>	<ul style="list-style-type: none">• Popcorn• Milk	<ul style="list-style-type: none">• Apple crisp• Milk	<ul style="list-style-type: none">• Tea• Rice pudding
<div>Today's activity</div>	<ul style="list-style-type: none">• Swimming	<ul style="list-style-type: none">• Ride the stationary bike	<ul style="list-style-type: none">• Walk with the kids to school

USE CANADA'S FOOD GUIDE TO HELP YOU WITH IDEAS AND PORTION SIZES

Eating well with Canada's Food Guide applies to a variety of cultures and includes vegetarians. The guide suggests that pregnant and breastfeeding women include an extra two to three food guide servings each day.



To get your free copy, go to www.hc-sc.gc.ca and follow the links or pick up a copy at a community health centre.

Thursday	Friday	Saturday	Sunday
<ul style="list-style-type: none"> • Bran cereal w/raisins • Milk in the bowl • Orange quarters • Coffee 	<p>Vitamin C increases iron absorption. Good sources of vitamin C are potatoes, red peppers, strawberries, citrus fruits and juices, tomatoes and broccoli.</p>	<ul style="list-style-type: none"> • Pancakes with saskatoon berry syrup • Cantaloupe • Milk • Tea 	<ul style="list-style-type: none"> • Whole wheat english muffin • Cottage cheese with peaches • Coffee
<ul style="list-style-type: none"> • Slice of banana bread • Tea 	<ul style="list-style-type: none"> • Apple slices • Tea 	<ul style="list-style-type: none"> • Bran muffin • Tea 	<ul style="list-style-type: none"> • Dried fruit bar • Milk
<p>Avoid eating any unpasteurized cheeses, pates, milks and other dairy products. Read labels to be sure you are choosing products that are pasteurized.</p>	<ul style="list-style-type: none"> • Cheese & ham sandwich (whole wheat bread) • Borscht • Cucumber slices • Yogurt and strawberries • Glass of water 	<ul style="list-style-type: none"> • Vegetable soup • Quesadilla • Apple • Milk 	<ul style="list-style-type: none"> • Pizza on a whole grain pita (Ham, peppers, cheddar cheese, mushrooms & tomato sauce) • Tossed salad w/ veggies • Orange
<ul style="list-style-type: none"> • Date and Nut Mix • Water 	<ul style="list-style-type: none"> • Diet soda • Orange cranberry loaf 	<p>Fish is an excellent source of protein and healthy fats that help the development of your baby's brain and eyes. <i>Eating Well with Canada's Food Guide</i> recommends choosing at least two food guide servings of fish per week. Health Canada provides advice for limiting exposure to mercury from certain types of fish for pregnant women. More info: www.hc-sc.gc.ca.</p>	<ul style="list-style-type: none"> • Pretzels • Milk
<ul style="list-style-type: none"> • Stir-fried beef w/broccoli, bean sprouts, bok choy, carrots • Noodles • Tea • Fruit salad 	<ul style="list-style-type: none"> • Dhal • Green beans • Raita • Naan • Milk • Mango 	<ul style="list-style-type: none"> • Baked salmon • Mashed potatoes • Green beans • Carrot salad • Milk • Mixed berries 	
<ul style="list-style-type: none"> • Digestive cookies • Milk 	<ul style="list-style-type: none"> • Diet soda • Baby carrots 	<p>Alternative Sweeteners OK: Moderate amounts of alternative sweeteners like aspartame (NutraSweet), sucralose (Splenda), or acesulfame K (Sunette) are considered safe during pregnancy. Not OK: Avoid using saccharin and cyclamate (found in Sucryl, Sweet N'Low, Sugar Twin and Weight Watchers) during pregnancy. For more info visit www.hc-sc.gc.ca.</p>	
<ul style="list-style-type: none"> • Yoga DVD 	<ul style="list-style-type: none"> • Walk to the park with the kids 		

Choosing Healthy Extra Calories

How many more calories are needed during pregnancy and breastfeeding?

1st trimester – no extra calories are needed

2nd trimester – about 350 healthy extra calories

3rd trimester – about 450 healthy extra calories

Healthy extra calories



350 calories

- Banana
- Bannock (50 g piece)
- Glass of skim milk or fortified soy beverage (1 cup/250 ml)



350 calories

- Half multigrain bagel with light cream cheese
- Glass of water



350 calories

- Granola bar
- 8 raw baby carrots
- Glass of skim milk or fortified soy beverage (1 cup/250 ml)

Not so healthy extra calories



Too Much: 700 calories

- Medium ice cream blended treat



Too Much: 850 calories

- Medium vanilla bean blended ice coffee (16 oz/455 ml)
- 1 jumbo chocolate chip cookie



Too Much: 1,250 calories

- Slush drink (16 oz/455 ml)
- Bag of chips (7 oz) (sour cream & onion flavour)

Why Are Fibre and Fluids Important?

Fibre helps prevent and manage constipation and can decrease your risk for diarrhea and hemorrhoids. Getting enough fibre is also important to protect against certain types of cancer and heart disease.

Fruits and vegetables with the skin left on, whole grains and cereals, legumes (dried beans, lentils and peas) as well as seeds/nuts are all great examples of foods containing fibre.

Your body also needs plenty of fluid during pregnancy. Fluids can come from water, juice, soups, broth, milk and moderate amounts from coffee and safe teas. Eating plenty of fruits and vegetables also supplies a high level of fluid for your overall health.

Daily requirements for fibre during pregnancy is 29 grams. Make sure you have five whole grain servings and five servings of vegetables or fruits with edible peels every day.



Bran muffin

Daily requirement for fluid during pregnancy

12 cups (3 litres) per day. While this seems like a lot, keep in mind that this includes all beverages, soups, and the water that is part of foods like fruits and vegetables.



Glass of milk



Bean chili



Lemon peel tea



Bran cereal with raisins



Whole grain bread



Broccoli

IS MONEY A PROBLEM?

If you have trouble buying enough food to meet the needs for pregnancy, talk to your health care provider. Some communities have special pregnancy programs that offer food and milk coupons, prenatal vitamins and counselling.

MANAGING CONSTIPATION

Constipation affects up to one third of all pregnant women. It can often be prevented and managed with increased daily activity, plenty of fluids and enough fibre.

Dealing with Common Discomforts

Nausea and Vomiting (morning sickness)

Cause: Your changing hormones, increased fatigue and the increased pressure of your baby can all contribute to morning sickness.

Morning sickness usually occurs in the first three months but can continue longer and can occur at any time of the day.

What you can do to help:

- **Eat small** frequent meals.
- **Avoid going longer than 2-4 hours** without eating, as a small amount of food in your stomach usually helps with nausea.
- **Let others cook.** Use stove fan, open windows and leave kitchen when possible to reduce smell of food.
- **Avoid foods** that make you feel ill or have strong odours.
- **Drink fluids** between meals, not with meals.
- **Limit caffeine,** chocolate and high fat foods.
- **Eat a snack at bedtime** since having some food in your stomach reduces nausea.
- **Get up slowly** in the morning and take a few bites of dry crackers, toast or plain cookies that you can stash as bedside snacks.
- **Do not take medication** unless advised by your health care provider. There is a medication that may help women with severe nausea and vomiting. Call your health care provider if you vomit more than twice a day or cannot keep fluid down.
- **Avoid brushing teeth immediately after vomiting.** Rinse mouth with water, a fluoridated mouthwash or a solution of baking soda and water after vomiting. This may help to prevent damage to your teeth.



Heartburn

Cause: Your pregnancy hormones can slow the movement of food through your stomach. Your growing baby puts pressure on your stomach causing heartburn due to back up of stomach contents.

What you can do to help:

- **Avoid foods** that make you feel ill.
- **Reduce caffeine,** chocolate and high fat foods.
- **Eat small,** frequent meals.
- **Drink liquids** between meals and not with the meal.
- **Good posture** helps digestion.
- **Walk** after your meals.
- **Avoid lying down** for two hours after a meal.
- Sleep with the head of your bed **raised slightly.**
- **Do not take medication** unless suggested by your health care provider.





Constipation

Cause: Your pregnancy hormones can slow movement in your intestines. As your baby grows he/she will put increased pressure on your intestines making it difficult to have bowel movements.

What you can do to help:

- **Drink plenty of fluids.** Aim for 8-12 cups (2-3 L) per day.
- **Increase high fibre foods** in diet such as fruits, vegetables and whole grains. (See page 11).
- **Walk every day** (unless advised not to by your health care professional).
- **Exercise regularly** (unless advised not to by your health care professional).
- **Do not take laxatives** or fibre supplements unless advised by your health care provider.



Food cravings

Cause: Unknown

What you can do to help:

Allow yourself to have some of the less nutritious foods that you may be craving, but ensure that you are still eating a well balanced diet.

Cravings for non-food items like dirt, detergent, starch and other non-food items is known as pica. If this occurs, contact your health care provider. Do not eat these items as they are toxic to your baby.



Changes in Your Baby

First trimester (Weeks 1-12)

Approximate weight: 1 oz (30 grams)
Approximate height: 3-4 inches (7.6-10.2 cm)

Growth:

- Heart is beating
- Legs, toes, arms and fingers form
- Blood vessels, intestines, bladder, ear and bones start to form
- Teeth are developing
- Brain and spinal cord are developing very quickly
- Face and eyes are forming



Second trimester (Weeks 13-28)

Approximate weight: 2 lbs (900 grams)
Approximate height: 14 inches (35.6 cm)

Growth:

- Stronger heartbeat that can be heard with stethoscope
- Legs and arms are kicking stronger
- Eyes have opened
- Sucks on their thumb
- Hiccups
- Hair starts to grow on their head and body

Your baby can hear subtle noises and will begin to recognize their parent's voices.



Third trimester (Weeks 29-40)

Approximate weight: 6-9 lbs (2,500 – 4,000 grams)
Approximate height: 19-20 inches (48-50 cm)

Growth:

- Weight gain is very rapid
- Bones and teeth are growing larger and stronger
- Baby is kicking more and more



Changes in You

First trimester (Weeks 1-12)



Weight gain: Often little to no weight gain

Your body is making two special organs to help support the pregnancy called the placenta and the amniotic sac.

Physical changes:

- Skin blemishes or dryness
- Gums may be tender and bleed easily throughout your pregnancy
- Vaginal dryness

Feelings:

- Tired and tender breasts
- Heartburn/morning sickness/nausea
- Excitement and anxiety of parenting and childbirth
- Decreased sexual drive

Movement: Can't feel the baby yet

Second trimester (Weeks 13-28)



Weight gain: Healthy weight gain is 0.5 -1 lb per week from 12 weeks onward. Should be “showing” now.

Physical changes:

- Breasts have grown
- Color spots on face, stomach and nipples
- Face and body hair may grow and darken in colour
- Blood sugars may be higher due to hormones

Feelings:

- Heartburn
- Backache and discomfort in your ribs
- Often may become more comfortable with being pregnant
- Increased sexual interest

Movement: May be able to feel baby kick as early as 16 weeks

Third trimester (Weeks 29-40)



Weight gain: Healthy weight gain is still 0.5 – 1 lbs (1.1 kg–2.2kg) each week. Your belly will grow and show the most during this trimester.

Physical appearance:

- Spider or varicose veins appear
- Nipples become darker and wider and may leak milk
- Stretch marks (often fade after birth)
- Swollen feet, ankles and hands

Feelings:

- Sleeping is uncomfortable and disrupted
- Dizzy and lightheaded
- Urinating more often

Movement: Early labour contractions called Braxton-Hicks contractions are caused by tightening of the uterus. They are painless and irregular.



Complications During Pregnancy

Gestational diabetes (high blood sugars)

Gestational diabetes is a form of temporary diabetes that occurs during pregnancy and causes your blood sugars to rise too high. It occurs in roughly one out of 20 pregnancies in Canada. Your health care professional will be screening your blood sugar levels throughout your pregnancy to make sure they are in a healthy range.

You are at an increased risk for developing gestational diabetes if you:

- Had gestational diabetes in a previous pregnancy.
- Are over 35 years old.
- Are overweight or obese.
- Have a history of polycystic ovary syndrome (PCOS).
- Have hirsutism (excessive body and facial hair).
- Have acanthosis nigricans (a skin disorder characterized by the appearance of darkened patches of skin).
- Are a member of a population considered to be at high risk for diabetes, including women of Aboriginal, Hispanic, South Asian, Asian or African descent.

If you have gestational diabetes it is very important to work with a dietitian to help you keep your blood sugar levels in a healthy range. The guidelines in this booklet are a good place to start. Keeping active is also very important, if approved by your health care provider.

If your blood sugars are not controlled in a healthy range, your baby could gain too much weight and be at risk of medical problems at birth such as severe breathing issues. Also, your child is more likely to be overweight throughout their life and have blood sugar concerns.

If you had gestational diabetes during your pregnancy, your blood sugars usually return to normal at birth. However, you are at a higher risk of developing type 2 diabetes later in life, so you should continue healthy eating and active living and maintain a healthy body weight. Be sure to visit your health care professional for regular checkups to make sure your blood sugars are in a healthy range.

Pre-eclampsia (pregnancy induced hypertension or high blood pressure)

Pre-eclampsia is high blood pressure combined with protein in the urine that usually occurs after the 20th week of pregnancy. It can be mild to severe and occurs in a small amount of pregnancies. Having high blood pressure while you are pregnant can reduce the flow of blood to your unborn baby, lead to a miscarriage and result in birth defects.

You are more at risk for pre-eclampsia if you:

- Are under 20 or over 35.
- Are overweight or obese.
- Have a medical problem before pregnancy such as high blood pressure, lupus, kidney problems or diabetes.
- Are carrying two or more babies at once.
- Have a family history of pre-eclampsia, particularly if it occurred in your mother or sister.
- Have had it before.
- Had your last baby 10 years ago or more.

The best way to ensure both you and your baby are healthy is to attend all your prenatal appointments regularly so your health care professional can check your blood pressure readings and urine tests.

How is pre-eclampsia treated?

If you have pre-eclampsia, your health care professional will likely suggest bed rest and prescribe some medications. You may or may not be admitted to the hospital for monitoring.

LOWER YOUR RISK

Women who consume higher amounts of calcium are at a lower risk of developing pre-eclampsia. Be sure you are getting enough by choosing three to four servings of milk and alternatives per day.



DIFFICULTY DIGESTING DAIRY FOODS?

If you have a lactose intolerance, lactose reduced milk or fortified soy beverages are available in most grocery stores. Liquid drops that you add to your regular milk or tablets that you take before eating a food or beverage that contains lactose are also available.

Anemia (iron deficiency)

Your iron needs are very high during pregnancy. Not having enough iron during your pregnancy (called “anemia”) has been linked to decreased weight gain, early delivery and low-birth weight babies. Common signs of anemia are fatigue, but since most women feel fatigued during their pregnancy your blood tests are an important way your health care provider can make sure you are getting enough iron.

You are more at risk of iron deficiency (anemia) if:

- You have a diet low in iron.
- You don't take your prenatal supplement regularly.
- You have serious morning sickness or are vomiting regularly.
- You have had two or more pregnancies close together.
- You are carrying more than one baby.
- You had heavy periods before you became pregnant.

How is anemia treated?

- Follow the nutrition recommendations for iron described on page 2.
- Take your prenatal supplement daily and only take an extra iron supplement if prescribed by your health care professional.
- Since iron supplements can cause constipation, be sure to get enough fibre and fluids daily. See the fibre and fluids information found on page 11 of this handout.

Local Contacts

- Alberta Centre for Active Living
www.centre4activeliving.ca
- Alberta Sport, Recreation, Parks and Wildlife Foundation www.cd.gov.ab.ca/asrpwf
- Be Fit for Life Network www.befitforlife.ca
- Growing Food Security in Alberta
www.foodsecurityalberta.ca
- Healthy U www.healthyalberta.com
- Health Link Alberta www.healthlinkalberta.ca
Edmonton, call 780-408-LINK (5465)
Calgary, call 403-943-LINK (5465)
Outside the Edmonton & Calgary,
call toll-free 1-866-408-LINK (5465)
- Parent Link Alberta (Alberta Government)
www.parentlinkalberta.ca
- Sport Alberta www.sportalberta.ca/links.htm

Websites

- Canada's Physical Activity Guide to Healthy Active Living www.phac-aspc.gc.ca/pau-uap/paguide/index.html
- Eating Well with Canada's Food Guide
www.hc-sc.gc.ca/fn-an/food-guide-aliment/index_e.html
- Eating Disorder Education Organization
www.edeo.org
- Food Allergy Network www.foodallergy.org
- Food Safety Information Line
www.foodsafetyline.org



MORE EXERCISE, LESS DIABETES

Research shows that babies of mothers who exercised during pregnancy are at lower risk of developing diabetes and have also shown to score higher on mental tests at age five.

Active Living

Pregnancy may seem like the perfect time to sit back and relax. You likely feel tired and have aches and pains in your back and feet. But unless you're experiencing pregnancy complications, activity will do you and your baby more good than sitting back and relaxing.

Benefits of physical activity during pregnancy

As you lose energy and morning sickness begins, you may need more convincing of the benefits of physical activity. But regular activity, even when you're under the weather, will improve the quality of your pregnancy. Here are some of the benefits of regular physical activity during pregnancy.

Provide the strength and stamina you need for labour and delivery

Giving birth requires strength and stamina, both of which are enhanced through consistent moderate physical activity. Having control over your breathing can help you manage pain and if you experience prolonged labour, increased endurance will be a real help. Additionally, some research has shown that fetuses of women who exercised during pregnancy may tolerate labour better than those of the non-exercisers.

Reduce stress and control mood swings

Pregnancy and becoming a parent are overwhelming life experiences that can leave you feeling mixed emotions – from happiness to anxiety and sadness. Physical activity can improve your mood. Pregnant women who stay active seem to have better self-esteem and a lower risk of depression and anxiety.

Music to exercise to:



EXERCISE BEFORE, DURING AND AFTER PREGNANCY

If you would like your health care professional to assess your readiness for activity checkout the PARmed-X for Pregnancy Physical Activity Readiness questionnaire on the Canadian Society for Exercise Physiology website: www.csep.ca.

Manage some of the discomforts of pregnancy

Throughout your pregnancy you may experience different levels of swelling, leg cramps, shortness of breath, backaches, varicose veins and constipation. When you're inactive for long periods of time, you'll only enhance your discomfort as your muscles tighten and your blood circulation and energy drops. Physical activity gets the heart pumping, improves blood flow to all areas of the body and helps move fluid within cells. Movement eases back ache and improves your posture by strengthening and toning muscles in your back, buttocks and thighs.

Improve your energy levels

Pregnancy will cause you to feel fatigue in situations that would normally be manageable. Regular movement such as walking, swimming or cycling strengthens your cardiovascular system and increases your stamina. Resistance activities like weight training or yoga keep muscles strong and toned so you'll need less effort to engage in day-to-day activities. Not only is exercise energizing, but it can help you relax and reduce stress, which will help you wind down more easily at the end of the day.

Promote healthy weight management

Weight gain is a normal part of pregnancy, but many women worry about gaining too much extra weight. Physical activity can help you manage your weight better and your body will have an easier time bouncing back after you give birth.

Decrease your risk of developing diabetes during pregnancy

Regular physical activity not only reduces the risk of developing diabetes during pregnancy but can help manage blood sugar levels in those who have it. Physical activity increases the efficiency of your body's own insulin (the hormone that regulates blood sugars in your body).



Activities I can do:



ASK YOUR DOCTOR

No matter your fitness level or experience with pregnancy and exercise, it's essential that you visit your family physician **BEFORE** you begin exercising to ensure a safe, healthy and active pregnancy.



REST IS BEST

Your health care professional should alert you of serious health concerns connected to your pregnancy. If in doubt, and until you can meet with your health care professional, rest is best.

Is it Safe for Every Pregnant Woman to Exercise?

For most healthy mothers-to-be with no pregnancy-related problems, physical activity is not only safe but recommended. For some pregnant moms with health issues or pregnancy complications, exercising may pose risks. In either case, consult your health care professional before beginning a physical activity program even if you were already active before your pregnancy.

Safer activities

- Walking, jogging, cycling (stationary bike preferred), group-led classes (low/moderate impact), dance classes, swimming, pool aerobics, yoga*, pilates* or resistance training.*

* These activities may include some positions that should be avoided while pregnant. Talk to your health care professional, check in with your instructor and listen to your body.

Higher risk activities

- Rollerblading, ice skating, downhill skiing or snowboarding, cross-country skiing, water skiing, scuba diving, soccer, basketball, contact activities (hockey, football, rugby or martial arts), parachuting, repelling or climbing.

Once your health care professional gives you the go ahead to begin your physical activity, you can increase your enjoyment by:

- **Listening to your body**
You know what is best for you and your baby. It's OK to lower the intensity of your physical activity during pregnancy if fatigue or discomfort is present. Avoid exercising so strenuously that you don't have energy for the rest of your day. This is especially important in the third trimester when your baby's needs for nutrition and growth are the greatest.
- **Staying cool**
To ensure you and your baby do not become overheated, avoid exercising in warm and humid climates (including pools where the water temperature is high) and avoid using saunas and hot tubs.
- **Lightening up**
Avoid heavy lifting tasks and prolonged standing during pregnancy, particularly in the third trimester.

Signs you should stop exercising

Consult your health care professional immediately if you experience any of the following:

- Blurred vision, dizziness or excessive fatigue.
- Severe nausea, shortness of breath or chest pain.
- Unexplained abdominal pain, contractions or vaginal bleeding.
- Any "gush" of fluid from the vagina.
- New or increased back or pelvic pain.
- Sudden swelling of the ankles, hands or face.
- Pain, redness and swelling in the calf of one leg.
- Persistent headaches.
- Failure to gain weight.
- Absence of—or a change in—fetal movements.
- Elevated heart rate or blood pressure following exercise (after one hour).



Exercise Tips for Each Trimester

As your pregnancy progresses, your body will go through many changes that will impact your level of energy and your ability to keep active. Refer to the chart below for trimester specific guidelines to help you exercise safely during all stages of your pregnancy.

GET PREPARED FOR PHYSICAL ACTIVITY

- Wear a supportive bra as well as loose clothing that will breathe and keep you from overheating. If outdoors, wear a hat and sunglasses for added protection.
- Purchase running shoes with good support and cushioning. To ensure a proper fit, purchase shoes later in the day when feet are usually a bit swollen.
- Carry a water bottle, and take small, frequent drinks through out your workout session.



First trimester

If you were inactive prior to becoming pregnant, **gradually increase** your aerobic activity to 20–30 minutes per session.

If you have been active prior to your pregnancy, maintain that level and slowly build to a maximum of **30 minutes**. If you have been exercising for longer than 30 minutes, reduce your time to 30 minutes.

During aerobic activity **monitor and control the duration** and intensity of your sessions. Exercise at a level so you are able to talk comfortably (without laboured breathing) during your workout.

During strength training, **avoid breath holding** and exhale on the effort of each repetition. Avoid lifting to failure on any of your weight sets. Rest sufficiently between exercises and sets.

Second trimester

After the fourth month of pregnancy, **avoid lying on your back** while exercising. This may cause light-headedness and can interrupt blood flow to your baby.

Discuss your physical activity progress with your health care professional at every visit and adjust your plan accordingly.

Abdominal exercise must now be done on **hands and knees** or on your side.

Maintain (don't increase) your exercise duration and intensities even though you may feel more energetic and less nauseous.

Third trimester

In the third trimester your goal is to **prepare for the birth of your baby**. Listen to your body and give yourself permission to rest.

Reduce your exercise duration to no more than **30 minutes**.

By the third trimester your center of gravity has changed and may cause you to **lose your balance** more easily. Watch your step at all times, but particularly when exercising.

Choose activities with less risk of falling: stationary bike, stair master, walk, swim, elliptical machine or pool exercises.

Avoid using weights and do **body-resistance exercises only**.

Stretching should be gentle as presence of the hormone relaxin can contribute to pain and overstretching.

Staying Motivated

During pregnancy, it's important to find ways to stay motivated when fatigue and discomfort may be convincing you to take a break. Start by choosing activities you enjoy that fit into your daily schedule, listen to your body and use these tips for additional motivation!

1. Start small. You don't need to join a gym or buy expensive workout clothes to get in shape. Just get moving. Go for a daily walk through your neighbourhood, try a prenatal exercise video right in your living room or even dance to your favourite music!

2. Find a workout buddy. Exercise is more enjoyable and interesting if you don't have to do it alone. Use the time to connect with a friend. Better yet, involve the whole family.

3. Motivate with music. Listen to music or a book while you exercise. Choose upbeat songs to energize your workout. Just remember to keep alert if using headphones outdoors.

4. Join a class. Many fitness and community centres offer classes designed for pregnant women. It can be very reassuring to exercise with other pregnant women. Choose a class that fits your interests and schedule.

5. Try something new. Get creative with your active time. Consider hiking, rowing, dancing or even Tai Chi!



6. Track your progress. Record what you did during each exercise session, how long you exercised and how you felt afterward. Recording your efforts can help you stay motivated and also track changes as your pregnancy progresses.

7. It's OK to take a breather. Your tolerance for strenuous exercise will decrease as your pregnancy progresses. If your body tells you to take a rest, then listen! A nice warm bath can be a great way to relax and ease aches and pains. Avoid hot tubs or baths with temperatures above 38° C (100° F).

8. Reward yourself. After each exercise session, take a few minutes to sit down and relax. Reflect on what you've just accomplished and savour the good feelings that exercise gives you. This type of internal reward can help you make a long-term commitment to regular exercise. External rewards can help, too. When you reach a longer range goal, treat yourself to a new pair of walking shoes or new tunes to enjoy while you exercise.

Serious Lifestyle Risks



Smoking

If you smoke or breathe in second-hand smoke, toxic chemicals are passed along to your baby and your baby will get less oxygen and nutrients. Babies born to women who smoke or breathe second-hand smoke are:

- More likely to be born premature and weigh less.
- At an increased risk of sudden infant death syndrome (SIDS).
- More likely to get sick and have developmental problems.

To reduce these serious risks, quit smoking and avoid second-hand smoke, especially during pregnancy and breast feeding. For more information and help with quitting, talk to your health care provider.



Alcohol

During pregnancy **no amount of alcohol is safe** to drink at any time. Alcohol negatively and severely affects the growth and development of your baby and can cause brain damage, permanent birth defects and mental disabilities. There is no cure for alcohol-related birth defects and brain damage. The harm will last a lifetime for your baby.

- Drinking alcohol during breastfeeding can also affect your baby since alcohol can end up in the breast milk.
- Drink water, milk, fruit or vegetable juice instead of beer, wine or spirits.
- Talk to your health care provider if you are struggling with drinking alcohol.



Illegal drugs and prescription medications

There are many prescription, over-the-counter and street drugs that will seriously affect the health of your baby if taken during pregnancy or breast feeding. Ask your health care professional or pharmacist before taking any home remedies, medications or drugs.

If you are struggling with an addiction to drugs, ask your health care professional to refer you to an addictions program or consult your community health centre.

1-866-33AADAC HELP LINE

(Alberta Only) AADAC offers alcohol, other drug, and tobacco information, support, and referral services to callers accessing this toll-free, 24 hour, and confidential help line.

Detecting Diseases

As part of good prenatal care for you and your baby, several routine tests to detect infectious diseases are recommended. These tests include screening for infection with **hepatitis B**, **syphilis** and **HIV**, and testing for immunity to **rubella** and **chickenpox**. Early detection means that steps can be taken to reduce the risk of harm to you and your baby.

If you have **hepatitis B**, there is a risk that your baby will be infected. If your infection is known, your baby can be given treatment that will help to prevent infection.

Syphilis is an infection that you can get before or during pregnancy. It can be treated with antibiotics but if not treated immediately, a pregnant woman with syphilis can pass it on to her baby, sometimes causing miscarriage, stillbirth, birth defects or low birth weight.

HIV is an infection that can be passed on to your baby during pregnancy, at delivery or during breastfeeding. You can have HIV for years and not know it or feel sick. To get help for yourself and your baby, you need to know for sure by getting tested.

Rubella and **chickenpox** are viruses which most adults are immune to. Immunization may be offered following delivery if you are not immune.

TESTING AND CARE

For more information on testing and care for women during pregnancy, talk to your health care professional or midwife or call: Health Link Alberta. Information is also available at www.health.gov.ab.ca



Post Pregnancy: Taking Care of Mom

Taking care of yourself, eating healthy food and gradually returning to an active lifestyle is just as important as taking care of your new baby. Your healthy eating and physical activity habits are also important to help set a good example for your child for an entire lifetime. Over time healthy eating and activity levels can also help you to lose your pregnancy weight. Be patient, weight loss can take up to one year.

Post pregnancy nutrition

Continue taking your prenatal supplement until you have finished breastfeeding. Once you are no longer breastfeeding you can take a daily multivitamin. This is especially important if you are planning another baby since you will need to once again take a folic acid (folate) supplement of 0.4 mg (400 micrograms) per day for at least a few months before trying to get pregnant and throughout the entire pregnancy.

If you are breastfeeding, continue to eat 350 to 450 calories extra per day to support a healthy milk supply for your baby, as well as gradual weight loss. A healthy diet also provides you with the nutrients and energy you need to recover from the pregnancy and delivery.

During and after breastfeeding, follow the recommendations in Eating Well with Canada's Food Guide. To download a copy visit <http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/index-eng.php>.

CAN I STAY ACTIVE WHILE BREASTFEEDING?

Some people believe that you should not exercise while breastfeeding as the lactic acid can sour your breast milk. This is not true. Lactic acid may affect the taste of the breast milk (like many of the foods you eat) but it will not make your milk sour. It also won't make your baby reject the breast or cause gassiness in your baby.

When can I start exercising again?

If pregnancy and delivery are uncomplicated, a mild exercise program of walking, pelvic floor exercises and stretching all muscle groups may begin immediately. Start slowly and give your body time to heal. Most recommendations suggest four to six weeks of rest and recovery, post delivery, to ensure proper rest and healing.

Enjoy this time after birth to bond with your baby. Many of the physical and emotional changes that occur with pregnancy will persist for several months after delivery. The length and difficulty of your delivery will determine how soon you should return to a normal exercise routine. So listen to your body and don't rush the process.

Once you do start moving, remember to start at a lower level than where you were before your pregnancy. Your body is still adjusting to the changes it has been through in the past nine months and the physical effects will take many months to reverse. In the coming weeks and months you will also be balancing your responsibilities as a new mom. Pace your efforts and don't let yourself get overly tired. Tend to your baby's needs and enjoy your time together.

Exercise guidelines

For cardiovascular training, walking is a safe and effective way to get moving. At this time, don't be too concerned with weight loss. As you eat well and begin physical activity, your weight will naturally adjust. Gradually build from 15 minute walks to 30 minutes or more, most days of the week.

For strength training, do Kegel and core exercises as well as body resistance exercises like walking lunges and pushups as these will strengthen legs and upper torso and also improve your balance.

REMAINING SMOKE FREE

For both your health and the health of your baby, it is still recommended that you not smoke. In order to decrease the risk of ear infections, colds, SIDS (Sudden Infant Death Syndrome) and respiratory problems in your baby, smoking should not be allowed near your baby or in the baby's home.

Baby Name: _____

Birthdate: _____

Weight: _____

Date I plan to start exercising again: _____

Moms I can invite to exercise with me: _____





Call for help

HEALTH LINK ALBERTA

For health advice or information, contact health link Alberta to speak to a registered nurse 24 hours a day, seven days a week at 780-408-LINK (5465) in Edmonton, 403-943-LINK in Calgary or outside the local calling areas, call toll-free 1-866-408-LINK.

