

Diabetes in Pregnancy

Gestational Diabetes

Information on:

What is Gestational Diabetes?

Healthy Eating

Healthy Blood Sugar levels or targets

Active Living



Saskatchewan
Ministry of
Health

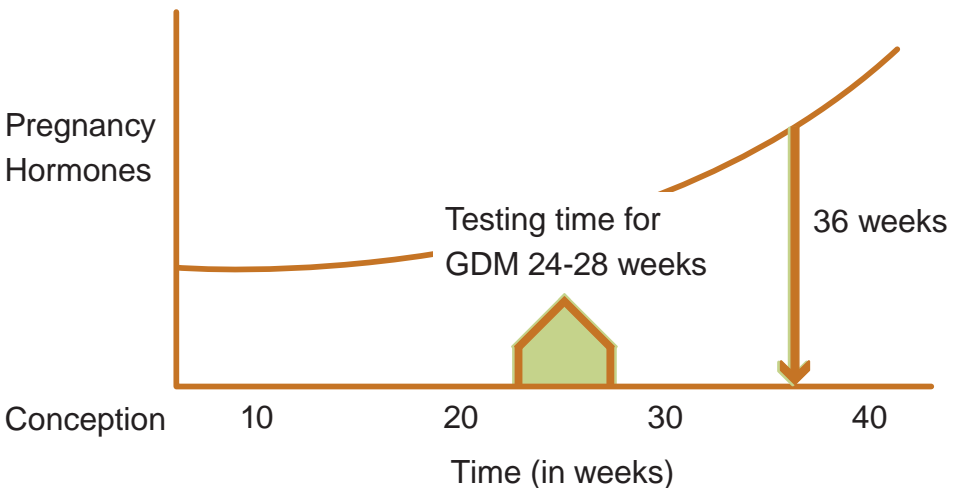
Gestational Diabetes

Gestational Diabetes (GDM) means diabetes during pregnancy.

- Hormones during pregnancy make it harder for insulin to work in your body
- Insulin is a hormone made by your pancreas and it is needed to help move sugar from your blood to your cells for energy
- The pancreas must make 2-3 times more insulin during pregnancy to keep your blood sugars within a normal and healthy range
- GDM develops when the pancreas cannot make enough insulin to keep up with the pregnancy hormones
- GDM is most common during the second half of pregnancy



How do your hormones change during pregnancy?



Women with a greater likelihood of having gestational diabetes should be screened during the first 3 months of their pregnancy.

How is it decided that you have GDM?

All pregnant women should be screened for gestational diabetes (GDM). At 24 – 28 weeks of your pregnancy, your blood sugar levels will be measured after a sweet drink.

How would you know if you are more likely to develop GDM?

- Someone in your family has diabetes
- You come from a high risk ethnic group
 - Aboriginal or Asian
- You are overweight
- You previously had GDM or a large baby who weighed over 4 kg (9 pounds)
- You are 35 years or older



How does it affect your baby?

High blood sugar levels can be unhealthy for both you and your baby.

- Your baby may have problems at birth and may have a low blood sugar level (hypoglycemia) after birth. This may cause drowsiness, irritability and feeding problems.
- Your baby may have difficulty breathing
- Your baby may have jaundice
- Your baby may weigh much more than normal and could be at higher risk for obesity and Type 2 diabetes as a child or young adult.

How does it affect you as a mother?

- If your baby is very large:
 - You may have a more difficult delivery or need a caesarian section (C-section)
 - There is an increased chance of premature birth
- There is a greater chance of you gaining too much weight and developing Type 2 diabetes after the pregnancy.

What can you do to take care of yourself & your baby?

1. Eat healthy and spread your food intake over the day.
2. Be physically active.
3. Do blood tests to monitor your blood sugars.

If healthy eating and physical activity are not enough to control your blood sugars, you may also need to take insulin, or diabetes medications.

How Should You Eat?

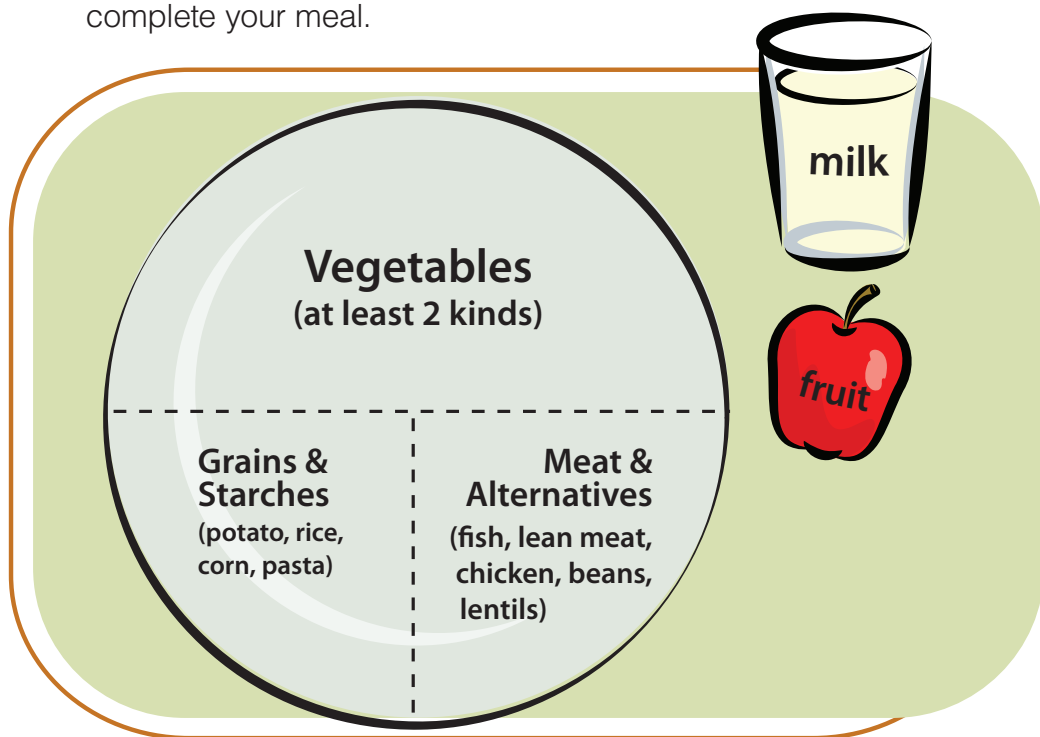
Healthy Eating Guidelines

- ✓ Try to eat every 2 to 3 hours. This usually means eating 3 balanced meals and 3 healthy snacks each day. Breakfast should be a small meal because blood sugars tend to be high in the morning.
- ✓ Follow ***Eating Well with Canada's Food Guide***.
- ✓ Take a prenatal multivitamin that contains folic acid and iron everyday. A health care provider can help you find the multivitamin right for you.
- ✓ Avoid high sugar foods and drinks (regular pop, juice, punch, jam, candy, sugar-added snacks, cookies, purchased muffins and cereals) because they will cause your blood sugar to rise quickly.
- ✓ Limit coffee, strong tea, and diet cola to 2 cups per day. Use only herbal tea considered safe in pregnancy (ie: Citrus peel, ginger, lemon balm, and rosehip).
- ✓ Artificial sweeteners and foods containing aspartame, sucralose, and acesulfame potassium (ie: Splenda, Equal) are considered safe in moderate amounts. Cyclamate or saccharin should be avoided during pregnancy.

- ✓ Choose foods prepared with little or no added fat, sugar, or salt
Ask your healthcare provider for information on reading labels.

Tips To Help You Plan Your Plate

- ✓ Enjoy a variety of foods from the four food groups of ***Eating Well with Canada's Food Guide*** at every meal.
- ✓ Eat plenty of vegetables. They are very high in nutrients and most do not affect blood sugar levels.
- ✓ Choose starchy foods at every meal such as whole grain breads and cereals, rice, pasta, or potatoes. Starchy foods are broken down into sugar that your body needs for energy.
- ✓ Include fish, lean meats, low fat cheese, eggs, nuts, nut butters, or legumes (dried peas, beans, and lentils) as part of your meal.
- ✓ Have an 8 oz (250ml) glass of milk and a small piece of fruit to complete your meal.



See a Registered Dietitian to help you plan meals and snacks for a healthy pregnancy and blood sugar control.

Carbohydrates

- ✓ You need carbohydrate as the main source of energy for you and your growing baby. Carbohydrates break down into sugar which goes into your blood stream.
- ✓ Carbohydrates include grains and starches, milk, fruit, dried peas, beans and lentils, and sugars.

Pregnancy does not mean you need to eat a lot of extra food. Watch your portion size and use your hands to help you plan your meals.

Fruit



- Choose an amount up to the size of your fist at each meal
- Limit or avoid all types of juice as they increase blood sugar quickly

Grains & Starches



- Choose an amount up to the size of your fist at each meal
- Make at least half of your grains and starches whole grain each day

Milk & Alternatives



- Have 1 cup (250ml) of milk or $\frac{3}{4}$ cup (175ml) of yogurt at each meal
- Choose less than 2% milk fat yogurt or milk

Vegetables



- Choose as many vegetables as you can hold in both hands
- Eat at least one dark green and one orange vegetable each day

Meat & Alternatives



- Choose an amount of protein up to the size of the palm of your hand and the thickness of your little finger at each meal
- Eat at least 2 servings of fish each week

Fats



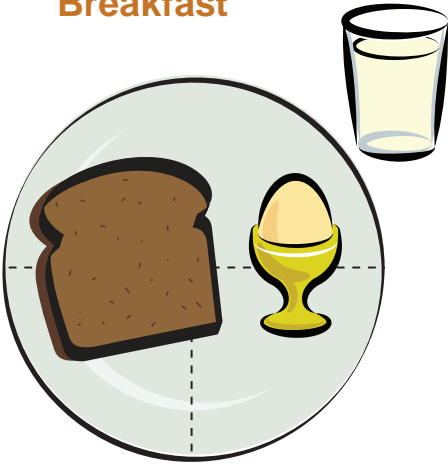
- Limit fat to an amount the size of the tip of your thumb at each meal
- Most of the time, use vegetable oils and fats low in saturated and trans fats

Satisfy your thirst with water!



Sample Menu

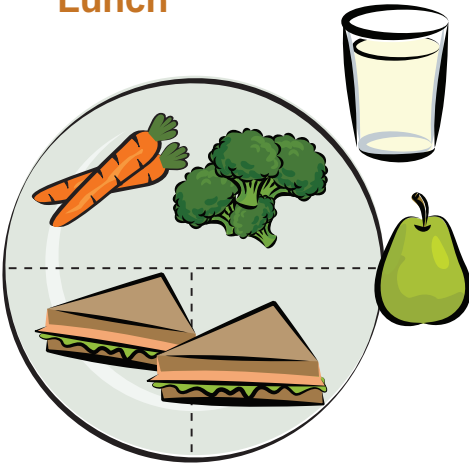
Breakfast



Between meal snack ideas:

Whole wheat crackers (8) with
1 oz/30g low fat cheese
OR
2 plain cookies and
1 cup/250ml milk

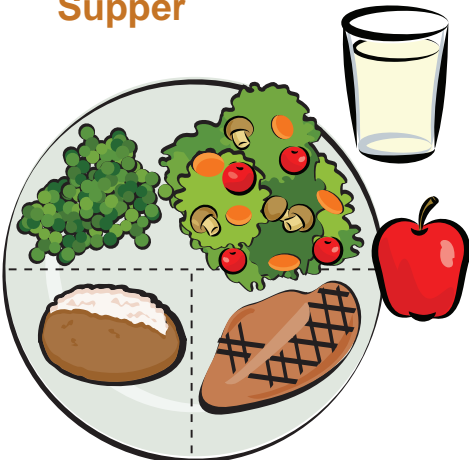
Lunch



Between meal snack ideas:

½ cup/125ml yogurt with
1 cup/250ml strawberries
OR
1 medium apple or banana
with 1 oz/30g low fat cheese

Supper



Bedtime snack ideas:

1 piece of whole wheat toast
with 1 tbsp/15ml peanut butter
OR
Whole grain cereal
and low fat milk

My Blood Sugar Levels

A pull-out record

Refer to the Blood Sugar Targets section in the following pages.

My Blood Sugar

Day		Breakfast		Lunch	
		Before <i>Goal <5.3</i>	1 hour after <i>Goal <7.8</i> 2 hours after <i>Goal <6.7</i>	Before <i>Goal <5.3</i>	1 hour after <i>Goal <7.8</i> 2 hours after <i>Goal <6.7</i>
Week 1	1				
	2				
	3				
	4				
	5				
	6				
	7				
Week 2	1				
	2				
	3				
	4				
	5				
	6				
	7				
Week 3	1				
	2				
	3				
	4				
	5				
	6				
	7				
Week 4	1				
	2				
	3				
	4				
	5				
	6				
	7				

Notes:

What should your Blood Sugar targets be?

- Fasting (before breakfast) and before meals: 3.8 to 5.2 mmol / L
- One hour after meals: 5.5 to 7.7 mmol / L
- Two hours after meals: 5.0 to 6.6 mmol / L

The goal is to have your blood sugars within target.

Insulin may be needed if meal planning and activity cannot keep blood sugars in the target range. If your blood sugar levels are above the target, contact your health care provider.



Checking your blood sugar level is a key part of taking care of yourself and your baby. Use the **My Blood Sugar Levels** record in the middle of this book.

- Your doctor or health care provider will tell you how often you should check your blood sugars
- Check your blood sugars regularly. For example, before you eat, and 1 or 2 hours after eating
- Bring your written record with you when you visit your healthcare provider
- They can help you make any changes needed to your meal plan, activity plan or medication



Any needle you use to check your blood sugar or to take insulin should be thrown into a special container available from your local pharmacy.



Where Does the Extra Weight Go?

It is healthy and normal to gain some weight during pregnancy. The speed of your weight gain is important and it should be steady throughout the pregnancy with a gain of ½ to 1 lb (0.3 kg to 0.5 kg) per week in the second and third trimesters. The amount of weight your body needs to gain depends on your weight before you became pregnant. Please talk to your health care provider about how much weight gain is right for you.



You need to gain more than just your baby's 7½ pounds!

Muscle and Fat – 2.7 kg (6 lbs)

→ To help your body during delivery and breastfeeding

Breasts – 1.1 kg (2.5 lbs)

→ To prepare for feeding your baby

Average Baby - 3.4 kg (7.5 lbs)

Amniotic Fluid – 0.9 kg (2 lbs)

→ The water in which the baby floats and grows

Blood and Extra Fluid - 3.2 kg (7 lbs)

→ To help bring food and air to your baby

Uterus – 1.1 kg (2.5 lbs)

→ Increases in size about 20 times to hold your growing baby

Placenta – 0.7 kg (1.5 lbs)

→ Formed to bring food to your baby and take away waste

What about Active Living?

- Active living is important because it can help to:
 - control your blood sugar
 - prepare your body for childbirth
 - prevent or delay development of diabetes
- Check with your doctor, nurse practitioner or midwife to see how active you can be. Ask your health care provider how to get started
- Active living will help you achieve your blood sugar goals (for example, a 10 to 15 minute walk after meals)
- If you are not used to being active, begin with 5 or 10 minutes every day. As you get stronger, you can increase to 30 minutes or more each time



Safety comes first!

Call your doctor, nurse practitioner or midwife right away if...

- You become dizzy, or have pain while exercising
- You have uterine contractions (labour pains, like stomach cramps) or vaginal bleeding, or your water breaks

Will Gestational Diabetes go away?

- Once you have your baby the GDM usually goes away
- If you have GDM, you are more likely to have GDM with your next pregnancies
- If you have had GDM you have a greater chance of developing Type 2 diabetes in the next several years

What should you do after your pregnancy?

- See your doctor 6 weeks after having your baby to be re-tested for diabetes. Before your next pregnancy have blood sugars tested.
- Eating a well balanced diet following ***Eating Well with Canada's Food Guide*** and being physically active every day will help reduce your risk of developing diabetes later in life

Why should you Breastfeed your baby?

- Breastfeeding may help stop your baby from becoming overweight or developing diabetes later in life
- Breastfeeding helps you to return to your pre-pregnancy weight which can help prevent the development of Type 2 diabetes
- Breastfeeding is the natural, traditional way to feed baby and is the only food your baby will need for the first 6 months



What are your feelings about GDM?

It is not unusual to feel scared, shocked and overwhelmed when you first hear that you have GDM. You are not alone in your efforts to have a healthy baby. You are the most important person in promoting a healthy pregnancy but your health care providers are available to give support. This booklet only provides the basic guidelines and more detailed assistance may be needed. Keep in contact with your health care providers as they can help develop a treatment plan that is unique to you.



Contact Information and Resources

To find a Diabetes Educator:

- Call your local Health Region.
- Call the Saskatchewan HealthLine @ 1-877-800-0002.
- On Reserve, call your local Community Health Clinic or Tribal Council.
- Ask your doctor, nurse practitioner, or midwife.

For Diabetes Information:

Canadian Diabetes Association (CDA)
1-800-BANTING (1-800-226-8464)
www.diabetes.ca

National Aboriginal Diabetes Association
1-877-232-6232
www.nada.ca

First Nations Inuit Health
(306) 780-5449
www.hc-sc.gc.ca/fnih-spni/index_e.html

Saskatchewan HealthLine
1-877-800-0002
www.healthlineonline.ca

Websites

Health Canada
<http://www.hc-sc.gc.ca/fn-an/nutrition/prenatal>

Dietitians of Canada
www.dietitians.ca

Health Canada- Canada's Food Guide
www.healthcanada.gc.ca/foodguide

Saskatchewan Ministry of Health
www.health.gov.sk.ca

In Motion
www.in-motion.ca

Saskatchewan Prevention Institute
www.preventioninstitute.sk.ca

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