

Diabetes in Pregnancy: Overview

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What Is Gestational Diabetes (GDM)?

Diabetes means that your body does not use the sugars in food the way it should. The hormone, insulin helps the body use sugar from your blood for energy. When you have diabetes, your body either does not make enough insulin or it does not use insulin as well as it should. This causes sugar (also called glucose) to build up in the blood.

GDM is when diabetes is found during pregnancy. This happens because the hormones from pregnancy and the placenta prevent the body from using insulin the way it should.

About 1 in 20 women will have GDM. It is more common in women who are overweight before pregnancy or who have family with diabetes. However, any woman can get diabetes during pregnancy.

Risks Of High Blood Sugar In Pregnancy

High blood sugars can cause the baby to grow too large and make giving birth hard. Some babies born to women with GDM will develop problems after birth, like low blood sugar or trouble breathing. If the mother learns how to manage her blood sugar, these problems are less likely to occur.

Other risks of elevated blood sugar:

- Stillbirth
- Birth defects (typically in women with pre-existing diabetes)
- Obesity
- Blood pressure problems
- Early onset type 2 diabetes for the child later in life.

Diabetes in pregnancy does not cause babies to be born with diabetes.

What Do I Do After Being Told I Have GDM?

1. Check your blood sugar:

You will need to check your blood sugar 4 times per day:

- Fasting (first thing in the morning before you eat anything): goal is 60-94
- One hour after the first bite of each meal: goal is less than 140.

Bring your log to every appointment

How to check your blood sugar

1. Put the test strip in the meter to turn it on.
2. Clean your finger using alcohol swab.
3. Prick the side of your clean, dry fingertip. Be sure to rotate fingers each time.
4. Wipe away the first drop of blood.
5. Touch a drop of blood from your finger to the test strip.
6. A few seconds later, the meter will show a number. This is your blood sugar.
7. Record this number on your log.
8. Bring your log to EVERY appointment.

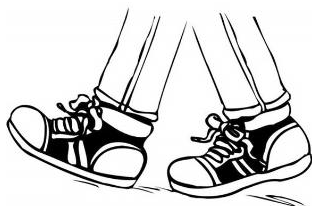
Needle Disposal: Used needles should be placed in a hard plastic (ex. Detergent jug), or metal container (ex. empty coffee can). The container should be sealed and labeled “**Sharps**” before throwing away in regular trash. Do not recycle.

2. Get Moving

Physical Activity can help keep your blood sugar stable and helps to lower your blood sugar when it is running high. All pregnant women should try to have regular physical activity. Talk with your provider about what might be good for you to try.

Try for at least 30 minutes of Physical Activity each day.

Ideas for Physical Activity



Go for a walk



Dance



Take the stairs

Reasons to Stop Physical Activity Right Away

If you have any of the following, stop physical activity and call your doctor right away:

- Contractions, cramps, bleeding, or labor pains
- Any kind of pain in your chest or stomach, or below your waist
- Dizziness, shortness of breath, or trouble breathing
- Heartbeats that are too fast
- Trouble walking



3. Meal Plan

- Eat more protein and fewer carbohydrates (carbs)
- Your provider will refer you to a dietician to discuss food choices for people with diabetes.
- Eating fruit or drinking milk at breakfast *might* make blood sugar too high.
- You may be more sensitive to carbs in the morning.

MEAL PLAN

	Breakfast	Snack	Lunch	Snack	Dinner	Snack
Carbohydrate Servings	2 (30 grams)	1 (15 grams)	3 (45 grams)	1 or 2 (15-30 grams)	3 (45 grams)	1 or 2 (15-30 grams)
Protein*	20-30 grams	7-10 grams	20-30 grams	7-10 grams	20-30 grams	7-10-grams
Examples:	1 slice of whole wheat toast + 6 ounces Greek yogurt + 2 scrambled eggs	6 whole wheat crackers + 1-2 cheese sticks	1 corn tortilla + ½ cup beans + 3 oz chicken + non-starchy vegetables + 1 small orange	1 small apple + 2 Tbsp. peanut butter or 1 oz nuts	1 cup of rice + 3-4 oz low mercury fish + non-starchy vegetables	1 cup milk + 3 graham cracker squares + peanut butter

*1 serving of protein= 7 grams

4. Medicine

If you are not able to manage blood sugar with changes in food choices and physical activity, your provider may start you on medicine such as insulin. In order for your provider to help you manage your GDM, please bring your blood sugar log to every appointment.

Hypoglycemia (Low Blood Sugar)

Signs and Symptoms

Here's what may happen when your blood sugar is low:



If low blood sugar is not treated, it can become severe and cause you to pass out.
If low blood sugar is a problem for you, talk to your doctor or diabetes care team.

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Treatment

If your blood sugar is **less than 60** eat one of the following:

- 7 lifesavers
- 1 tablespoon of honey
- drink half a glass of juice
- 4oz of soda
- 8oz of skim milk

Re-check in 15 min. If it is still less than 60, repeat until it comes above 60. If it takes more than 3 tries, eat a meal and **call** the high risk OB nurse advice line or on-call provider.

If left untreated, low blood sugar can cause you to pass out. If this occurs it is an *emergency* and someone must give you an injection of glucagon and call 911.

Hyperglycemia (High Blood Sugar)

Signs & Symptoms

Here's what may happen when your blood sugar is high:



Very thirsty



**Needing to pass urine
more than usual**



Very hungry



Sleepy



Blurry vision



**Infections or injuries
heal more slowly
than usual**

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What should I do if my blood sugar is high?

If your fasting blood glucose is 126 or more for 2 days, call the clinic. If your blood glucose levels at any time are *200 or more for 2 days*, leave a message for the nurse. Your call will be returned by the next business day.

If blood sugar is *EVER 250 or MORE*, call the urgent OB advice line.

Life After Pregnancy

Many patients who have diabetes during pregnancy no longer have it after baby is born.

However, women who have diabetes during pregnancy are at high risk for developing diabetes within the next 5 years. To reduce this risk, continue making changes towards a healthy lifestyle. Involving your family in these changes will build a support team and help you stick to it while helping them get healthier as well.

At your postpartum visit, your provider may ask you to do a 2 hour fasting glucose or check your hemoglobin A1C as a follow up to having GDM.

When the baby is born, he/she will have blood sugars done with a heel prick. If the blood sugar is low (hypoglycemia), it will be done more often. If the blood sugar is too low or stays low, baby may need to be watched more closely in the Newborn Critical Care Center (NCCC).

What can I do to help lower risk of newborn low blood sugar?

- Skin to Skin

Having your baby skin-to-skin right after birth and maintaining skin to skin for the first few hours reduces his/her stress, raises blood sugar and leads to early feeding. If mom is not able, the father or partner can place baby skin to skin until mom is able. Having the baby skin to skin with mom will help the baby to breastfeed early.

- Breast Feeding

Breastfeed or provide breastmilk for your baby, even if only for a short time. Breastmilk can help raise blood sugar and provide some protection for the brain against low blood sugar. Ideally, a baby should eat ***within an hour after birth.***

- Keep Baby Warm

Being cold causes stress to the newborn and causes them to use up sugar as a fuel source to keep warm, and can lead to low blood sugar. Keeping baby skin to skin is one of the best ways to keep baby warm. Be sure that you and baby are both dry, that baby has on a hat and his or her body is covered by a warm blanket. If baby needs to go back to bed, make sure baby is swaddled and has a hat on. You may want to call your nurse for help until you feel ready.

What are the symptoms of newborn low blood sugar?

Symptoms of low blood sugar may not be obvious in newborn babies and each baby may experience it differently. Many babies have few or no symptoms.

- Shakiness
- Not being active/very sleepy or floppy
- Not feeding well
- Breathing problems
- Skin that is bluish or feels cold

If your baby is having any of these symptoms call your nurse right away.

What is the treatment for low blood sugar in the newborn?

Your baby's treatment will be determined by:

- Your baby's gestational age, overall health, and medical history
- Your baby's tolerance
- Your opinion or preference

Treatment options include:

- Giving your baby extra milk (supplement). This does not mean you don't have enough milk or shouldn't breastfeed; it is only because your baby needs a little extra food to raise his/her blood sugar. This can be your expressed milk, donated pasteurized breastmilk or formula.
- Giving your baby a fast-acting source of sugar
- Giving sugar right into the baby's bloodstream through an IV. The baby may need this for several days, but he or she can usually still feed from the mother's breast or bottle during this time.

Your baby will be closely watched during treatment. This may include having more blood glucose checks and may require admission to the NCCC. Treatment can last from a few hours to a few days. Your baby will come back to you when his/her blood sugar remains in target range with only feedings and there are no other medical concerns.

What about when I get home?

Your child's healthcare provider may suggest a special feeding schedule for your baby. Be aware of your baby's signs of hunger and allow time for frequent feedings. Keep baby warm. If your baby is not feeding well, has symptoms of low blood sugar, or has a low temperature even with your efforts to warm him/her call your baby's healthcare provider.

BLOOD SUGAR LOG

Instructions: Check your blood sugar 4 times a day; fasting (first thing in the morning) & one hour after eating first bite of food at a meal. In the notes section, please include under “NOTES” any special circumstances or food choices that may have affected your results.

DATE	FASTING Goal: 60-94	1 HR. AFTER BREAKFAST Goal: Less than 140	1 HR. AFTER LUNCH Goal: Less than 140	1 HR. AFTER DINNER Goal: Less than 140	NOTES

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OBGYN Clinics Contact Information

On call OB pager for urgent afterhours needs: 919-216-2864

UNC Maternal Fetal Medicine Raleigh

Scheduling: 919-784-6425

Nurse Advice Line: 984-215-3781

UNC Maternal Fetal Medicine at Vilcom Center

Scheduling: 984-215-5000

Nurse Advice Line: 984-215-5001

UNC OBGYN at Weaver Crossing

Scheduling: 984-974-7005

Nurse Advice Line: 984-974-9473

UNC OBGYN at Panther Creek

Scheduling: 919-481-4747

Nurse Advice line: 984-974-9473

Operador del hospital: **984-974-4131**

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