

What I need to know about Gestational Diabetes



NATIONAL INSTITUTES OF HEALTH
National Diabetes Information Clearinghouse



U.S. Department
of Health and
Human Services

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What is gestational diabetes?

Gestational (jes-TAY-shun-ul) diabetes is diabetes that is found for the first time when a woman is pregnant. Out of every 100 pregnant women in the United States, three to eight get gestational diabetes. Diabetes means that your blood glucose (also called blood sugar) is too high. Your body uses glucose for energy. But too much glucose in your blood can be harmful. When you are pregnant, too much glucose is not good for your baby.

This booklet is for women with gestational diabetes. If you have type 1 or type 2 diabetes and are considering pregnancy, call the National Diabetes Information Clearinghouse at 1-800-860-8747 for more information and consult your health care team before you get pregnant.



Gestational diabetes is diabetes that is found for the first time when a woman is pregnant.

What causes gestational diabetes?

Changing hormones and weight gain are part of a healthy pregnancy. But both changes make it hard for your body to keep up with its need for a hormone called insulin. When that happens, your body doesn't get the energy it needs from the food you eat.

What is my risk of gestational diabetes?

To learn your risk for gestational diabetes, check each item that applies to you. Talk with your doctor about your risk at your first prenatal visit.

- I have a parent, brother, or sister with diabetes.
- I am African American, American Indian, Asian American, Hispanic/Latino, or Pacific Islander.
- I am 25 years old or older.
- I am overweight.
- I have had gestational diabetes before, or I have given birth to at least one baby weighing more than 9 pounds.
- I have been told that I have “pre-diabetes,” a condition in which blood glucose levels are higher than normal, but not yet high enough for a diagnosis of diabetes. Other names for it are “impaired glucose tolerance” and “impaired fasting glucose.”

If you checked any of these risk factors, ask your health care team about testing for gestational diabetes.

- You are at **high risk** if you are very overweight, have had gestational diabetes before, have a strong family history of diabetes, or have glucose in your urine.
- You are at **average risk** if you checked one or more of the risk factors.
- You are at **low risk** if you did not check any of the risk factors.

When will I be checked for gestational diabetes?

Your doctor will decide when you need to be checked for diabetes depending on your risk factors.

- If you are at **high risk**, your blood glucose level may be checked at your first prenatal visit. If your test results are normal, you will be checked again sometime between weeks 24 and 28 of your pregnancy.
- If you have an **average risk** for gestational diabetes, you will be tested sometime between weeks 24 and 28 of pregnancy.
- If you are at **low risk**, your doctor may decide that you do not need to be checked.

How is gestational diabetes diagnosed?

Your health care team will check your blood glucose level. Depending on your risk and your test results, you may have one or more of the following tests.

Fasting blood glucose or random blood glucose test

Your doctor may check your blood glucose level using a test called a fasting blood glucose test. Before this test, your doctor will ask you to fast, which means having nothing to eat or drink except water for at least 8 hours. Or your doctor may check your blood glucose at any time during the day. This is called a random blood glucose test.

These tests can find gestational diabetes in some women, but other tests are needed to be sure diabetes is not missed.



Your health care provider will check your blood glucose level to see if you have gestational diabetes.

Screening glucose challenge test

For this test, you will drink a sugary beverage and have your blood glucose level checked an hour later. This test can be done at any time of the day. If the results are above normal, you may need further tests.

Oral glucose tolerance test

If you have this test, your health care provider will give you special instructions to follow. For at least 3 days before the test, you should eat normally. Then you will fast for at least 8 hours before the test.

The health care team will check your blood glucose level before the test. Then you will drink a sugary beverage. The staff will check your blood glucose levels 1 hour, 2 hours, and 3 hours later. If your levels are above normal at least twice during the test, you have gestational diabetes.

Above-normal results for the oral glucose tolerance test*

Fasting	95 or higher
At 1 hour	180 or higher
At 2 hours	155 or higher
At 3 hours	140 or higher

Note: Some labs use other numbers for this test.

* These numbers are for a test using a drink with 100 grams of glucose.

How will gestational diabetes affect my baby?

Untreated or uncontrolled gestational diabetes can mean problems for your baby, such as

- being born very large and with extra fat; this can make delivery difficult and more dangerous for your baby
- low blood glucose right after birth
- breathing problems

If you have gestational diabetes, your health care team may recommend some extra tests to check on your baby, such as

- an ultrasound exam, to see how your baby is growing
- “kick counts” to check your baby’s activity (the time between the baby’s movements) or special “stress” tests

Working closely with your health care team will help you give birth to a healthy baby.

Both you and your baby are at increased risk for type 2 diabetes for the rest of your lives. (See page 16 for information on how to lower your child’s chances of getting type 2 diabetes.)

How will gestational diabetes affect me?

Often, women with gestational diabetes have no symptoms. However, gestational diabetes may

- increase your risk of high blood pressure during pregnancy
- increase your risk of a large baby and the need for cesarean section at delivery

The good news is your gestational diabetes will probably go away after your baby is born. However, you will be more likely to get type 2 diabetes later in your life. (See page 16 for information on how to lower your chances of getting type 2 diabetes.) You may also get gestational diabetes again if you get pregnant again.

Some women wonder whether breastfeeding is OK after they have had gestational diabetes. Breastfeeding is recommended for most babies, including those whose mothers had gestational diabetes.

Gestational diabetes is serious, even if you have no symptoms. Taking care of yourself helps keep your baby healthy.

How is gestational diabetes treated?

Treating gestational diabetes means taking steps to keep your blood glucose levels in a target range. You will learn how to control your blood glucose using

- a meal plan
- physical activity
- insulin (if needed)



Using a meal plan will help keep your blood glucose in your target range.

Meal Plan

You will talk with a dietitian or a diabetes educator who will design a meal plan to help you choose foods that are healthy for you and your baby.

Using a meal plan will help keep your blood glucose in your target range. The plan will provide guidelines on which foods to eat, how much to eat, and when to eat. Choices, amounts, and timing are all important in keeping your blood glucose levels in your target range.

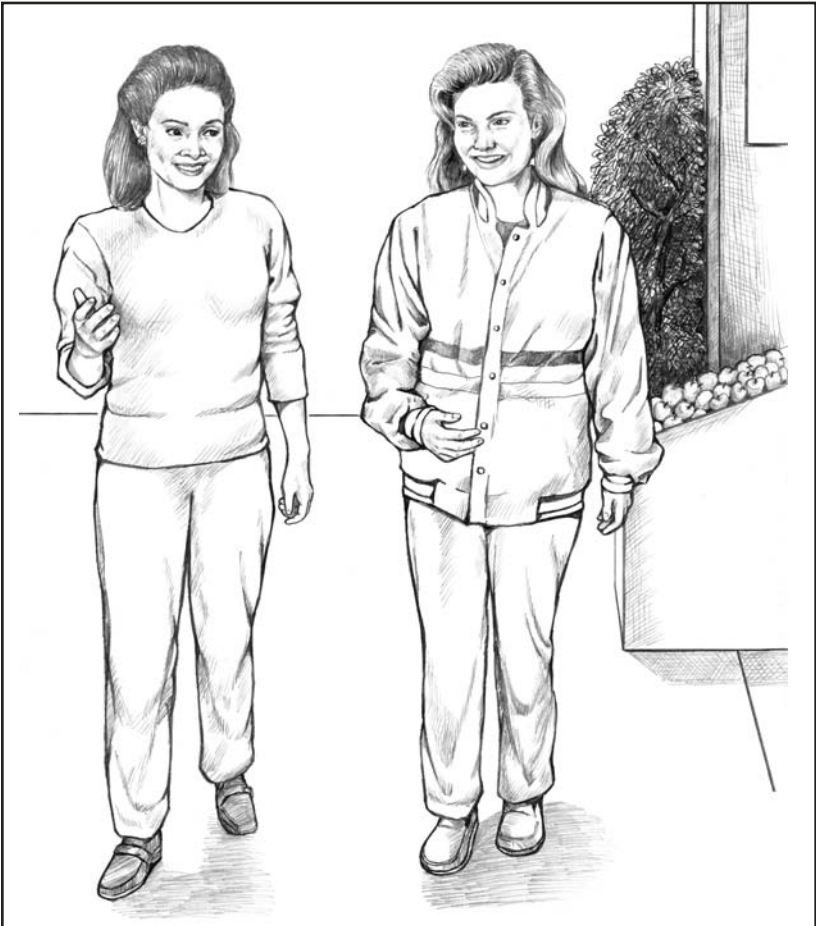
You may be advised to

- limit sweets
- eat three small meals and one to three snacks every day
- be careful about when and how much carbohydrate-rich food you eat; your meal plan will tell you when to eat carbohydrates and how much to eat at each meal and snack
- include fiber in your meals in the form of fruits, vegetables, and whole-grain crackers, cereals, and bread

For more about meal planning, call the National Diabetes Information Clearinghouse for a copy of *What I need to know about Eating and Diabetes* or you can read it online at www.diabetes.niddk.nih.gov/dm/pubs/eating_ez/index.htm.

Physical Activity

Physical activity, such as walking and swimming, can help you reach your blood glucose targets. Talk with your health care team about the type of activity that is best for you. If you are already active, tell your health care team what you do.



Physical activity can help you reach your blood glucose targets.

Insulin

Some women with gestational diabetes need insulin, in addition to a meal plan and physical activity, to reach their blood glucose targets. If necessary, your health care team will show you how to give yourself insulin. Insulin is not harmful for your baby. It cannot move from your bloodstream to the baby's.

How will I know whether my blood glucose levels are on target?

Your health care team may ask you to use a small device called a blood glucose meter to check your levels on your own. You will learn

- how to use the meter
- how to prick your finger to obtain a drop of blood
- what your target range is
- when to check your blood glucose

You may be asked to check your blood glucose

- when you wake up
- just before meals
- 1 or 2 hours after breakfast
- 1 or 2 hours after lunch
- 1 or 2 hours after dinner

The following chart shows blood glucose targets for most women with gestational diabetes. Talk with your health care team about whether these targets are right for you.

Blood glucose targets for most women with gestational diabetes

On awakening	not above 95
1 hour after a meal	not above 140
2 hours after a meal	not above 120

Each time you check your blood glucose, write down the results in a record book. Take the book



with you when you visit your health care team. If your results are often out of range, your health care team will suggest ways you can reach your targets.

Each time you check your blood glucose, write down the results.

Will I need to do other tests on my own?

Your health care team may teach you how to test for ketones (KEE-tones) in your morning urine or in your blood. High levels of ketones are a sign that your body is using your body fat for energy instead of the food you eat. Using fat for energy is not recommended during pregnancy. Ketones may be harmful for your baby.

If your ketone levels are high, your health care providers may suggest that you change the type or amount of food you eat. Or you may need to change your meal times or snack times.

After I have my baby, how can I find out whether my diabetes is gone?

You will probably have a blood glucose test 6 to 12 weeks after your baby is born to see whether you still have diabetes. For most women, gestational diabetes goes away after pregnancy. You are, however, at risk of having gestational diabetes during future pregnancies or getting type 2 diabetes later.



After you have your baby, you can do a lot to prevent or delay type 2 diabetes.

How can I prevent or delay getting type 2 diabetes later in life?

You can do a lot to prevent or delay type 2 diabetes.

- Reach and maintain a reasonable weight. Even if you stay above your ideal weight, losing 5 to 7 percent of your body weight is enough to make a big difference. For example, if you weigh 200 pounds, losing 10 to 14 pounds can greatly reduce your chance of getting diabetes.
- Be physically active for 30 minutes most days. Walk, swim, exercise, or go dancing.
- Follow a healthy eating plan. Eat more grains, fruits, and vegetables. Cut down on fat and calories. A dietitian can help you design a meal plan.

Remind your health care team to check your blood glucose levels regularly. Women who have had gestational diabetes should continue to be tested for diabetes or pre-diabetes every 1 to 2 years. Diagnosing diabetes or pre-diabetes early can help prevent complications such as heart disease later.

Your child's risk for type 2 diabetes may be lower if you breastfeed your baby and if your child maintains a healthy weight.

Where can I get more information?

Diabetes Teachers (nurses, dietitians, and other health professionals)

To find a diabetes teacher near you, call the American Association of Diabetes Educators toll-free at 1-800-TEAMUP4 (1-800-832-6874). Or go to www.diabeteseducator.org and click on “Find a Diabetes Educator.”

Dietitians

To find a dietitian near you, call the American Dietetic Association’s National Center for Nutrition and Dietetics at 1-800-366-1655. Or go to www.eatright.org and click on “Find a Nutrition Professional.”



Health Information

To learn more about pregnancy, contact the National Institute of Child Health and Human Development (NICHD), part of the National Institutes of Health. Call NICHD toll-free at 1-800-370-2943. Or go to www.nichd.nih.gov.

For more information about diabetes, contact the National Diabetes Information Clearinghouse (NDIC) (see the next page) for free copies of these publications:

Managing Diabetes

What I need to know about Diabetes Medicines

What I need to know about Eating and Diabetes

What I need to know about Physical Activity and Diabetes

Your Guide to Diabetes: Type 1 and Type 2

Preventing Type 2 Diabetes

Am I at Risk for Type 2 Diabetes?

Small Steps. Big Rewards. Your GAME PLAN for Preventing Type 2 Diabetes

Or you can read them online at
www.diabetes.niddk.nih.gov/dm/a-z.asp.

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The National Diabetes Information Clearinghouse (NDIC) is a service of the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK). The NIDDK is part of the National Institutes of Health under the U.S. Department of Health and Human Services. Established in 1978, the Clearinghouse provides information about diabetes to people with diabetes and to their families, health care professionals, and the public. The NDIC answers inquiries, develops and distributes publications, and works closely with professional and patient organizations and Government agencies to coordinate resources about diabetes.

Publications produced by the Clearinghouse are carefully reviewed by both NIDDK scientists and outside experts.

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This booklet is also available at www.diabetes.niddk.nih.gov.



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