

Patient information from BMJ

Last published: Aug 03, 2021

Diabetes that develops in pregnancy (gestational diabetes)

Some women get high levels of glucose (sugar) in their blood when they are pregnant. This is called gestational diabetes. If you get this kind of diabetes, it can be harmful to both you and your baby if it isn't treated.

What is gestational diabetes?

Gestational diabetes is a type of diabetes that can happen during pregnancy. If you have diabetes, it means you have too much glucose in your blood. Glucose is a kind of sugar that your body uses for energy.

Gestational diabetes can happen at any time during pregnancy, but it is most likely to develop in the later months. It usually goes away soon after you give birth.

The reasons why gestational diabetes develops are complex. But the simple explanation is that some women's bodies are unable to make enough insulin to deal with the extra demands of pregnancy.

Insulin is a hormone that helps your body use glucose for energy. Without enough insulin, glucose builds up in your blood. This can cause problems for you and your baby. For example:

- gestational diabetes increases your chance of high blood pressure during pregnancy. It also increases your chance of a condition called pre-eclampsia, which can be life threatening
- gestational diabetes can cause your baby to grow too large in your womb. This increases your baby's chance of being injured during birth or of needing a caesarean section (C-section) delivery. Babies born to mothers with gestational diabetes may also have very low blood sugar shortly after birth, or breathing problems.

Gestational diabetes happens in between 3 and 5 of every 100 pregnancies. Things that can increase your chance of getting gestational diabetes include:

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- being pregnant when you are older (over age 40)
- being very overweight
- having gained weight as a young adult (at least 20 kilograms, or around 45 pounds)
- smoking
- having a condition called polycystic ovary syndrome
- having had gestational diabetes in an earlier pregnancy
- having a close family member with type 2 diabetes (the most common type of diabetes)
- having a non-white ancestry: for example, gestational diabetes is more common in women who are South Asian, black, or Middle Eastern.

What are the symptoms?

The most common symptoms of gestational diabetes are:

- having to urinate frequently, and
- being very thirsty.

However, most women don't get any symptoms. This is because pregnant women are usually tested and treated for gestational diabetes before it causes symptoms.

Routine testing of pregnant women for gestational diabetes is called **screening**. Screening for gestational diabetes usually happens in the 24th to 28th week of pregnancy. But some women are tested earlier if doctors think they have an increased chance of having the condition.

Doctors in different countries follow different guidelines for deciding which pregnant women should be offered screening.

- In some countries, such as the UK, doctors offer screening to pregnant women who have an increased chance of having gestational diabetes: for example, if they are very overweight, have a family history of type 2 diabetes, or have had gestational diabetes before.
- In other countries, such as the US, all pregnant women are offered screening for gestational diabetes.

There are two main approaches to screening.

- **One-step testing:** This involves having an **oral glucose tolerance test**. In the morning, you have a blood test to check your glucose level after you've had nothing to eat overnight. You then drink a syrupy glucose drink.

After a certain amount of time, you have further blood tests to see how your body is handling the extra glucose. You are diagnosed with gestational diabetes if your glucose is above a certain level in any of the blood tests.

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- **Two-step testing:** You first have a **glucose challenge test**. This involves drinking a glucose drink and then having a blood test an hour later to see how your body handles the extra glucose.

If your blood glucose is below a certain level, you are unlikely to have gestational diabetes and you don't need another test. But, if it is above a certain level, you then have an **oral glucose tolerance test** to find out if you have gestational diabetes.

This is similar to the oral glucose tolerance test described above. But for this test your glucose must be high in two blood tests for you to be diagnosed with gestational diabetes.

What treatments work?

The goal of treatment is to return your blood glucose level to a range that is healthy for a woman who is pregnant.

Many women will be able to lower their glucose level by changing what they eat and exercising. Others will need to also have insulin injections.

You and your doctor will discuss which treatments are best for you. You will also need to regularly check your glucose level, to make sure your treatment is working.

Diet and exercise

Your doctor, a nurse, or a dietician should work with you to come up with an **eating plan** to lower your glucose level. This will most likely involve eating:

- less fatty and sugary foods, and
- more whole grains, fruit and vegetables, and sources of lean protein, such as chicken and fish.

One diet often recommended is the **low-glycaemic diet**. It focuses on eating foods that release glucose into your bloodstream slowly (such as whole grains), while cutting back on foods that release glucose quickly (such as white bread and sweets).

For example, you might:

- eat porridge in the morning rather than cereal
- have whole-grain bread at lunch rather than white bread, and
- opt for brown rice for the evening meal rather than white rice.

Regular exercise can also help lower your glucose level, as your body uses more glucose for energy when you're physically active.

Your doctor will probably recommend that you try to exercise most days of the week. Good exercise options when you're pregnant include brisk walking and swimming. If you haven't exercised in a while, it's best to start slowly and gradually increase how much you do.

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No single diet or exercise plan is right for all women. Your healthcare team can help you explore what's best for you.

Insulin treatment

If changing your diet and exercising don't lower your glucose level enough, or if your glucose level is very high to begin with, your doctor will probably recommend that you have insulin treatment.

This involves giving yourself daily injections of insulin. Your healthcare team will teach you how to do this.

Your doctor will carefully work out how much insulin you need, to make sure you take an amount that is safe for you and your baby.

Monitoring your glucose level

Keeping a close check on your blood glucose level is an important part of treatment, particularly if you're taking insulin.

Your doctor may recommend that you check your glucose level several times a day: for example, when you first get up and after meals. This will help guide your treatment and ensure that your glucose level is being well controlled.

You can test your glucose level with a device called a glucose meter. It uses a small drop of blood, usually from your finger, to check your glucose. This may sound difficult or scary, but most people get used to it with practice.

What will happen?

If you have gestational diabetes, treatment can help you have a healthy pregnancy and a healthy baby. Your diabetes will probably go away soon after you give birth.

However, you have an increased chance of getting gestational diabetes again in future pregnancies. You can talk to your doctor about how to reduce the chance of this happening if you are planning to become pregnant again.

Women who've had gestational diabetes have an increased chance of getting type 2 diabetes. Just as regular exercise and a healthy diet are important in treating gestational diabetes, they are equally important in helping to prevent type 2 diabetes. Reaching and maintaining a healthy post-baby weight will also lower your risk.

Your doctor will also probably recommend having regular tests to check your glucose level. You will probably be tested in the first few months after giving birth, and at least every few years after. These tests can give you an early warning if your glucose is climbing too high, so you can take steps to lower it.

If you have any questions or concerns, be sure to talk to your doctor.

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