CONDITION

Gestational diabetes

Gestational diabetes is high blood sugar that is first diagnosed during pregnancy.

WHAT IT IS
High blood sugar first diagnosed during pregnancy

BODY SYSTEM
Hormones, metabolism, and pregnancy

MAIN SYMPTOMS
Usually none, thirst, frequent urination, tiredness

WHAT CAUSES IT
Pregnancy hormones causing insulin resistance

HOW IT IS DIAGNOSED
Glucose challenge and oral glucose tolerance testing

MAIN TREATMENT
Food planning, activity, glucose monitoring, sometimes medication

CAN IT BE CURED?
Sometimes - usually resolves after delivery

IS IT AN EMERGENCY?
Sometimes - vomiting with inability to keep fluids down

LONG-TERM OUTLOOK
Most pregnancies do well with careful management

Overview

Gestational diabetes is a condition in which your blood sugar is higher than recommended during pregnancy. It is usually diagnosed in the second or third trimester in someone who did not already have diabetes.

Your body uses a hormone called insulin to move glucose, or sugar, from your blood into your cells for energy. During pregnancy, hormones made by the placenta make insulin less effective. This is called insulin resistance. If your body cannot make enough extra insulin, blood sugar rises.

Gestational diabetes often causes no noticeable symptoms. Screening is important because high blood sugar can affect the pregnancy even when you feel well.

Managing blood sugar lowers the chance of problems such as having a larger-than-expected

baby, pregnancy-related high blood pressure, or low blood sugar in the baby after birth. Management usually involves food planning, physical activity, home glucose checks, and sometimes medication.

Gestational diabetes commonly improves after the placenta is delivered. However, it raises your chance of developing gestational diabetes in another pregnancy and type 2 diabetes later in life. Follow-up after birth remains important even if your blood sugar returns to the usual range.

Symptoms

Most people with gestational diabetes have no symptoms. The condition is often found through routine pregnancy screening rather than because something feels wrong.

When symptoms occur, they may include:

These symptoms can also happen during a pregnancy without diabetes. They do not confirm gestational diabetes on their own.

Frequent infections, including vaginal yeast infections, may occur when blood sugar is high, but they are not specific to gestational diabetes. A blood glucose test is needed to make the diagnosis.

- Feeling unusually thirsty
- Urinating more often than expected
- Feeling very tired
- Blurred vision

Causes and risk factors

Pregnancy naturally increases insulin resistance. This helps make nutrients available to the developing baby. Most pregnant bodies respond by producing more insulin. Gestational diabetes develops when this extra insulin is not enough to keep blood sugar within the recommended range.

It is not caused simply by eating sugar. Food choices can affect blood glucose, but the main cause is the interaction between pregnancy hormones, insulin production, and your body's response to insulin.

Gestational diabetes can occur in any pregnancy. The chance is higher if you:

Age and some medicines can also affect risk. Having a risk factor does not mean you will develop the condition, and having no known risk factors does not rule it out.

Occasionally, testing in early pregnancy finds blood sugar high enough to suggest diabetes was present before pregnancy. This needs assessment because pre-existing diabetes and gestational diabetes are managed somewhat differently.

- Had gestational diabetes in an earlier pregnancy
- Have overweight or obesity before pregnancy
- Have a parent or sibling with type 2 diabetes
- Previously gave birth to a large baby
- Have polycystic ovary syndrome, or PCOS
- Have previously had blood sugar levels above the usual range
- Belong to a population with a higher background rate of type 2 diabetes

Diagnosis

Screening is commonly offered between 24 and 28 weeks of pregnancy. Testing may be offered earlier if you have risk factors or signs that blood sugar may already be high.

Testing methods differ between healthcare systems. Two common approaches are:

For an oral glucose tolerance test, you usually fast beforehand. A blood sample is taken, you drink a measured glucose drink, and further blood samples are collected at set times. This shows how your body handles glucose.

The glucose challenge test does not always require fasting. A blood sample is taken after a glucose drink. An abnormal screening result does not necessarily mean you have gestational diabetes; a longer tolerance test may be needed to confirm it.

Diagnostic glucose thresholds differ slightly among health systems and professional guidelines. Your maternity team should explain which test is being used and what your results mean.

If gestational diabetes is diagnosed, you may be asked to check your blood sugar at home. These checks guide management but are not the same as the original diagnostic test.

- A one-step oral glucose tolerance test
- An initial glucose challenge followed, if abnormal, by an oral glucose tolerance test

Treatment and management

Treatment aims to keep blood sugar within pregnancy targets while supporting adequate nutrition and healthy fetal growth. Your care may involve a midwife, obstetric clinician, diabetes specialist, dietitian, or diabetes educator.

Food planning is usually the first part of management. This does not mean cutting out all carbohydrates. Carbohydrates provide energy and are found in foods such as bread, rice, potatoes, fruit, milk, and beans. The amount, type, and timing of carbohydrate can affect blood sugar.

A dietitian may help you develop a plan that includes regular meals, suitable portions, fibre-rich foods, protein, and healthy fats. Restrictive dieting or trying to lose weight during pregnancy is not generally recommended.

Physical activity helps muscles use glucose. If activity is safe for your pregnancy, options may include walking, swimming, or pregnancy-appropriate exercise. Some people find that gentle activity after meals helps with glucose levels. Follow any pregnancy-specific restrictions you have been given.

You will usually check blood sugar with a finger-prick meter before and after selected meals. Some people use a continuous glucose monitor. Your team will set targets and explain what to do if readings are repeatedly outside them.

Medication may be recommended when food and activity changes are not enough. This is not a sign that you have failed. The placenta's hormonal effects often become stronger as pregnancy progresses.

Insulin is commonly used because it lowers blood sugar effectively and does not meaningfully cross the placenta. Metformin, a tablet that improves the body's response to insulin, is used in some healthcare systems after discussion of its benefits and limitations. The most suitable option depends on glucose patterns, stage of pregnancy, local guidance, and your preferences.

Your baby's growth may be followed with ultrasound scans. Gestational diabetes does not automatically mean you will need induction of labour or a caesarean birth. Birth planning considers blood sugar control, the baby's growth, other pregnancy conditions, and your obstetric history.

Complications

Most people with well-managed gestational diabetes have healthy pregnancies and babies. The condition does increase certain risks, especially when blood sugar remains high.

Extra glucose can cross the placenta. The baby responds by making more insulin, which may lead to faster growth and more body fat. A larger baby can increase the chance of a difficult vaginal birth, shoulder injury during birth, induction, or caesarean birth.

Gestational diabetes is also linked with a higher chance of:

After delivery, the baby's blood sugar may be checked. Early feeding and skin-to-skin contact are often encouraged. Some babies need extra feeding, glucose treatment, or short-term observation.

For you, the longer-term concerns are recurrence in a future pregnancy and a higher chance of type 2 diabetes. The child also has a higher lifetime chance of obesity and type 2 diabetes, although many other genetic, social, and lifestyle factors contribute.

- High blood pressure and pre-eclampsia during pregnancy
- Excess amniotic fluid
- Premature birth
- Low blood sugar in the baby after birth
- Newborn jaundice or breathing difficulties
- Stillbirth, particularly when diabetes is poorly controlled or other risks are present

Prevention

Gestational diabetes cannot always be prevented. Pregnancy hormones and inherited susceptibility cannot be controlled, and the condition can develop despite healthy habits.

Before pregnancy, regular activity, a balanced eating pattern, and reaching a weight that is healthy for you may lower the chance of gestational diabetes if you have overweight. These steps cannot guarantee prevention.

During pregnancy, staying active and following a balanced eating pattern may support healthy blood sugar and pregnancy weight gain. Pregnancy is not usually the time for unsupervised weight-loss diets.

If you had gestational diabetes before, tell your maternity team early in a future pregnancy. Earlier testing does not prevent the condition, but it can identify high blood sugar sooner.

Living with it and what to expect

Glucose levels can change as pregnancy progresses. You may have acceptable readings at

first and later need medication because insulin resistance often rises as the placenta grows. This does not mean that anything you did caused the change.

Daily management can involve planning meals, carrying testing supplies, recording glucose readings, and attending extra appointments. If this becomes stressful or hard to afford or fit around work and family life, tell your care team. Practical support and simpler monitoring plans may be available.

During labour, your blood sugar may be checked. Medication needs may change, and insulin used during pregnancy is often stopped after delivery under clinical guidance.

Blood sugar usually improves soon after the placenta is delivered. A glucose test is commonly recommended 4 to 12 weeks after birth to check that levels have returned to the expected range. This test can also find type 2 diabetes or prediabetes that needs ongoing care.

Even with a normal postpartum result, periodic diabetes screening is recommended over the years. Maintaining regular activity, eating a balanced diet, and addressing weight changes where appropriate may reduce future risk.

Breastfeeding is encouraged when possible and is safe with gestational diabetes. It may have metabolic benefits for both you and your baby, but feeding decisions can also be shaped by health, comfort, medication, and personal circumstances.

When to get medical help

Contact your maternity or diabetes team during routine hours if your glucose readings are repeatedly above or below the targets you were given. Also seek advice if you cannot follow the eating plan, are having medication problems, or are unsure how to use your glucose meter.

Seek prompt same-day maternity assessment if you notice:

Get emergency help for confusion, fainting, a seizure, severe breathing difficulty, or inability to keep fluids down with worsening illness. These symptoms are uncommon but can signal severe low blood sugar, dehydration, or diabetic ketoacidosis. Ketoacidosis is a dangerous build-up of acids called ketones and can occur in pregnancy even when glucose is not extremely high.

- Reduced or changed fetal movement
- A severe or persistent headache, vision changes, or pain below the ribs
- Vaginal bleeding, leaking fluid, or signs of labour
- Repeated low blood sugar episodes while using glucose-lowering medication

- Fever or another illness that is affecting eating, drinking, or glucose levels

Common questions

Does gestational diabetes mean I will have diabetes forever?

No. Blood sugar returns to the usual range after delivery for many people. However, some discover they already had type 2 diabetes, and everyone with gestational diabetes has a higher future risk. Postpartum testing is the only way to know your current status.

What can I eat with gestational diabetes?

You can usually eat foods from all major food groups, including carbohydrates. Management focuses on portion size, carbohydrate type and timing, and combining carbohydrate with protein, fibre, or healthy fat. A pregnancy dietitian can adapt advice to your culture, budget, nausea, allergies, and usual foods.

Will I need insulin?

Not everyone does. Some people meet glucose targets with food planning and activity, while others need medication. Insulin may become necessary later because pregnancy hormones increase insulin resistance. Needing it does not mean the condition is unusually severe or that you managed it badly.

Will my baby be too big or need a caesarean birth?

Not necessarily. Gestational diabetes increases the chance of faster fetal growth, but many babies remain within the expected size range. Good glucose management lowers the risk. A caesarean birth is not automatic; delivery planning is based on the whole pregnancy.

Can I breastfeed if I had gestational diabetes?

Yes. Gestational diabetes itself does not prevent breastfeeding. Your baby may need early feeds and blood sugar checks after birth. If you use medication after delivery, your healthcare team can confirm whether it is suitable while breastfeeding.

Will gestational diabetes happen in my next pregnancy?

It can recur, but recurrence is not certain. The chance is influenced by factors such as blood sugar after birth, weight, family history, and the severity of the earlier condition. Tell your maternity team about the history so that testing can be arranged at the appropriate time.

Sources

- American Diabetes Association Professional Practice Committee. "Management of Diabetes in Pregnancy: Standards of Care in Diabetes-2024." Diabetes Care . 2024;47(Supplement 1):S282-S294.
- American College of Obstetricians and Gynecologists. Practice Bulletin No. 190: Gestational Diabetes Mellitus . Obstetrics & Gynecology . 2018;131(2):e49-e64.
- National Institute for Health and Care Excellence. Diabetes in Pregnancy: Management from Preconception to the Postnatal Period . NICE guideline NG3, updated 2020.
- National Institute of Diabetes and Digestive and Kidney Diseases. Gestational Diabetes . Health information from the US National Institutes of Health.
- Centers for Disease Control and Prevention. Gestational Diabetes . Diabetes and pregnancy health information.
- US Preventive Services Task Force. "Screening for Gestational Diabetes: US Preventive Services Task Force Recommendation Statement." JAMA . 2021;326(6):531-538.