

Gestational Diabetes

A plain-English guide for you and your family

WHAT IS HAPPENING

During pregnancy, the placenta makes hormones—especially one called human placental lactogen—that block the mom's insulin from working as well as it used to. That insulin resistance is actually normal and helpful: it leaves more sugar in the mom's blood so the baby can take what it needs to grow. The mom's pancreas sees the rising sugar and tries to make extra insulin to balance things out. In most pregnancies, the pancreas can keep up and blood sugar stays in the safe zone. But in gestational diabetes, the pancreas does not have enough reserve—think of it like a factory that cannot add enough workers to meet a sudden spike in orders—so blood sugar climbs and stays high. That high sugar crosses the placenta and floods the baby, making the baby's pancreas work overtime and grow bigger than normal. The extra sugar also makes the baby pee more, which fills the amniotic sac with too much fluid. The placenta itself gets overworked trying to deliver all that glucose and oxygen, which can trigger high blood pressure in the mom (preeclampsia). After birth, the baby's insulin is still running high even though the sugar supply from mom just stopped, so the newborn's blood sugar can drop dangerously low in the first hours of life. None of these problems is random—each one traces back to that one upstream break: not enough pancreas power to match pregnancy's insulin resistance.

What you might feel

- Often no symptoms at all
- Feeling thirsty more than usual
- Needing to pee more often
- Feeling very tired
- Blurry vision
- Baby measuring larger than expected on ultrasound
- More amniotic fluid than normal (polyhydramnios) on ultrasound
- Sugar found in the urine on a routine prenatal visit

Call the doctor right away if...

- Blood sugar over 200 mg/dL at any time — may mean pre-existing diabetes, not just gestational.
- Baby growing much larger than dates suggest — raises the risk of a difficult delivery and low blood sugar in the baby right after birth.
- High blood pressure or protein in urine appearing alongside high blood sugar — may signal preeclampsia, which is dangerous for both mom and baby.
- Sudden severe headache, vision changes, or belly pain in a mom with gestational diabetes — can mean preeclampsia or another urgent complication.

What the care team will do

- Check capillary blood glucose before meals and 1 to 2 hours after the first bite of each meal, recording all values in a logbook with the food eaten.
- Teach the patient to count carbohydrates and plan meals with 30 to 45 grams of carbs at breakfast, 45 to 60 grams at lunch and dinner, and 15 grams at snacks, spreading carbs evenly through the day.
- Teach and supervise subcutaneous insulin injection technique if prescribed, emphasizing injection sites in the abdomen or thigh and proper storage of insulin vials.
- Monitor for signs of low blood sugar (hypoglycemia) including shakiness, sweating, confusion, and fast heartbeat, especially 1 to 2 hours after insulin injection.
- Teach the patient to do kick counts starting at 28 weeks, feeling for 10 movements in 2 hours once daily, and to call immediately if movements decrease.
- Schedule and confirm attendance at all non-stress tests and biophysical profiles ordered by the provider, typically starting at 32 to 36 weeks.
- Explain that the baby will need blood sugar checks right after birth and may need formula or IV dextrose if glucose drops below 40.
- Remind the patient that she must return for a 75-gram oral glucose tolerance test at 6 to 12 weeks postpartum to check if diabetes has resolved.

Medicines you may be given — and why

Insulin (various types: rapid-acting, short-acting, intermediate, long-acting)

Insulin is the key that unlocks cells so sugar from your blood can go inside and feed them. In gestational diabetes, your body does not make enough insulin to handle the extra sugar that comes from pregnancy hormones blocking insulin's action. Injected insulin gives your body the

extra keys it needs to move sugar out of your blood and into your muscles, liver, and fat cells, keeping your blood sugar in the safe range for you and your baby.

Metformin (Glucophage)

Metformin works mainly in your liver to stop it from dumping too much sugar into your blood overnight and between meals. Normally your liver stores sugar and releases it when you need energy; in gestational diabetes, pregnancy hormones make the liver release too much.

Metformin tells the liver to calm down and release less sugar. It also helps your muscle cells become a bit more sensitive to insulin (so the insulin you do make works better), but its biggest job is turning down the liver's sugar output.

Glyburide (Micronase, DiaBeta)

Glyburide pushes your pancreas to squeeze out more insulin from the beta cells (the insulin factories inside your pancreas). In gestational diabetes, your beta cells are working hard but cannot keep up with the extra demand from pregnancy hormones. Glyburide gives them a nudge to release more insulin into your blood, which then moves sugar from your blood into your cells. This is most helpful if your pancreas still has some reserve insulin to release—if your beta cells are completely exhausted, glyburide will not work well and you will need insulin injections instead.

Where this information comes from

- ACOG Practice Bulletin No. 190: Gestational Diabetes Mellitus (2018)
- American Diabetes Association Standards of Care in Diabetes (2023)
- US Preventive Services Task Force (USPSTF) Gestational Diabetes Screening Recommendation (2021)
- Cochrane Review: Screening and Treatment for Gestational Diabetes

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