

Gestational diabetes

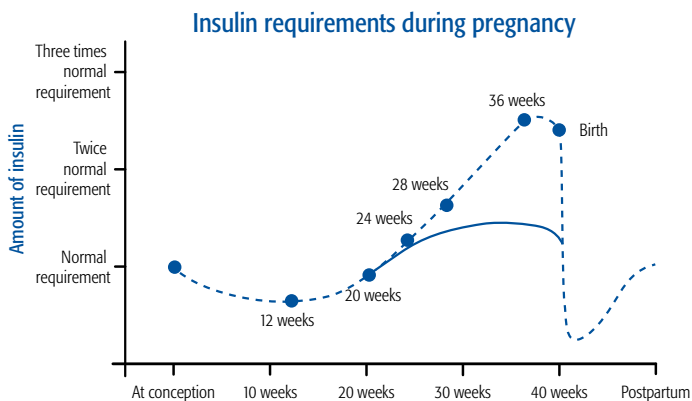
Diabetes diagnosed during pregnancy is referred to as gestational diabetes.

Blood sugar and insulin production during pregnancy

Insulin is a hormone that the body needs in order to use blood sugar as a source of energy. During pregnancy, the need for insulin increases.

In cases of gestational diabetes, the body is unable to produce enough insulin to sustain the increased insulin requirements, resulting in increased blood sugar levels. Increased insulin requirements generally occur in weeks 20-22 of pregnancy, and blood sugar often begins to rise. It is therefore important to monitor blood sugar regularly throughout pregnancy.

The image below shows how blood sugar rises during pregnancy and falls rapidly after birth.



Effect of gestational diabetes on mother and child

Women are rarely aware of the symptoms of gestational diabetes. However, gestational diabetes increases the odds of complications during pregnancy and childbirth.

The most common complications are:

- Preeclampsia
- Gestational hypertension
- Rapid growth of the baby in utero resulting in large birth size
- Poor lung development in the fetus
- Increased chances of needing a C-section
- Shoulder dystocia, nerve damage, or bone fractures during delivery
- Neonatal hypoglycemia

Treatment and monitoring during pregnancy

The first line of treatment for gestational diabetes consists of good nutrition, exercise, reducing stress and strain, and paying attention to good sleep.

People with gestational diabetes may remain in antenatal care at their health care centre, but individual high-risk pregnancy cases are referred to Landspítali.

Blood sugar measurements

Good monitoring and management of blood sugar reduces the likelihood of complications during pregnancy and childbirth. Blood sugar must therefore be measured until the baby is born. It is recommended to measure your blood sugar four times a day; fasting in the morning and one hour after starting a meal, i.e. one hour after breakfast, lunch, and dinner.

Ideal glucose levels are:

- Fasting blood sugar: 5.5 mmol/L or less
- Blood sugar one hour after a meal: 7.7 mmol/L or less

Blood sugar measurements must be recorded and reviewed by a midwife at each antenatal care visit. If 15% or more of the measurements are above the limit despite dietary and lifestyle changes, additional medication may be required.

Nutrition	A good diet is always important, especially during pregnancy. Varied healthy diet are important for the health of mother and baby. Dietary information is available at Landspítali: Gestational diabetes - dietary recommendations .
Physical exercise	Regular exercise is important to combat diabetes. Exercise speeds up metabolism, which helps keep blood sugar at a normal level. It's important to choose an appropriate form of exercise. It's generally safe to continue a regular exercise regimen during pregnancy. Hiking, yoga, and swimming are generally suitable for most pregnant people.
Stress, strain, and sleep	Excessive strain, stress, and lack of sleep can elevate blood sugar levels. In case of high stress or trouble sleeping, it's recommended to seek the advice of a midwife.

Additional monitoring during pregnancy

- Additional checkups are available as part of your antenatal care plan as necessary.
- An ultrasound scan is available at week 36 to assess foetal growth and amniotic fluid levels.

Bi-weekly monitoring is available from week 38 until delivery for patients receiving medication:

- High-risk pregnancies are monitored once a week.
- Antenatal checkups are done once a week at your local health care center.

Labour may be induced in patients with gestational diabetes:

- a. At weeks 40+0 to 40+6 if treatment consists of diet and exercise.
- b. At week 39+0 to 39+6 if medication is required in addition to diet and exercise.

Monitoring during labour and postpartum

Monitoring the mother

- If no medication is required during pregnancy, blood sugar is monitored every four hours during labour.
- If medication to lower blood sugar was required during pregnancy, blood sugar levels are monitored every two hours during labour.
- If more than 48 units of insulin per day were required at the end of pregnancy, fasting is recommended once labour is underway and sugar and insulin are administered intravenously to reduce the risk of postpartum hypoglycemia in the baby.

Medication is no longer administered after delivery and blood sugar is monitored for 1-2 days.

Monitoring the baby

- It is assumed that the baby will remain with the mother after birth. In some cases, the baby must be admitted to the neonatal intensive care unit (NICU) for observation.
- It is important to begin breastfeeding as soon as possible to reduce the risk of hypoglycemia in the baby. If the baby's blood sugar drops, formula may be necessary.
- If the mother did not require medication to reduce blood sugar levels during pregnancy, the baby's blood sugar is measured for eight hours after birth.
- If the mother required medication to reduce blood sugar levels or if the baby's blood sugar is unstable, the baby's blood sugar levels are monitored until stable.

Upon returning home

In most cases, blood sugar levels return to normal after birth and medication to lower blood sugar can be stopped immediately.

However, people diagnosed with gestational diabetes have an increased risk of developing type 2 diabetes later in life, so it is recommended to have blood sugar levels monitored annually by a general practitioner and to maintain a healthy lifestyle. Symptoms of high blood sugar are usually subtle and require a blood test for diagnosis. If you experience symptoms such as fatigue, thirst, or more frequent urination than usual, it is recommended to seek medical attention.