



Advice to you who have been recommended

Glucose Test During Pregnancy

Where there is an increased risk of gestational diabetes (GDM)

Gestational diabetes is a form of diabetes that occurs during pregnancy, a temporary disturbance in blood sugar metabolism which usually disappears again after the birth. Roughly one pregnant woman in ten is affected.

Disposition for gestational diabetes increases if you:

- Are over 25 years old
- Weight with BMI ≥ 25
- PCO-syndrome
- Hereditary predisposition for diabetes; parents or siblings with type 2 diabetes
- Oral corticosteroid treatment
- Previous pregnancy with gestational diabetes
- Have previously given birth to a large child ≥ 4.5 kg
- Sugar present in urine

What causes gestational diabetes?

The hormone insulin, which is produced in the pancreas, reduces the concentration of sugar in the blood. If you cannot produce enough insulin, you develop diabetes. During pregnancy, and especially during the second and third part, a reduced sensitivity for insulin occurs, largely caused by hormones which are produced in the placenta. This means that the pancreas is forced to increase insulin production to compensate for the increased demand. If the pancreas is not capable of increasing the production of insulin, blood sugar levels will rise and you will develop gestational diabetes.

The effects of gestational diabetes on women

A woman with gestational diabetes is more likely to suffer from high blood pressure and/or preeclampsia. Gestational diabetes often recurs; in roughly one in three subsequent pregnancies the mother becomes ill again. It is possible to counteract this in advance of the next pregnancy through a healthy diet, avoiding becoming overweight, and exercise.

Why increased blood sugar levels are not good for the foetus

If the mother has increased levels of blood sugar in her blood it will lead to increased blood sugar level in the foetus, since glucose (blood sugar) is transported to the foetus via the placenta. The foetus will then counter by increasing its own insulin production, in order to process the increased level of glucose in its blood. This can lead to a serious increase in weight and size, which can complicate the birth and lead to macrosomia (a child whose weight at birth is over 4.5 kg).

After birth the increased insulin production can make it more difficult for the child to regulate its blood sugar, which can sink to dangerously low levels (hypoglycemia). Therefore, the child should be given 10-20 ml expressed breast milk or substitute after the first breast feed, which usually occurs in the delivery room. After that the child's blood sugar levels are checked regularly after 3 hours, 6 hours, 9 hours, 16 hours, 24 hours and 48 hours, in order to see how

the child regulates its blood sugar. The target value for the child's blood sugar is ≥ 2.4 mmol/l. The check is carried out on new-born children via a small prick in the heel.

In the case of new-born children **whose mothers have not tested their blood sugar levels**, the above blood sugar checks are carried out.

Continuous skin contact and breast feeding during the first waking period after the birth are preventative and important for a child who risks hypoglycemia.

It has been shown that children of mothers with gestational diabetes also have an increased risk later in life; more irregularities in blood sugar balance, overweight and metabolic syndrome compared to the rest of the population.

How do I know if I have gestational diabetes?

Gestational diabetes is an illness that usually does not exhibit any symptoms. The woman seldom experiences the symptoms that are usual in diabetes, like thirst or urinating often, so it is almost always detected through a **glucose** level test.

The **glucose** level test is usually carried out between week 24 and week 28 of the pregnancy and in some cases as early as week 12.

If you refuse the glucose level test and/or have had normal levels when you checked your blood sugar at home, **it does not mean that you cannot be diagnosed with GDM**, and the child's blood sugar will be checked as described above.

How is gestational diabetes diagnosed?

Diagnosis always follows a glucose level test. The test is done by first testing levels after fasting and afterwards drinking 75 g glucose (1.5 glasses). After one hour the glucose level is monitored and then again after a further hour. This gives three results. The normal values are: after fasting ≥ 5.2 , after 1 hour ≥ 9.9 , after 2 hours ≥ 8.5 . If one of these levels is too high you will be diagnosed with gestational diabetes. You have to book time for the **glucose** test yourself. Your maternity counsellor will advise you on the best time to do it.

How is gestational diabetes treated?

First and foremost gestational diabetes is treated by regulating your diet. You will learn how to measure your blood sugar level yourself, both before and after meals, and to record so called daily curves. In that way you learn what can lead to increased blood sugar levels, so that you can correct it in your diet. You will get instructions from your maternity counsellor.

In addition, it is important that you are physically active. Be physically active for at least 30 minutes every day. This will keep your blood sugar in balance. If diet and exercise are not enough to keep your blood sugar levels in balance, a medicinal treatment with insulin or metformin will be needed.

Most women who have received medicinal treatment during their pregnancy can end it after the birth.

How to avoid gestational diabetes

Remember that, in order to avoid gestational diabetes, it helps to have good dietary and exercise routines right from the start of your pregnancy.

Important tips: eat regularly, better several smaller meals a day. Eat a lot of vegetables, avoid too much fat and foods that contain sugar. Do not put on too much weight and keep yourself

active. Choose forms of exercise that you enjoy. Remember that if you have good dietary and exercise routines during the pregnancy you will not only help yourself but also your child.

What to do when the pregnancy is over?

If you have had gestational diabetes, you are at risk of developing type 2 diabetes later in life. You can reduce this risk greatly with a healthy diet, avoiding becoming overweight (especially important) and keeping physically active. For this reason, it is a good idea to continue with a healthy lifestyle after your pregnancy. At the same time, your child will learn healthy dietary routines and copy your physically active lifestyle.

Women who have had gestational diabetes will receive a follow-up plan after the pregnancy.

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Sources

Diabetes Association of Finland, Diabetes Association of Finland, Good medical practice gestational diabetes/Duodecim/

https://www.terveyskirjasto.fi/terveyskirjasto/tk.koti?p_artikkeli=khr00093