Gestational diabetes

CHUM

You have gestational diabetes? Rest assured, you and your fetus are not in danger. A team will help you to control it well. This fact sheet gives you information on this condition, its risks, and how to avoid them.

What is gestational diabetes?

Gestational diabetes is an abnormal increase in blood sugar (glucose) levels during pregnancy. This diabetes usually appears towards the end of the 6th month or during the last 3 months of pregnancy.

It is caused in large part by hormonal changes that occur during pregnancy. The placenta (the organ that connects the fetus to the uterus) produces hormones that interfere with the action of insulin (a hormone that controls blood sugar levels). In some women, this leads to an accumulation of blood sugar.

What are the signs of gestational diabetes?

Women with gestational diabetes often have no symptoms.

However, some may have the following signs:

- Increased volume and frequency of urination
- Intense thirst
- Dry mouth
- Unusual fatigue

How is gestational diabetes diagnosed?

By an oral glucose tolerance test (OGTT). Glucose levels are measured by blood tests done first on an empty stomach and then after drinking a sweet liquid. All pregnant women generally undergo this test between the 24th and 28th week of pregnancy, or in the first few months for women at risk.

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What factors increase the chances of developing gestational diabetes?

Some women develop gestational diabetes without having any of the following risk factors. However, you are more likely to develop it if:

- You are 35 years old or older.
- You belong to a group at high risk of diabetes (Indigenous, Hispanic, Asian, Arab, or African).
- You are obese and have a body mass index (BMI) of 30 kg/m^2 or more.
- You have had gestational diabetes before.
- You have a history of abnormally high blood sugar (pre-diabetes).
- You have previously given birth to a baby weighing over 4 kilos (9 pounds).
- Your father, mother, brother or sister has type 2 diabetes.
- You are taking a corticosteroid treatment for a chronic problem.
- You have had polycystic ovarian syndrome in the past.

What are the risks associated with gestational diabetes?

The treatment and control of gestational diabetes greatly reduce the risk of complications and make it almost as low as for a non-diabetic woman.

It is important to know that gestational diabetes does not increase the risk of malformations or diabetes in your child at birth.

However, certain risks increase when the mother's glucose level is not controlled.

Risks for the mother

- Pregnancy induced hypertension (high blood pressure) and pre-eclampsia, which is an abnormally high blood pressure that may appear during pregnancy. If it is severe, it can lead to complications, including seizures. However, the risk of pre-eclampsia goes down again when diabetes is well controlled.
- More difficult vaginal delivery or a caesarean section, due to the baby's weight.
- Production of excess amniotic fluid, which can cause premature labour.
- Development of type 2 diabetes after childbirth or in the following years (two in five women with gestational diabetes).

Risks for the baby at birth

- Weight above average (over 4 kilos or 9 pounds).
- Low blood sugar (hypoglycemia).
- Jaundice.
- Low blood calcium.
- Breathing problems.

How do I measure my blood sugar level?

If you have gestational diabetes, you will have to measure your blood sugar at least 4 times a day, following a schedule (see table on page 3). Take the number of measurements ordered by your doctor.

This is done using a device called a **glucose monitor or glucometer.** A nurse will show you how to use it.

You will need to record your results in a blood glucose control logbook. **Always bring this notebook to your appointments.**

Glucose level measurement - Alternate DAY A and DAY B

	BREAKFAST		LUNCH		SUPPER	
	Before	1 hr. after	Before	1 hr. after	Before	1 hr. after
DAY A	X	X	X		X	
DAY B	X	X		X		X
Target values	3.7 to 5.0 mmol/L	5.0 to 7.8 mmol/L	3.7 to 5.3 mmol/L	5.0 to 7.8 mmol/L	3.7 to 5.3 mmol/L	5.0 to 7.8 mmol/L

How can I control my gestational diabetes?

Adopting healthy lifestyle habits is most often enough to control gestational diabetes. If you need to take insulin, maintain these habits. They will help to reduce the doses. These healthy habits are:

> Have a **balanced** diet. This is fundamental to the treatment. Monitor how much and what type of sugar you take in at each meal, the regularity of meals, etc. A nutritionist will give you specific recommendations.

> Practise **regular physical activity** (walking, yoga, swimming, etc.). This will help you control your blood sugar levels very effectively and improve your physical condition. It is recommended to do 2.5 hours of physical activity per week. Ideally, 3 to 5 sessions of 30 to 45 minutes each should be spread over the week.

A balanced diet and regular physical activity also help to control your weight. As with non-diabetic pregnant women, your weight gain should be gradual. The recommended total weight gain depends on your body mass index (BMI) before pregnancy.

BMI before pregnancy	Recommended weight gain
Less than 18.5 kg/m^2	12.5 to 18 kg (28 to 40 lb)
From 18.5 to 24.9 kg/m^2	11.5 to 16 kg (25 to 35 lb)
From 25 to 29.9 kg/m^2	9 to 11.5 kg (15 to 25 lb)
From 30 to 34.9 kg/m^2	5 to 9 kg (11 to 20 lb)
35 kg/m^2 or more	0 to 5 kg (0 to 11 lb)

Insulin treatment is required for 30% to 40% of women with gestational diabetes. If necessary, a nurse will show you how to prepare a dose of insulin and inject it.

How will I be followed if I have gestational diabetes?

> **During pregnancy**

You will have regular visits (2 to 4 times a month), at which you will see one or more of the following professionals: a doctor, a nurse, and a nutritionist. They may also be able to follow you remotely by telephone or via the Internet.

Around the 32nd week of pregnancy, you will have an ultrasound to better assess your baby's growth and weight. Depending on your situation, there may be other follow-ups.

> At delivery

Nurses will regularly measure your blood sugar level during labour. If needed, they will install a catheter to allow you to receive glucose (solution) and insulin.

> After the birth

If you were receiving insulin injections during pregnancy, they will be stopped. Your blood sugar level will be measured as needed. Your baby's blood sugar level will be checked 2 hours after birth and then regularly for the next 12 to 36 hours.

To make sure your baby has enough blood sugar, you should breastfeed or bottle-feed as soon as possible after birth.

You will be encouraged, like all other mothers, to breastfeed your child.

> In the months following the birth

Around 6 to 8 weeks after delivery, you will have another oral glucose tolerance test (OGTT) to see if the diabetes has disappeared. The results will be sent to your doctor, who will contact you. If the results are abnormal, a follow-up appointment will be made.

What are the risks of diabetes returning?

In the majority women, gestational diabetes disappears after childbirth. However, 2 out of 5 women develop type 2 diabetes in the following years.

During a future pregnancy, there is a 30% to 85% risk of developing diabetes again.

The best way to prevent this disease is to maintain a healthy lifestyle (diet and physical activity), lose your pregnancy weight, and maintain a healthy weight.

Who can I contact for help or to ask questions?

CHUM high-risk pregnancy clinic
(Clinique GARE)

Nurse: 514 890-8000, poste 35646

Nutritionist: 514 890-8000, ext. 35443

USEFUL RESOURCES

Diabetes Québec:
> diabete.qc.ca/en

Canadian Diabetes Association
(en anglais) :
> diabetes.ca

To learn more about pregnancy, delivery, or follow-up care, visit our internet site.

Videos, other fact sheets, and more resources are available at:

centredesnaissanceschum.com

Questions

The content of this document in no way replaces the recommendations and diagnoses made, or the treatment suggested by your health professional.

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