Gestational Diabetes

(Diabetes, Gestational; GDM; Gestational Onset Diabetes Mellitus [GODM]; Glucose Intolerance During Pregnancy)

by Debra Wood, RN

En Español (Spanish Version) More InDepth Information on This Condition

Definition

Glucose comes from the breakdown of food. It is the body's energy source. Assisted by a hormone called insulin, glucose can pass from the blood to the cells. Without insulin, glucose will build up in the blood. This is called hyperglycemia. At the same time, your body's cells are starved for glucose (energy).

When diabetes first occurs during pregnancy it is called gestational diabetes. The extra glucose in the blood can cross to the baby. This condition can cause problems for the mother and baby.

Large Baby Due to Gestational Diabetes



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Causes

The exact cause is unknown. But these factors may contribute to the condition:

- Hormones needed for the baby's growth interfere with insulin
- Excess maternal weight increases insulin resistance
- Insulin resistance prevents the body from effectively using insulin

Risk Factors

These factors increase your chance of developing this condition:

- <u>Obesity</u> or being overweight
- Family members with <u>diabetes</u>
- Age: 25 or older
- Race: Hispanic, African-American, Native-American, Asian-American, Indigenous Australian, or a Pacific Islanders
- Gestational diabetes in a previous pregnancy
- Previous delivery of a large baby
- Previous stillbirth or too much fluid surrounding a baby during pregnancy
- Glucose in urine

Symptoms

This condition may not cause any symptoms. If symptoms occur, they may include:

- Increased urination
- Thirst
- Hunger
- Recurring vaginal or urinary tract infections
- Weakness

Diagnosis

Your Risk

If you are at high risk, you may need <u>glucose testing</u> as soon as possible. If your initial test is negative, you should be retested between 24-28 weeks of gestation.

If you are at average risk, you may be given the 50-gram glucose test. (See Screening Test below.) This is given between 24-28 weeks of gestation.

If you are at low risk, you do not need glucose testing. To be low risk, you must meet all of the following criteria:

- Less than 25 years of age
- Normal weight before and during pregnancy
- Member of an ethnic group with a low risk of gestational diabetes
- No known diabetes in any siblings or parents
- No history of abnormal glucose tolerance
- No history of poor pregnancy outcomes

Screening Test

This involves:

- Drinking a liquid high in sugar
- Taking a blood sample one hour later to measure the glucose level

In some cases, a <u>urine glucose test</u> may be done. These are not as reliable as the blood test.

Diagnostic Test

This involves:

- A three-hour glucose-tolerance test if the initial screening test shows an above normal sugar level
- Glucose monitoring in the morning and after meals

Treatment

The aim of treatment is to return glucose levels to normal. Treatment includes:

Diet

- Eat a <u>balanced diet</u>.
- Eat plenty of <u>vegetables</u> and <u>fiber</u>.
- Limit the amount of fat you eat. Avoid food high in sugar.
- Eat <u>moderate portions</u> of food at each meal.
- Eat a bedtime snack with protein and a starchy food.
- Do not gain more than the recommended amount of weight during pregnancy. Gaining too much weight can increase the risk of having:
 - A baby with a high birth-weight
 - <u>A preterm birth</u>
 - Cesarean delivery
- Keep a record of your food intake. Share this with your doctor.

Exercise

<u>Physical activity</u> helps the body use glucose. The insulin you produce will be more effective. Ask your doctor about an exercise routine.

Blood Sugar Testing

Use a monitor to check your glucose levels. Show your doctor the results at prenatal visits.

Medication

Insulin Injections

If you have made lifestyle changes and your glucose levels stay above normal, you may need to inject insulin each day.

Oral Medicines

Some doctors may choose to prescribe oral medicines to help control your blood sugar levels. Examples of these medicines include:

- <u>Metformin</u> (eg, Glucophage)
- <u>Glyburide</u> (eg, DiaBeta, Glucovance)

Follow-up

After delivery, glucose levels usually return to normal. You will need a glucose tolerance test 6-8 weeks after delivery. Exercising, breastfeeding, and losing weight will help to reduce your chance of developing <u>type 2</u> <u>diabetes</u>.

Prevention

The following may help prevent this condition:

- Maintain normal weight gain during pregnancy.
- Eat a healthy diet.
- Exercise regularly. Talk to your doctor before starting an exercise program.

RESOURCES:

The American College of Obstetricians and Gynecologists http://www.acog.org/

American Diabetes Association <u>http://www.diabetes.org/</u>

CANADIAN RESOURCES:

Canadian Diabetes Association <u>http://www.diabetes.ca/</u>

Women's Health Matters http://www.womenshealthmatters.ca/

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