

# A Healthy Pregnancy for Women With Diabetes

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#### What is diabetes mellitus?

**Diabetes mellitus** (also called "diabetes") is caused by a problem with **insulin**. Insulin moves **glucose** out of the blood and into the body's cells where it can be turned into energy (see the FAQ Diabetes and Women). Pregnancy health care professionals often call diabetes that is present before pregnancy **pregestational diabetes mellitus**.

When the body does not make enough insulin or does not respond to it, glucose cannot get into **cells** and instead stays in the blood. As a result, the level of glucose in the blood increases. Over time, high blood glucose levels can damage the body and cause serious health problems, such as heart disease, vision problems, and **kidney disease**.

### How can pregestational diabetes affect my pregnancy?

If your diabetes is not managed well, you are at increased risk of several of the **complications** associated with diabetes. The following problems can occur in women with diabetes:

- · Birth defects
- High blood pressure
- Hydramnios—In this condition, there is an increased amount of amniotic fluid in the amniotic sac that surrounds the
  fetus. It can lead to preterm labor and delivery.
- **Macrosomia** (very large fetus)—The fetus receives too much glucose from the mother and can grow too large. A large fetus can make delivery more difficult. A large fetus also increases the risk of having a **cesarean birth**.

# How can pregestational diabetes affect my baby?

Babies born to mothers with pregestational diabetes may have problems with breathing, low glucose levels, and *jaundice*. Most babies do well after birth, although some may need to spend time in a *neonatal intensive care unit (NICU)*. The good news is that with proper planning and control of your diabetes, you can decrease the risk of these problems.

#### If I have diabetes and wish to become pregnant, is it important to tell my health care professional?

Yes, your health care professional will help you get your blood glucose level under control before you become pregnant (if it is not already). Controlling your glucose level is important because some of the birth defects caused by high glucose levels happen when the fetus's organs are developing in the first 8 weeks of pregnancy—before you may know you are pregnant. Getting your glucose level under control may require changing your medications, diet, and exercise program.

#### How can I control my diabetes during pregnancy?

You can control your glucose level with a combination of eating right, exercising, and taking medications as directed by your health care professional. You may need to see your health care professional more often. Your health care professional will schedule frequent prenatal visits to check your glucose level and for other tests.

## How does my health care professional know if my blood glucose level has been well controlled?

A blood test called a *hemoglobin* A1C test may be used to track your progress. This test result gives an estimate of how well your blood glucose level has been controlled during the past 4–6 weeks.

## Can pregnancy affect my glucose level?

Women with diabetes are more likely to have low blood glucose levels, known as hypoglycemia, when they are pregnant. Hypoglycemia can occur if you do not eat enough food, skip a meal, do not eat at the right time of day, or exercise too much. Make sure you and family members know what to do if you think you are having symptoms of hypoglycemia, such as dizziness, feeling shaky, sudden hunger, sweating, or weakness.

# How can my diet affect my pregnancy?

Eating a well-balanced, healthy diet is a critical part of any pregnancy because your fetus depends on the food you eat for its growth and nourishment (see the FAQ Nutrition During Pregnancy). In women with diabetes, diet is even more important. Not eating properly can cause your glucose level to go too high or too low.

## How can exercise help during my pregnancy?

Exercise helps keep your glucose level in the normal range and has many other benefits, including controlling your weight; boosting your energy; aiding sleep; and reducing backaches, constipation, and bloating.

# Will I take medications to control my diabetes during pregnancy?

If you took insulin before pregnancy to control your diabetes, your insulin dosage usually will increase while you are pregnant. Insulin is safe to use during pregnancy and does not cause birth defects. If you used an insulin pump before you became pregnant, you probably will be able to continue using the pump. Sometimes, however, you may need to switch to insulin shots

If you normally manage your diabetes with oral medications, your health care professional may suggest a change in your dosage or that you take insulin while you are pregnant.

## How will diabetes affect labor and delivery?

Labor may be induced (started by drugs or other means) earlier than the due date, especially if problems with the pregnancy arise. While you are in labor, your glucose level will be monitored closely—typically every hour. If needed, you may receive insulin through an *intravenous (IV) line*. If you use an insulin pump, you may use it during labor.

## If I have diabetes, can I breastfeed my baby?

Experts highly recommend breastfeeding for women with diabetes. Breastfeeding gives the baby the best nutrition to stay healthy, and it is good for the mother as well. It helps new mothers shed the extra weight that they may have gained during pregnancy and causes the **uterus** to return more quickly to its prepregnancy size.

#### Glossary

Amniotic Fluid: Fluid in the sac that holds the fetus.

Amniotic Sac: Fluid-filled sac in a woman's uterus. The fetus develops in this sac.

**Birth Defects:** Physical problems that are present at birth.

Cells: The smallest units of a structure in the body. Cells are the building blocks for all parts of the body.

Cesarean Birth: Birth of a fetus from the uterus through an incision (cut) made in the woman's abdomen.

**Complications:** Diseases or conditions that happen as a result of another disease or condition. An example is pneumonia that occurs as a result of the flu. A complication also can occur as a result of a condition, such as pregnancy. An example of a pregnancy complication is preterm labor.

Diabetes Mellitus: A condition in which the levels of sugar in the blood are too high.

Glucose: A sugar in the blood that is the body's main source of fuel.

**Hemoglobin:** The protein molecule in red blood cells that carries oxygen from the lungs to the body and returns carbon dioxide from the body to lungs.

High Blood Pressure: Blood pressure above the normal level. Also called hypertension.

*Hydramnios:* A condition in which there is an excess amount of amniotic fluid in the sac surrounding the fetus.

Insulin: A hormone that lowers the levels of glucose (sugar) in the blood.

Intravenous (IV) Line: A tube inserted into a vein and used to deliver medication or fluids.

**Jaundice:** A buildup of bilirubin (a brownish yellow substance formed from the breakdown of red cells in the blood) that causes the skin to have a yellowish appearance.

Kidney Disease: A general term for any disease that affects how the kidneys function.

Macrosomia: A condition in which a fetus weighs 8 pounds and 13 ounces (4,000 grams) or more.

Neonatal Intensive Care Unit (NICU): A special part of a hospital in which sick newborns receive medical care.

Pregestational Diabetes Mellitus: Diabetes that existed before pregnancy.

Preterm: Less than 37 weeks of pregnancy.

*Uterus:* A muscular organ in the female pelvis. During pregnancy, this organ holds and nourishes the fetus.

#### If you have further questions, contact your obstetrician-gynecologist.

**FAQ176:** This information was designed as an educational aid to patients and sets forth current information and opinions related to women's health. It is not intended as a statement of the standard of care, nor does it comprise all proper treatments or methods of care. It is not a substitute for a treating clinician's independent professional judgment. Please check for updates at www.acog.org to ensure accuracy.

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