

Managing Diabetes During Pregnancy

Almost two million women of reproductive age have diabetes, and these numbers continue to rise. Here's how to ensure a successful and healthy pregnancy.



It is extremely important for women with diabetes to achieve normal blood glucose levels before they become pregnant, because if women have poorly controlled diabetes going into a pregnancy, they are at much higher risk for serious fetal complications. This improved control can be accomplished with education and medical management.

Women with type 1 diabetes or type 2 diabetes are also at higher risk for:

- Large birth weight babies, resulting in more Cesarean deliveries and increased complications during delivery
- Premature births or fetal death
- Pre-eclampsia: a dangerous surge in blood pressure associated with protein in the urine
- Diabetic retinopathy: damage to the retina caused by high glucose levels
- Diabetic kidney disease
- Severe hypoglycemia: episodes of low blood glucose levels that can result in confusion or unconsciousness

Ensuring a healthy pregnancy

The good news is that women with uncomplicated diabetes who keep their blood glucose levels in a normal range before and during pregnancy have about the same chance of having a successful pregnancy as women without diabetes.

The Joslin-Beth Israel Deaconess Pregnancy Program recommends the following blood glucose goals and medical assessments before pregnancy:

- Fasting and pre-meal blood glucose: **80-110 mg/dl**
- Blood glucose one hour after meal: **100-155 mg/dl**
- A1C, a blood test that measures average blood glucose over two to three months:

less than 7 percent and as close to 6% as possible without hypoglycaemia

- Review of diabetes and obstetrical history
- Eye evaluations to screen for and discuss risks of diabetic retinopathy
- Renal, thyroid, gynaecological and sometimes cardiac evaluations

Once pregnant, women with type 1 or type 2 diabetes should monitor their blood glucose levels at least six times a day (before meals and one hour after every meal) and also before driving. Fasting and pre-meal glucose levels should be between 60 and 95 mg/dl, and one-hour post-meal readings should be between 100 and 129 mg/dl.

Other recommendations to ensure a successful pregnancy:

- See your diabetes provider often, anywhere from weekly to every four weeks
- Have your A1C level checked every four to eight weeks
- Meet with a certified diabetes educator and registered dietitian, as needed
- Follow the **Healthy Eating Pyramid** diet guidelines, including folic acid supplements
- Do some physical activity, as directed by your obstetrician
- Always check your blood glucose before driving (due to an increased risk of severe hypoglycemia)

With careful diabetes management, women can and do have successful pregnancies and healthy babies.

Adapted from an article by Joslin Diabetes Centre

