

Diabetes, Pregnancy and Cystic Fibrosis: Patient Information

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Introduction:

Most women with Cystic Fibrosis (CF) are able to become pregnant, but there are often increased complications during the pregnancy, including respiratory, cardiovascular, and metabolic changes which may worsen CF health. There are many factors to consider when deciding whether or not pregnancy is right for you and if your health is optimized for a healthy pregnancy. One important consideration is diabetes. Adult women living with CF are at high risk of developing diabetes before and during pregnancy. Diabetes before pregnancy is most often Cystic Fibrosis Related Diabetes (CFRD) while diabetes that develops during pregnancy is gestational diabetes. Both types of diabetes can affect you and your baby's health. Getting the right diabetes care prior to conception and throughout pregnancy is very important.

Potential health risks of diabetes in pregnancy:

- Diabetes can increase your risk for preterm delivery and low birth weight for your baby.
- If uncontrolled, diabetes can affect the organ development of your baby during the first trimester of pregnancy.
- If uncontrolled, diabetes can cause complications at time of delivery that may lead to your baby requiring neonatal intensive care.
- Women with CF who have diabetes are at increased risk for poor nutrition and insufficient weight gain during pregnancy.
- If you have pre-existing cystic fibrosis related diabetes (CFRD), it is possible that diabetes complications like diabetic eye disease and diabetic kidney disease can worsen during pregnancy.
- Note: Diabetes does **not** increase your risk for maternal death or more rapid decline in your lung function or BMI after delivery. However regardless of diabetes, pregnancy in CF can cause other maternal complications, which you should discuss with your healthcare team.

Evaluation:

- Screening for diabetes is recommended prior to conception and during pregnancy for women with CF. The screening test for diabetes is the oral glucose tolerance test.
- Ensure you are screened for diabetes within 6 months of trying to conceive. You should be tested again in first and second trimester of pregnancy even if your initial test is normal.
- If you find that you are unexpectedly pregnant, contact your care team to have diabetes testing as soon as possible if not tested in the prior 6 months.

Treatment:

- If you have pre-existing diabetes or develop diabetes during pregnancy, you will be asked to monitor your glucose (sugar) levels frequently and to keep them as normal as possible.
- Glucose targets during pregnancy are as follows: fasting glucose < 95 mg/dL, 1 hour after meal reading < 140 mg/dL, 2 hours after meal reading < 120 mg/dL.
- Insulin is the only recommended therapy for diabetes in pregnant women with CF.
- Insulin should be started promptly if your glucose levels are above pregnancy targets.
- If you are on insulin therapy, you will notice that your insulin doses change over time with the hormones of pregnancy and whenever you are facing a medical stress. This is expected, and you should remain in close contact with your care team about changes in your glucose levels.
- Hypoglycemia (low blood glucose) is a common complication of treatment. It is important to review how to treat hypoglycemic events with your health care provider.
- It is helpful to conceive with a BMI of ≥ 22.0 kg/m² or higher to address nutritional challenges in pregnancy.
- Care from endocrinology and nutrition consultants is recommended during pregnancy when available.

For More Information:

<https://www.cff.org/managing-cf/planning-safe-pregnancy>

<https://www.cff.org/managing-cf/eating-well-during-your-pregnancy>

<https://www.marchofdimes.org/complications/cystic-fibrosis-and-pregnancy.aspx>