

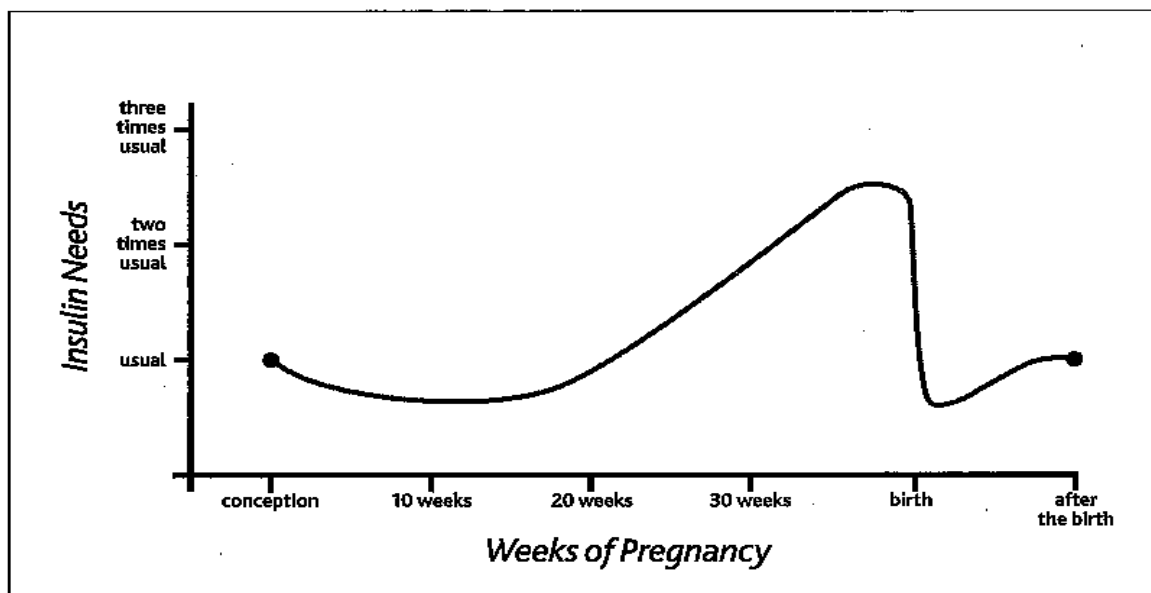
## **UNDERSTANDING DIABETES IN PREGNANCY (Type 1 and Type 2 Diabetes)**

Congratulations on your pregnancy! You have been trying your best to manage your diabetes before you were pregnant. Now we need to help manage your diabetes while you are pregnant, which might be a little more challenging. What changes in pregnancy can you expect?

### *Insulin Needs in Pregnancy*

The graph below shows the increasing insulin needs in pregnancy. Note that the insulin needs are two to three times higher in pregnancy from when you were not pregnant. Then there are additional fluctuations depending on what week of pregnancy you are.

- In the first 14 weeks of pregnancy, your insulin needs may actually slightly decrease.
- From weeks 14-17, your insulin dose will usually stay the same.
- From weeks 17-36, your insulin dose will likely increase every 1-2 weeks.
- At 36 weeks, your insulin tends to be more stable but you may need a little less insulin during the night.
- Immediately after your deliver, you will see a sudden decrease in insulin needs of 1/3-1/2 of your pre-delivery dose. Your insulin needs will likely go back to pre-pregnancy within a few days post-delivery.



Reader D., Davidson J., S. Larson. Self-Care Pregnancy Planning and Care For Women with Diabetes. 3rd Edition, 2012. International Diabetes Center, Park Nicollet, Minneapolis, MN

### *Blood Glucose Monitoring*

- With Type 1 and Type 2 Diabetes in pregnancy, it is recommended to increase your blood glucose testing to 6 times a day, testing before and 2 hours after your three main meals. This will help your diabetes care team better manage and adjust your medications and treatment.
- Keep a record of your daily glucose values to review at your appointments with your care provider and dietitian. You may also be asked to keep a food log for a few days along with your blood glucose records.
- Your glucose targets during pregnancy are 60-100 mg/dl fasting or before meals and <130 mg/dl 2 hours after meals.

### *Treating Low Glucose*

- A glucose level less than 60 mg/dl is called hypoglycemia and is considered too low for pregnancy. Severe low glucose can be unsafe for you and your baby.
- Symptoms of low glucose may include: weakness, shakiness/dizziness, sweating, confusion, irritation or other mood changes, and hunger
- When you feel symptoms of hypoglycemia, check your blood glucose. If your level is below 60 mg/dl, follow the “Rule of 15’s”:
  - Eat or drink 15 grams of carbohydrate (4 oz juice or regular soda, 8 oz low-fat milk, 3-4 glucose tablets, 3-4 hard candies, etc)
  - Wait 15 minutes and re-test your blood glucose
  - Repeat with another 15 grams of carbs if your glucose is still <60 mg/dl
  - If your glucose remains <60 mg/dl after 3 treatments, call your care team

### *Ketone Checking*

- Ketone testing may be required if you have high glucose (>200 mg/dL) or are sick or have an infection.
- Ketones are a byproduct of your body breaking down fat stores to provide glucose energy for cells. This can be a sign of inadequate carbohydrate intake or that there is inadequate insulin to move glucose from the bloodstream into cells.
- Ketone buildup can happen more quickly during pregnancy and can cause a serious problem called diabetic ketoacidosis (DKA). Ketones can pass to your baby through the placenta and cause harm, so call your care team immediately if you have moderate or high ketones or experience symptoms of DKA, including severe stomach pain, vomiting, or trouble breathing.

### *Possible Problems during Pregnancy*

- When your glucose levels are above target, your body passes on extra glucose to your baby.
- This increases the risk of your baby developing problems such as birth defects, macrosomia (very large baby), post-partum hypoglycemia, respiratory distress syndrome (RDS), or miscarriage/stillbirth in rare cases.
- Keeping your glucose levels within range can help prevent these problems and keep you and your growing baby healthy.

### *Management of Diabetes in Pregnancy*

- If you have Type 1 Diabetes or Type 2 Diabetes and are on insulin, you will continue to take insulin to manage your glucose levels during pregnancy. If you have Type 2 Diabetes and took oral medications before pregnancy, your medications will most likely switch to insulin during your pregnancy to meet your body's increasing insulin needs. Sometimes Glyburide may be used if minor adjustments need to be made.
- It is important to manage your diabetes closely in pregnancy through regular visits with your diabetes care team. Your Registered Dietitian and/or Certified Diabetes Educator will help you learn more about how to balance your insulin doses with a food and activity plan.
- Your food plan will tell you when to eat and how many grams of carbohydrates to eat for each meal and snack.
- If cleared by your pregnancy care provider, try to get moderate physical activity (such as walking or swimming) most days of the week. This helps your body use insulin better, lowers your glucose levels, and helps to control weight gain.

### *During and After Delivery*

- During labor and delivery, your glucose levels will be monitored carefully to keep them between 60 and 100 mg/dl to ensure a safe delivery for you and your baby.
- After your baby and placenta have been delivered, your baby's glucose level will be monitored for a few hours and your insulin needs will decrease suddenly. Your diabetes care provider will help you determine your insulin doses after pregnancy and you will have a follow-up visit 4-6 weeks after birth.