

**MANAGEMENT OF DIABETES MELLITUS
 DURING PREGNANCY**

Care Before Conception	Prenatal Care	Labor and Delivery
Type 1*		
<p>Diabetes is controlled.</p> <p>Risk is lowest if Hb A_{1c} levels are ≤ 8% at conception.[†]</p> <p>Evaluation includes a 24-h urine collection (protein excretion and creatinine clearance) to check for renal complications, ophthalmologic examination to check for retinal complications, and ECG to check for cardiac complications.</p>	<p>Prenatal visits begin as soon as pregnancy is recognized. Frequency of visits is determined by degree of glycemic control.</p> <p>Diet should be individualized according to ADA guidelines and coordinated with insulin administration.</p> <p>Three meals and 3 snacks/day are recommended, with emphasis on consistent timing.</p> <p>Women are instructed in and should do plasma glucose self-monitoring.</p> <p>Hb A_{1c} level should be checked every trimester.</p> <p>Women should be cautioned about the dangers of hypoglycemia during exercise and at night.</p> <p>Women and their family members should be instructed in glucagon administration.</p> <p>Amount and type of insulin should be individualized. In the AM, 2/3 of total dose (60% NPH, 40% regular) is taken; in the PM, 1/3 (50% NPH, 50% regular) is taken.[‡]</p> <p>Fetal monitoring with nonstress tests, biophysical profiles, and kick counts should be done weekly from 32 wk to delivery (or earlier if indicated).</p>	<p>Vaginal delivery at term is possible if women have documented dating criteria and good glycemic control.</p> <p>2nd-trimester amniocentesis for genetic testing is not done unless indicated for another problem or requested by the couple.</p> <p>3rd-trimester amniocentesis to determine fetal lung maturity may be done to help determine the optimal timing for elective delivery.</p> <p>Cesarean delivery should be reserved for obstetric indications or fetal macrosomia (> 4500 g), which increases risk of shoulder dystocia.</p> <p>Delivery should occur by 38–40 wk.</p> <p>During delivery, a constant low-dose insulin infusion is usually preferred, and the usual sc administration of insulin is stopped. If induction is planned, the usual pm NPH insulin dose is given on the day before induction.</p> <p>Postpartum and continuing diabetes care should be arranged. Postpartum insulin requirements may decrease by up to 50%.</p>
Type 2*		
<p>Hyperglycemia is controlled.</p> <p>Risk is lowest if Hb A_{1c} levels are ≤ 8% at conception.[†]</p> <p>Weight loss is encouraged if BMI is > 27 kg/m².</p> <p>The diet should be low in fat, relatively high in complex carbohydrates, and high in fiber.</p> <p>Exercise is encouraged.</p>	<p>For overweight women, diet and caloric intake are individualized and monitored to avoid weight gain of > 9 kg; daytime snacks are discouraged.</p> <p>Moderate walking after meals is recommended.</p> <p>Women are instructed in and should do plasma glucose self-monitoring.</p> <p>The 2-h postbreakfast plasma glucose level is checked weekly at clinic visits.</p> <p>Hb A_{1c} level should be checked every trimester.</p> <p>The amount and type of insulin should be individualized. Regular insulin is taken before each meal: 2/3 of total dose (60% NPH, 40% regular) is taken in the AM; 1/3 (50% NPH, 50% regular) is taken in the PM.</p> <p>Fetal monitoring with nonstress tests, biophysical profiles, and kick counts should be done weekly from 32 wk to delivery (or earlier if indicated).</p>	<p>Management is the same as for type 1.</p>

**MANAGEMENT OF DIABETES MELLITUS
 DURING PREGNANCY—Continued**

Care Before Conception	Prenatal Care	Labor and Delivery
Gestational		
<p>Women who have had gestational diabetes in previous pregnancies should try to reach a normal weight and engage in modest exercise.</p> <p>The diet should be low in fat, relatively high in complex carbohydrates, and high in fiber.</p> <p>Fasting plasma glucose and Hb A1c levels should be checked.</p>	<p>Diet and caloric intake are individualized and monitored to prevent weight gain of > 9 kg.</p> <p>Moderate exercise after meals is recommended.</p> <p>Insulin therapy is reserved for persistent hyperglycemia (fasting plasma glucose > 95 mg/dL or 2-h postprandial plasma glucose > 120 mg/dL) despite a trial of dietary therapy for ≥ 2 wk.</p> <p>The amount and type of insulin should be individualized. Regular insulin is taken before each meal: $\frac{2}{3}$ of total dose (60% NPH, 40% regular) is taken in the AM; $\frac{1}{3}$ (50% NPH, 50% regular) is taken in the PM.</p> <p>Fetal monitoring with nonstress tests, biophysical profiles, and kick counts should be done beginning at 32–34 wk (or earlier if indicated) and continued until delivery for women who require insulin.</p>	<p>Vaginal delivery at term is possible if women have a well-documented delivery date and good diabetic control.</p> <p>2nd-trimester amniocentesis for genetic testing may not be required. 3rd-trimester amniocentesis to determine fetal lung maturity may be done to help determine the optimal timing for elective delivery.</p> <p>Cesarean delivery should be reserved for obstetric indications or fetal macrosomia (> 4500 g), which increases risk of shoulder dystocia.</p> <p>Delivery should occur by 38–40 wk.</p>

*Guidelines are only suggested; marked individual variations require appropriate adjustments.

†Normal values may differ depending on laboratory methods used.

‡Hospital programs may recommend up to 4 insulin injections daily. Continuous sc insulin infusion, which is labor-intensive, can sometimes be given in specialized settings.

ADA = American Diabetes Association; BMI = body mass index; Hb A1c = glycosylated Hb; NPH = neutral protamine Hagedorn.