

Pre-existing Diabetes References:

- Jovanovic-Peterson L, Peterson CM, Reed GF, Metzger BE, Mills JI, et al. Maternal postprandial glucose levels and infant birth weight: The Diabetes in Early Pregnancy Study. Am J Obstet Gynecol 1991;164:103-10. *Typically a decrease in insulin requirement of 10% is seen in Type I diabetics between 7 and 15 weeks' gestation.*
- Moore TR. Diabetes in Pregnancy. Maternal-Fetal Medicine: Principles and Practice. 5th ed Saunders: Philadelphia: 2004,1023-61. Boluses should be programmed to limit postprandial serum glucose excursions to ≤ 130 mg/dL.
- 3) Garner P. Type I diabetes mellitus and pregnancy. Lancet 1995;346:157-61. *The daily caloric intake for the underweight patient should be 35-40 kcal/kg, for the normal weight patient 30-35 kca/kgl, and for the overweight patient (>120% ideal BMI) 24 kcal/kg.*
- 4) Jovanovic-Peterson L, Peterson CM, Reed GF, Metzger BE, Mills JI, et al. Maternal postprandial glucose levels and infant birth weight: The Diabetes in Early Pregnancy Study. Am J Obstet Gynecol 1991;164:103-10. Nonfasting glucose levels more strongly predict macrosomia than fasting or glycosylated hemoglobin values.
- 5) Gabbe S, Graves C. Management of diabetes mellitus complicating pregnancy: **Obstet Gynecol 2003;102:857-68.** *General recommendations for adjusting insulin dosage.*
- 6) Moore TR. Diabetes in Pregnancy. Maternal-Fetal Medicine: Principles and Practice. 5th ed Saunders: Philadelphia: 2004,1023-61. *The ratio of carbohydrate in grams to insulin in units should be 15:1 in the nonpregnant state and the first trimester. By the second trimester, increase the carbohydrate to insulin ratio to 10-12:1. In the third trimester, use a ratio of 8-10:1.*
- 7) Albert TJ, Landon MB, Wheller JJ, Samuels P, Cheng RF, Gabbe S. Prenatal detection of fetal anomalies in pregnancies complicated by insulin-dependent diabetes mellitus. Am J Obstet Gynecol 1996;174:1424-8. A cut off value for HbA1C does not exist to counsel for a decreased risk of fetal cardiac anomalies.
- 8) American College of Obstetricians and Gynecologists. Antepartum fetal surveillance. ACOG Practice Bulletin #9. Washington, DC: ACOG, 1999. *Initiating testing at 32- 34 weeks of gestation is appropriate for most pregnancies at increased risk of stillbirth, although in pregnancies with multiple or particularly worrisome high risk conditions, testing may be initiated as early as* 26 – 28 weeks of gestation.

- 9) Johnstone FD, Prescott RJ, Steel JM, Mao JH, Chambers S, Muir N. Clinical and ultrasound prediction of macrosomia in diabetic pregnancy. Br J Obstet Gynaecol 1996;103:747-54. Prediction is significantly improved by adding ultrasound to clinical information, but at 34 weeks or later this only contributes to 8% of the variance.
- 10) American College of Obstetricians and Gynecologists. Fetal macrosomia. **ACOG Practice Bulletin #22.** Washington, DC: ACOG, 2000. ... prophylactic cesarean section may be considered for suspected fetal macrosomia with estimated fetal weights greater than 4,500 g in women with diabetes.

NOTIFICATION TO USERS

These algorithms are designed to assist the primary care provider in the clinical management of a variety of problems that occur in pregnancy. They should not be interpreted as *standard of care* but instead represent *guidelines* for the management of these patients. Variation in practice should be taken into account such factors as characteristics of the individual patient, health resources, and regional experience with diagnostic and therapeutic modalities. The algorithms remain the intellectual property of the University of North Carolina School of Medicine at Chapel Hill. They cannot be reproduced in whole or part without the *expressed* permission of the school.

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