

GESTATIONAL DIABETES SCREENING & DIAGNOSIS WORKSHEET

◆ *First Prenatal Visit.* Screen and test clients who present with one or more of the following risk factors:

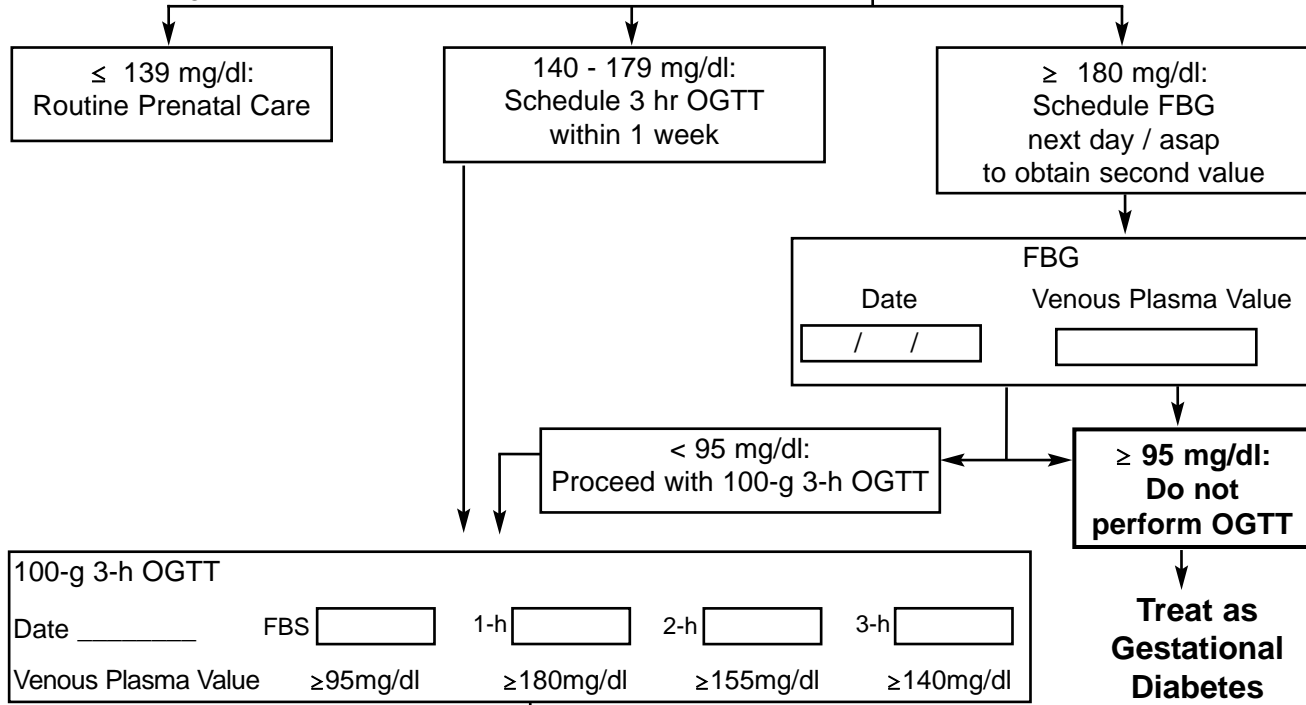
- A. Previous history of:
 1. Gestational diabetes
 2. Macrosomia
 3. Unexplained stillbirth
 4. Malformed infant
- B. Family history of overt diabetes in parents, siblings, children
- C. Body weight with BMI > 30^{1, 2}
- D. Age > 25 years³
- E. Heavy glucosuria (> 2+)
- F. High risk ethnic group:
 - African American
 - American Indian
 - Hispanic/Latina
 - Asian/Pacific Islander
 - South-East Asian
 - East Indian⁴
 - Indigenous Australian³
- G. Taking medications causing hyperglycemia

◆ *24-28 weeks:* Screen all pregnant women for evidence of gestational diabetes.

Initial Screen
24 - 28 Week: 1 hr 50 gm Glucose (Non-fasting)

Date / /

Venous Plasma Value



If two or more values are met or exceeded: Treat as Gestational Diabetes.

If one value is elevated: Initiate management with diet and exercise. Consider retesting with the 3-hr OGTT (100 gm) in 2 weeks OR evaluate results of SBGM for 2 weeks.

Metzger, BE, Coustan, DE, Buchanan, TA, Gabbe, SG, Hadden, DM, Hod, M. et al. Summary and Recommendations of the Fourth International Workshop on Gestational Diabetes Mellitus. Diabetes Care (suppl 2) 1998; B161-7
Carpenter MW, Coustan DR. Criteria for screening tests for gestational diabetes. Am J Obstet Gynecol 1982; 144(7): 768-73.

GLUCOSE TESTING INSTRUCTIONS

Screening for Gestational Diabetes:

50 Gram Oral Glucose Challenge Test (50-g OGCT)

- a. Pre-test Instructions: none
- b. Administered during office visit without respect to time of day or last meal.
- c. 50 grams glucose (such as glucola), consumed in less than 5 minutes.
- d. No smoking, remain seated.
- e. Venous plasma glucose level drawn 1 hour from start of ingestion of the glucose load.
- f. Venous plasma glucose level should be assayed by an enzyme method such as glucose oxidase or hexokinase.

Diagnostic (confirmatory) Test for GDM:

100 Gram Oral Glucose Tolerance Test (100-g 3-h OGTT)

- a. Pre-test Instructions:
 - Fast at least 8 hours and no more than 14 hours (water okay).
 - Instruct clients to "eat normally" for at least three days. There are no specific pre-fast diet recommendations, since most healthy women consume an adequate amount (≥ 150 grams) of carbohydrate. Clients who exhibit the following nutritional risk factors may have an inadequate carbohydrate intake and will need dietary instruction for a minimum of 150 grams of carbohydrate per day:
 - Hyperemesis gravidarum
 - Chronic malnutrition
 - Eating disorders
 - Philosophical/religious/health beliefs restricting diet
 - Acute medical or lifestyle stress
 - Following Atkins/low carb diet
 - NPO: medical or self-directed
- b. Obtain fasting venous glucose level.
- c. Consume 100 grams glucose (such as glucola), in less than 5 minutes.
- d. No smoking, remain seated.
- e. Obtain venous plasma glucose level @: 1, 2, and 3 hours from start of ingestion of the glucose load.
- f. Venous plasma glucose level should be assayed by an enzyme method such as glucose oxidase or hexokinase.

Postpartum Reclassification of Carbohydrate Metabolism Impairment After GDM:

All women diagnosed with gestational diabetes should be evaluated for overt diabetes and/or prediabetes 6-12 weeks postpartum and annually thereafter. The preferred postpartum method is the 2 h 75 gm OGTT glucose at 6-12 weeks followed by yearly fastings and every 3 years, a 2h 75 gm OGTT.^{5, 6}

75 Gram Oral Glucose Tolerance Test (75-gm 2-h OGTT)

- a. Fast at least 8 hours and no more than 14 hours (water okay).
- b. Obtain fasting venous glucose level
- c. Consume 75 grams glucose (such as glucola), in less than 5 minutes.
- d. No smoking, remain seated.
- e. Obtain venous plasma glucose level: 2 hours from start of ingestion of the glucose load.
- f. Venous plasma glucose level should be assayed by an enzyme method such as glucose oxidase or hexokinase.

DIAGNOSING DIABETES, revised 2004		
Normal	Prediabetes	Diabetes Mellitus*
Fasting < 100 mg/dL	FPG** ≥ 100 mg/dL - 125 mg/dL	FPG ≥ 126 mg/dL
2h PG*** < 140 mg/dL	2h PG ≥ 140 mg/dL - 199 mg/dL (IGT)	2h PG ≥ 200 mg/dL
<p>* In the absence of unequivocal hyperglycemia and acute metabolic decompensation, these criteria should be confirmed by repeat testing on a different day. ** FPG - Fasting Plasma Glucose *** 2h PG - 2 hour Post Load Glucose</p>		

REFERENCES

1. American Diabetes Association. Management: Nutrition. In: Kelley DB, editor-in-chief. Medical management of type 2 diabetes, 4th ed. Alexandria, VA: American Diabetes Association, 1998: 29-49.
2. National Heart, Lung and Blood Institute. Clinical guidelines on the identification, evaluation and treatment of overweight and obesity in adults. Washington, DC: National Institute of Health, 1998: 12.
3. Metzger BE, Coustan DR, Buchanan TA, Gabbe SG, Hadden DM, Hod M. et al. Summary and Recommendations of the Fourth International Conference Workshop on Gestational Diabetes Mellitus. Diabetes Care 1998 (suppl 2); 21: B161-7.
4. Fujimoto WY. Diabetes in Asian and Pacific Islander Americans. In: Diabetes in America, 2nd ed, National Institutes of Health, 1995: 661-77.
5. American Diabetes Association Guidelines JAN. 2004, Diabetes Care, Vol 27, Supplement 1 p.s89
6. ACOG Practice Bulletin Number 30, Sept., 2001, P 553.