

MEMORANDUM # 65

TO: UNC Hospitals Attending Physicians, Housestaff, Nursing Coordinators, Department Heads and Supervisors

FROM: Mark Brecher, M.D., Chair, McLendon Clinical Laboratories
John F. Chapman, Dr. P.H., Director, Core Laboratory
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DATE: October 9, 2006

SUBJECT: Revised Reference Range for Random (non-fasting) Glucose

Effective October 16, 2006, the upper limit of the reference range for random serum/plasma glucose (GLUC, test#9) will be revised downward from 199 to 179 mg/dL. This change is consistent with the current recommendation of the American Diabetes Association (ADA) for postprandial control of blood glucose in the inpatient¹ and outpatient setting².

In addition, the ADA recommends that patients with no prior history of diabetes who are found to have hyperglycemia (random blood glucose >125 mg/dL or 6.9 mmol/L) during hospitalization should have follow-up testing within one month of hospital discharge. Though no formal recommendations exist regarding the use of random glucose as a screening test for diabetes in the outpatient setting, follow-up of random glucose values >125 mg/dl or 6.9 mmol/L obtained in the outpatient setting with a fasting plasma glucose measurement or 75-gram oral glucose tolerance test is reasonable³.

Table 1. Reference Range

Previous Random (Non-Fasting) Blood Glucose Range	New (Non-Fasting) Blood Glucose Range (effective 10/16/06)
65 – 199 mg/dL (3.6 – 11.0 mmol/L)	65 – 179 mg/dL (3.6 – 9.9 mmol/L)

If you have questions concerning this change please call Dr. John Chapman 6-3725.

REFERENCES

¹Clement S, Braithwaite SS, Magee MF, Ahmann A, Smith EP, Schafer RG and Hirsh IB. Management of diabetes and hyperglycemia in hospitals.(Reviews/Commentaries/Position Statements) Diabetes Care 2004;27:p.578.

²American Diabetes Association. Standards of medical care in diabetes--2006. Diabetes Care 2006;29 Suppl 1:p.S10.

³Engelgau MM, Narayan KM, Herman WH. Screening for type 2 diabetes. Diabetes Care 2000;23:p.1563.