

Do Race and Ethnicity Impact Hemoglobin A1c Independent of Glycemia?

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Abstract

Hemoglobin A1c (HbA1c) is widely used as an index of mean glycemia, a measure of risk for the development of diabetes complications, and a measure of the quality of diabetes care. Emerging literature suggests that, although HbA1c levels change little over time within persons without diabetes, they vary considerably among individuals, suggesting that factors other than glycemia may impact HbA1c. Racial and ethnic differences in HbA1c have been described that do not appear to be explained by differences in glycemia. It is imperative that the nonglycemic factors that affect HbA1c be more clearly defined. Even more important, it must be determined whether differences among individuals or groups correlate with susceptibility to complications or merely reflect variation in hemoglobin glycation.

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Abbreviations: (ADAG) A1c-derived average glucose, (BMI) body mass index, (DPP) Diabetes Prevention Program, (HbA1c) hemoglobin A1c

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