

**UNIVERSITY GRADUATE SCHOOL BULLETIN  
ANNOUNCEMENT**

**Florida International University**  
*University Graduate School*

Doctoral Dissertation Defense

**Abstract**

Risk Factors of Coronary Heart Disease and Correlates of Type 2 Diabetes  
among Cuban Americans

by

**Subrata D. Nath**

The differences in the risk factors of coronary heart disease (CHD) and the predictors of type 2 diabetes were investigated among Cuban Americans with (N=79) and without (N=80) type 2 diabetes using a cross-sectional study design. Data on socioeconomic status, smoking, physical activity, dietary intake, and angina symptoms were collected using validated standardized questionnaires. Anthropometrics and blood pressure (BP) were recorded. Glucose, glycated hemoglobin, lipid profile, homocysteine, and C-reactive protein were assessed in fasting blood.

Diabetics reported a significantly higher rate of angina symptoms than non-diabetics (P=0.008). After adjusting for age and gender, diabetics had significantly (P<0.001) higher mean waist circumference and mean systolic BP than non-diabetics. There was no significant difference in nutrient intakes and physical activity levels between the groups. After adjusting for age and gender, diabetics had significantly (P<0.001) higher mean serum levels of triglycerides and homocysteine than non-diabetics. In contrast, diabetics had significantly (P<0.01) lower levels of high-density lipoprotein cholesterol (HDL-C) than non-diabetics. In multiple linear regression, several modifiable lifestyle habits were the independent predictors of these CHD risk factors.

Multivariate logistic regression analyses showed that increased age, male gender, larger waist circumference, lack of acculturation, increased intake of percent calories from protein, and higher serum levels of triglycerides were the independent risk factors for diabetes among the study participants. In contrast, increased intake of fiber and moderate alcohol consumption conferred protection against diabetes.

The study concluded that Cuban Americans with diabetes have a greater number of CHD risk factors compared to those without diabetes. Several modifiable lifestyle factors are associated with the risk of diabetes. Culturally sensitive public health measures are needed to reduce the burden of diabetes and CHD in this high-risk minority population.

**Date:** November 22, 2004  
**Time:** 10.00 a.m.  
**Place:** University Park, GL 220

**Department:** Dietetics and Nutrition  
**Major Professor:** Dr. Fatma G. Huffman