

Body mass index, waist/hip ratio, and coronary heart disease incidence in African Americans and whites

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To study the relation of the amount and distribution of body fat with incident coronary heart disease in two ethnic groups, the authors analyzed prospective data from the Atherosclerosis Risk In Communities Study. Among 14,090 participants aged 45-64 years and free of coronary disease at baseline in 1987-1989, we identified 398 events through 1994, an average of 6.2 years of follow-up. Among African-American women, the multivariate-adjusted relative risks of coronary heart disease across quartiles of body mass index were 1.0, 1.91, 1.54, and 2.15 (p for trend = 0.27), and those for waist/hip ratio were 1.0, 2.07, 2.33, and 4.22 (p for trend = 0.76) for body mass index and 1.0, 1.08, 1.87, and 1.68 (p for trend = 0.06) for waist/hip ratio. Relative risks for whites were generally similar to those for African Americans. Relative risks were stronger for never smokers than for the overall cohort. Unlike some previous studies, our results suggest that African Americans, like whites, are not spared from the coronary heart disease risks accompanying obesity.

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