

## Prevention

### BODY SHAPE INDEX PREDICTS CARDIOVASCULAR MORTALITY INDEPENDENT OF BMI

Moderated Poster Contributions  
Poster Sessions, Expo North  
Saturday, March 09, 2013, 3:45 p.m.-4:30 p.m.

Session Title: Prevention: Cardiovascular Risk Factors  
Abstract Category: 24. Prevention: Clinical  
Presentation Number: 1146M-12

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**Background:** A Body Shape Index (ABSI) separates the influence of the component of body shape from that of body size. We examined association between ABSI and risk of ischemic heart disease (IHD) and cardiovascular disease (CVD) mortality in a nationally representative cohort.  $ABSI = [Waist\ circumference] / [(BMI)^{2/3} * (height)^{1/2}]$

**Methods:** Participants over age 30 enrolled in the National Health and Nutrition Examination Survey (NHANES) III study from 1988 to 1994 had known CVD risk factors (age, sex, race, BMI, diabetes, hypertension, smoking history, triglycerides, HDL, history of CVD, family history of CVD and medication use) measured. CVD and IHD mortality through 2006 were obtained via linkage with the National Death Index. Weighted cox proportional hazards model was used to estimate hazards ratio (HR) and 95% confidence interval (CI) for IHD and CVD mortality per one standard deviation (SD) increase in ABSI.

**Results:** 11, 748 participants (mean age  $54 \pm 16.6$  years, 52.7 % females, and 29.5 % ethnic minorities) had complete data. During 152, 373 person-years followup (median: 14 years), there were 1184 CVD deaths and 889 IHD deaths. In multivariate analysis, HR was 1.49 (95% CI, 1.25-1.78) for CVD mortality and 1.58 (95% CI, 1.33-1.88) for IHD mortality per unit increase in SD.

**Conclusion:** In a nationally representative sample of US adults, ABSI was a predictor of IHD and CVD mortality.

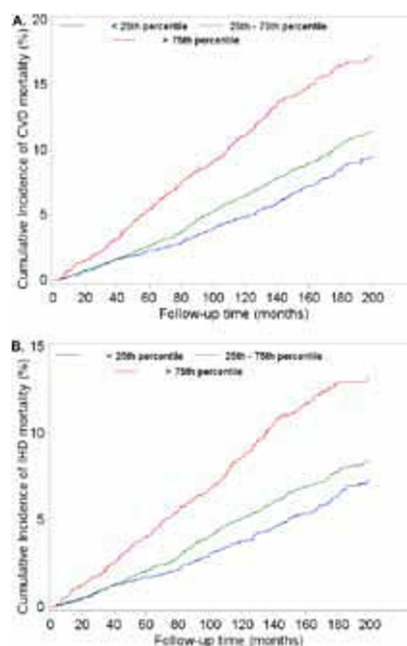


Figure: Cumulative incidence of (A) Cardiovascular mortality and (B) Ischemic heart disease mortality by ABSI