

# **Dietary Approaches to Stop Hypertension Diet Concordance and Incident Heart Failure: The Multi-Ethnic Study of Atherosclerosis.**

## **Abstract**

### **INTRODUCTION:**

*In observational studies, the association between the Dietary Approaches to Stop Hypertension (DASH) diet and incident heart failure has been inconsistent. It was hypothesized that higher DASH diet concordance has a protective effect on heart failure in a multi-ethnic cohort.*

### **METHODS:**

*The Multi-Ethnic Study of Atherosclerosis cohort includes men and women of multiple ethnicities who were aged 45-84 years and free of clinical cardiovascular disease at baseline. Participants were recruited between 2000 and 2002 from six U.S. communities and followed for incident cardiovascular health events through 2015 for the purpose of this data set. Diet was measured using food-frequency questionnaires. Cox proportional hazards analysis was used to investigate the associations of the DASH diet concordance with incident heart failure in 2017-2018.*

### **RESULTS:**

*During a median 13 years of follow-up, 179 of 4,478 participants developed heart failure, corresponding to a rate of 3.4 per 1,000 person years. Heart failure incidence rates did not vary significantly by DASH quintile for the population as a whole. In participants younger than 75 years, highest DASH concordance was associated with a lower risk of incident heart failure compared with those in the lowest quintile (hazard ratio=0.4, 95% CI=0.2, 0.9 vs all participants hazard ratio=1.0, 95% CI=0.2, 0.9) after adjusting for demographics, energy consumption, and known cardiovascular confounders.*

### **CONCLUSIONS:**

*This study supports the hypothesis that DASH is beneficial in heart failure prevention within the individuals aged less than 75 years subgroup, an idea that to date was substantiated only by much smaller studies or in less diverse patient populations*