Background: Increased dietary sodium is a significant risk factor for poor cardiovascular disease (CVD) outcomes. The American Heart Association (AHA) recommends sodium intake of <2300mg/day for all adults and 1500mg/day for adults with CVD. No recent studies have evaluated the impact of socioeconomic status on sodium intake.

Methods: A cross-sectional study was conducted using the continuous NHANES from 2009-2018. The study included 3170 adult men and women, >20 years with CVD. Income to poverty ratio (IPR) was categorized as <1, >1-<2, >2. Using these categories, baseline characteristics of study participants and self-reported sodium intake were described. Using IPR and sodium intake as continuous variables, the effect of IPR on sodium intake was estimated using linear regression. Multivariable adjusted analysis was conducted controlling for age, race, sex, and educational level.

Results: Of the 3170 non-institutionalized US adults with CVD, the majority were older adults >65years (61%), male (56.4%), white (50.2%), had an educational level below high school (32.1%), overweight (28.9%), and had an average calorie intake of 1862 + (899.8). The average sodium intake of adults with CVD was 3096mg +1635mg/day. Average sodium intake was highest among participants with an IPR>2 (3128.7 + (1535.2) mg/day and participants with a college degree or higher (3236.4+1539.2) mg/day. An increase in IPR was associated with a 46mg/day increase in sodium intake [\(\text{Coeff 45.6, p= 0.042 (95% CI 1.7 89.5)}\]. After controlling for age, sex, gender, and education, this association was not statistically significant. [\(\text{Coeff 3.1, p= 0.9 (95% CI -43.7 49.8)}\].

Conclusion: The average sodium intake of adults with CVD was 3096mg/day, more than double the recommended sodium intake of <1500mg/day. Although it appeared that increasing IPR was associated with an increase in reported sodium intake, this is likely because, with higher education and income-poverty ratio, participants were better able to report their sodium intake. Overall, adherence to sodium dietary recommendations among participants with CVD was poor with over 89% of participants consuming sodium >1500mg/day regardless of income to poverty ratio.