

Additional File 2. Outcome, Main Exposures, and Covariate Variable Operationalization

	Variable	Definition
Outcome	Diet-related cardiometabolic multi-morbidity	Household head(s) self reporting 2 or more diet-related cardiometabolic chronic conditions
		Diet-related cardiometabolic chronic conditions include: angina, atherosclerosis, hyperlipidemia, congestive heart failure, diabetes, myocardial infarction, hypertension, or stroke
Main Exposures	Weighed per capita	Main exposure variables controlled for household size and age composition of household members
		Household members weighted by age to account for the expected daily caloric requirements relative to the recommended 2,000 calorie/day for adults. Age 13 years + were given a weight of 1, age 6-12 years were given a weight of 0.75, and age 2-5 years were given a weight of 0.575.
	Packaged Food & Drink <i>Quantity</i>	Servings per capita
		Servings defined as total volume of item/serving size of item, with serving size as content consumed typically per eating occasion
	Packaged Food & Drink <i>Quality</i>	Calories, protein, carbohydrates, fat, fiber, and sodium, expressed as weighed per capita nutrients per serving
		Servings defined as total volume of item/serving size of item, with serving size as content consumed typically per eating occasion
		Calories, protein, carbohydrates, fat, fiber, and sodium calculated from all purchases across all 13 food and drink categories
	Packaged Food & Drink <i>Quantity*Quality</i>	Calories, protein, carbohydrates, fat, fiber, and sodium weighed per capita
		Calories, protein, carbohydrates, fat, fiber, and sodium calculated from total monthly purchases across all 13 food and drink categories
	Covariates	BMI
Age		Age of household head
Education		Education of household head, categories include: some high school, high school diploma, some college, college degree, post graduate work or technical school
Physical Activity		Weekly physical activity of household head, categories include: rarely/never, some days, most days (reference is most days)
Race		White, Black, Hispanic, Asian, Other
Income		Household income in dollars, categories in 10K increments from \$0-9,999 (reference) to \$100,000+
Family Size		Number people living in household, categories from 1 (reference) to 8+ people
Marital Status		Household head marital status, categories include married, divorced, separated, widowed
Survey Year		Year of household data collection, categories include 2006 (reference), 2007, and 2008