| **Study** | **Participants** | **Exposure** | **IntakeStatus Ascertainment** | **Results** |
| --- | --- | --- | --- | --- |
| Cook, 2009125; Satterfield, 199122; Hebert, 1995107; Cook, 201631; Cook, 2014126Location: USSetting: CommunityDesign: Prospective Cohort studyStudy Name:TOHP Follow-up (TOHP I and TOHP II). | Study of: AdultsN: 284% Male: 69.4Mean Age/Range/Age at Baseline: Men: 30-44y, 915; 45-54y, 686; Women: 30-44y, 366; 45-55y, 339.Race: Men: white 1418; Black, 139; Other, 44; Women: white 504; Black, 183; Other, 18Systolic BP: Men: < 125, 762; >= 125, 839; women: <125, 298; >= 125, 407Diastolic BP: Men: 80-84, 894; 85-89, 707; women: 80-84, 387; 85-89, 318.Magnesium: NRCalcium: NROther Minerals: NRMean BMI: Men: < 25, 238; 25 to <30. 777; >= 30 586; Women, <25 138; 25 to <30 279; >= 30 288.% with Hypertension: NR% with history of CVD: NR% with Type 2 diabetes: NR% with Kidney disease: NR% with history of Kidney stones: NRInclusion: Participants who had not been randomized to an active sodium reduction intervention in TOHP I and II were included.Exclusion: Participants who had CVD events during the trial periods, and who had no valid urinary excretion measures were excluded. | Exposure Type: Sodium to Potassium Excretion RatioExposure Unit: linearDuration(in months): 120 to 180 (10 to 15 years)Exposure to Follow Up Time: 10 years after the end of TOHP I and 5 years after the end of TOHP IIDose format: NRNR, Dose: NR | Sodium measure: More than one 24-hour urinary analysis without reported quality control measureBest sodium measure recorded: twice, at 5 (life- style interventions) or 7 (nutritional supplement interventions) scheduled collections in TOHP I and at 3 to 5 scheduled collections during TOHP IIPotassium measure: More than one 24-hour urinary analysis without reported quality control measure\_1Best potassium measure recorded: twice, at 5 (life- style interventions) or 7 (nutritional supplement interventions) scheduled collections in TOHP I and at 3 to 5 scheduled collections during TOHP IIMortality Outcomes-Method of Ascertainment: National death indexCVD, CHD, stroke, kidney stones/disease Outcomes-Method of ascertainment: medical records | Cardiovascular Events (Including stroke, myocardial infarction (MI), coronary artery bypass graft, percutaneous transluminal coronary angioplasty, and death from cardiovascular causes) (linear/Outcome):Median, 5; range, 1-7 in TOHP I; median, 4; range, 1-5 in TOHP II FUNR cases: 19, total: 284Adjustment: Clinic,treatment assignment, age, sex, race/ethnicity, education status, family history of cardiovascular disease, baseline weight, alcohol, smoking, exercise, and changes in weight, smoking, and exerciseAmong Black participants, no association between sodium to potassium excretion ratio and risk of CVD adjusting for treatment assignment. |
| Mills, 2016120; He, 2016121; Yang, 2014122; Lash, 2009123Location: USSetting: CommunityDesign: Prospective Cohort studyStudy Name:The Chronic Renal Insufficiency Cohort (CRIC) Study. | Study of: AdultsN: 1472% Male: Q1 35.0, Q2 49.9, Q3 61.3 Q4 76.0Mean Age/Range/Age at Baseline: Q1 mean 57.2 (SD 10.9) Q2 mean 57.6 (SD 11.3) Q3 mean 58.2 (SD 10.8) Q4 mean 58.0 (SD 10.6) yearsRace: Q1: White 38.6% Black 51.4% Other 10.0 %; Q2: White 45.6% Black 44.0% Other 10.3%; Q3 White 50.6% Black 37.4% Other 12.0%; Q4 White 54.3% Black 32.9% Other 12.8%Systolic BP: Q1: mean 125.6 (SD 21.7); Q2 mean 126.3 (SD 20.9); Q3 mean 128.1 (SD 21.7); Q4 mean 132.3 (SD 22.4) mmHgDiastolic BP: Q1: mean 70.7 ( SD 12.7); Q2 mean 71.0 (SD 12.8); Q3: mean 71.4 (SD 12.3); Q4: mean 72.7 (SD 13.0) mmHgMagnesium: NRCalcium: NROther Minerals: NRMean BMI: Q1: mean 31.7 (SD 8.0); Q2 mean 32.1 (SD 7.5); Q3 mean 31.9 (SD 7.3); Q4 mean 31.8 (SD 7.5) kg/m^2% with Hypertension: Q1 80.2; Q2 86.5; Q3 86.7; Q4 90.8% with history of CVD: Q1 27.3; Q2 30.0; Q3 34.9; Q4; 39.7% with Type 2 diabetes: Q1 37.7; Q2 43.8; Q3 49.3; Q4 60.3% with Kidney disease: NR% with history of Kidney stones: NRInclusion: Participant aged 21 to 74 years with mild to moderate CKD designed to identify and examine risk factors for CKD progression and development of CVD in those with CKD, who met age-specific estimated glomerular filtration rate (eGFR) criteria of 20 to 70 mL/min/1.73 m^2 were included.Exclusion: People with a history of kidney transplant, dialysis for at least 1 month, glomerulonephritis requiring immunosuppression, advanced heart failure, cirrhosis, or polycystic kidney disease were excluded. | Exposure Type: 24 h urinary sodium excretion calibrated to mean urinary creatinine excretion of 1569 mg/24 hours inExposure Unit: per 1000 mg/24 hDuration(in months): 163.2 (6.8 years)Exposure to Follow Up Time: NRDose format: NRNR, Dose: NR for Black | Sodium measure: Multiple 24-hour urine analysis with validationBest sodium measure recorded: 3 times, 1 year apartCVD, CHD, stroke, kidney stones/disease Outcomes-Method of ascertainment: Hospital records, Interview with participant or proxy, followup visit | Composite CVD (Defined as congestive heart failure, stroke, and myocardial infarction) (per 1000 mg/24 h/Outcome):Median 6.8 years FUNR cases: NR, total: 1460Adjustment: Age, sex, race, clinic site, education, waist circumference, lean body mass index, body mass index, cigarette smoking, alcohol drinking, physical activity, LDL-cholesterol, glucose, history of CVD, antidiabetic medications, lipid-lowering medications, diuretics, renin-angiotensin system blocking agents, and other antihypertensive medications, urinary creatinine excretion, baseline eGFRAmong black participants, greater sodium excretion was associated with an increased risk of compostive CVD.Congestive Heart Failure (Congestive heart failure was identified by hospital admission for new or worsening CHF signs and symptoms, in addition to diminished cardiac output) (per 1000 mg/24 h/Outcome):Median 6.8 years FUNR cases: NR, total: 1461Adjustment: Age, sex, race, clinic site, education, waist circumference, lean body mass index, body mass index, cigarette smoking, alcohol drinking, physical activity, LDL-cholesterol, glucose, history of CVD, antidiabetic medications, lipid-lowering medications, diuretics, renin-angiotensin system blocking agents, and other antihypertensive medications, urinary creatinine excretion, baseline eGFRAmong black participants, greater sodium excretion was associated with an increased risk of compostive CVD.Myocardial Infarction (Myocardial infarction was defined by characteristic changes in troponin and creatinekinase–MB levels, symptoms of myocardial ischemia, electrocardiogram changes, or new fixed profusion abnormalities.) (per 1000 mg/24 h/Outcome):Median 6.8 years FUNR cases: NR, total: 1468Adjustment: Age, sex, race, clinic site, education, waist circumference, lean body mass index, body mass index, cigarette smoking, alcohol drinking, physical activity, LDL-cholesterol, glucose, history of CVD, antidiabetic medications, lipid-lowering medications, diuretics, renin-angiotensin system blocking agents, and other antihypertensive medications, urinary creatinine excretion, baseline eGFRAmong black participants, greater sodium excretion was associated with an increased risk of compostive CVD.Stroke (Stroke was defined as rapid onset of neurologic deficit, headache, or other nonvascular cause and clinically relevant lesion on brain imaging for longer than 24 hours or deathwithin24 hours.) (per 1000 mg/24 h/Outcome):Median 6.8 years FUNR cases: NR, total: 1472Adjustment: Age, sex, race, clinic site, education, waist circumference, lean body mass index, body mass index, cigarette smoking, alcohol drinking, physical activity, LDL-cholesterol, glucose, history of CVD, antidiabetic medications, lipid-lowering medications, diuretics, renin-angiotensin system blocking agents, and other antihypertensive medications, urinary creatinine excretion, baseline eGFRAmong black participants, greater sodium excretion was associated with an increased risk of compostive CVD. |