| **Study** | **Participants** | **Intervention(s)** | **IntakeStatus Ascertainment** | **Findings - Outcomes and Comparison** |
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| Sacks, 200110Vollmer, 200111; Svetkey, 200412; Harsha, 200413; Akita, 200314Location: USSetting: CommunityDesign: Randomized Cross-over individualStudy Name:DASH-SodiumNumber of Sites: multipleCrossover: Length of washout period: <5 daysStudy Years: NR | Study of: AdultsN: 79Mean Age/Range/Age at Baseline: 49(10)Race: 56% black; 40% NH white; 5% Asian/otherSystolic BP: 135(10)Diastolic BP: 86(4)Magnesium: NRCalcium: NROther Minerals: NRMean BMI: 30(5)% with Hypertension: 41% with history of CVD: 0% with Type 2 diabetes: 0% with Kidney disease: 0% with history of Kidney stones: 0Mean Age/Range/Age at Baseline: 47+/-10Race: 57% black; 40% NH white; 3% Asian/otherSystolic BP: 134+/-10Diastolic BP: 86+/-5Magnesium: NRCalcium: NROther Minerals: NRMean BMI: 29+/-5% with Hypertension: 41% with history of CVD: 0% with Type 2 diabetes: 0% with Kidney disease: 0% with history of Kidney stones: 0Comparator:% Male: NRMean Age/Range/Age at Baseline: NRRace: NRSystolic BP: NRDiastolic BP: NRMagnesium: NRCalcium: NROther Minerals: NRMean BMI: NR% with Hypertension: NR% with history of CVD: NR% with Type 2 diabetes: NR% with Kidney disease: NR% with history of Kidney stones: NRInclusion: 22 years old or more, average systolic blood pressure 120 to 159 mm Hg (over 3 visits) and average diastolic blood pressure 80 to 95 mm HgExclusion: heart disease, renal insufficiency, poorly controlled hyperlipidemia or diabetes mellitus, diabetes requiring insulin, special dietary requirements, more than 14 alcoholic drinks per week, or use of antihypertensive drugs or other medications that would affect blood pressure or nutrient metabolism | Intervention Type: Intervention 1: Prescribed or synthetic diet (all food provided) with sodium quantifiedDescription: Control High Sodium: To replicate typical diet with high sodium contentForm of Administration: Dietary Modification: All foods provided, menu designed to achieve high sodium intakeDose: 150 mmol sodium/d in control dietNa/K ratio: NRMagnesium: NRCalcium: NROther Minerals: NRIntervention 2: Prescribed or synthetic diet (all food provided) with sodium quantifiedDescription: Control Intermediate Sodium: To replicate typical diet with intermediate sodium contentForm of Administration: Dietary Modification: All foods provided, menu designed to achieve intermediate sodium intakeDose: 100 mmol sodium/d in control dietNa/K ratio: NRMagnesium: NRCalcium: NROther Minerals: NRComparator: Prescribed or synthetic diet (all food provided) with sodium quantifiedDescription: Control Low Sodium: To replicate typical diet with low sodium contentForm of Administration: Dietary Modification: All foods provided, menu designed to achieve low sodium intakeDose: 50 mmol/dNa/K ratio: NRMagnesium: NRCalcium: NROther Minerals: NRIntervention 3: NRDescription: DASH High Sodium: To impose DASH diet with high sodium contentForm of Administration: Dietary Modification: All foods provided, menu designed to follow DASH with high sodium intakeDose: 150 mmol sodium/d in DASH dietNa/K ratio: NRMagnesium: NRCalcium: NROther Minerals: NRIntervention 4: Prescribed or synthetic diet (all food provided) with sodium quantifiedDescription: DASH intermediate Sodium: To impose DASH diet with intermediate sodium contentForm of Administration: Dietary Modification: All foods provided, menu designed to follow DASH with intermediate sodium intakeDose: 100 mmol/dNa/K ratio: NRMagnesium: NRCalcium: NROther Minerals: NRComparator: Prescribed or synthetic diet (all food provided) with sodium quantifiedDescription: DASH Low Sodium: To achieve DASH diet with low sodium contentForm of Administration: Dietary Modification: All foods provided, menu designed to follow DASH with low sodium intakeDose: 50 mmol/dNa/K ratio: NRMagnesium: NRCalcium: NROther Minerals: NRDuration: 4 periods of 30 days each, including run-inExposure to Follow Up Time: 0 months | Sodium measure: Chemical analysis of diet with intervention/exposure adherence measure, Single 24-hour urinary analysis without reported quality control measureBest sodium measure recorded: Single 24-hour urine analysis without validation measured at least 4 times, 4 weeks apart; chemical analysis of diet; Food diaries completed daily without validation;Sodium, Method of Validation: NR, Chemical analysis of diet with intervention/exposure adherence measureSodium Status Intervention 1: 141+/-55 mmol/dSodium Status Intervention 2: 106+/-44 mmol/dSodium Status Comparator: 64+/-37mmol/dSodium Status Intervention 3: 144+/-58 mmol/dSodium Status Intervention 4: 107+/-52 mmol/dPotassium measure: Single 24-hour urine analysis without validationBest potassium measure recorded: Single 24-hour urine analysis without validation measured at least 4 times, 4 weeks apart; chemical analysis of diet; Food diaries completed daily without validation;Potassium, Method of Validation: Adherence checks via food diaries, supervised mealsPotassium Status Intervention 1: 40+/-14 mmol/d Potassium Status Intervention 2: 41+/-14 mmol/d Potassium Status Comparator: 42+/-14 mmol/d Potassium Status Intervention 3: 75+/-27 mmol/d Potassium Status Intervention 4: 81+/-31 mmol/dHow was blood pressure measured? Random-zero sphygmomanometers, seated, 3 times during screening, weekly during 1st 3 weeks of intervention periods, and 5 times during last 9 days of intervention periods | Subgroup: <= 45Diastolic BPFollow-Up Time: 30 daysComparison: Intervention 3 vs Intervention 5MD -1.10 (95% CI: -2.10 - 0.00)Comparison: Intervention 1 vs ComparatorMD -2.80 (95% CI: -4.00 - -1.70)Systolic BPFollow-Up Time: 30 daysComparison: Intervention 3 vs Intervention 5MD -1.40 (95% CI: -2.90 - 0.20)Comparison: Intervention 1 vs ComparatorMD -5.30 (95% CI: -7.00 - -3.50)Subgroup: > 45Diastolic BPFollow-Up Time: 30 daysComparison: Intervention 3 vs Intervention 5MD -2.20 (95% CI: -3.10 - -1.20)Comparison: Intervention 1 vs ComparatorMD -3.80 (95% CI: -4.80 - -2.90)Systolic BPFollow-Up Time: 30 daysComparison: Intervention 3 vs Intervention 5MD -4.50 (95% CI: -6.00 - -3.00)Comparison: Intervention 1 vs ComparatorMD -7.50 (95% CI: -8.90 - -6.10) |
| Zhou, 201615; Zhou, 201316Location: ChinaSetting: CommunityDesign: Cluster RCT ParallelNumber of Sites: multipleStudy Years: unclear | Study of: Both adults and childrenN: 462Participants:% Male: NRMean Age/Range/Age at Baseline: NRRace: NRSystolic BP: NRDiastolic BP: NRMagnesium: NRCalcium: NROther Minerals: NRMean BMI: NR% with Hypertension: NR% with history of CVD: NR% with Type 2 diabetes: NR% with Kidney disease: NR% with history of Kidney stones: NRInclusion: Families were at least one member was a hypertension patient; the participant had an estimated daily sodium intake of \_260 mmol per day; Individuals were at least 18 years of age and had no significant renal impairment or other indication for a potassium-sparing medication.Exclusion: Moving | Intervention Type(s):Duration: NRExposure to Follow Up Time: NR |  | Subgroup: Age >70Diastolic BP-sittingFollow-Up Time: 36 monthsComparison: Intervention 1 vs ComparatorMD -2.80 (95% CI: NC - NC)Systolic BP-sittingFollow-Up Time: 36 monthsComparison: Intervention 1 vs ComparatorMD 0.03 (95% CI: NC - NC) |