| **Study** | **Participants** | **Intervention(s)** | **IntakeStatus Ascertainment** | **Findings - Outcomes and Comparison** |
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| Sinaiko, 199333; Gomez-Marin, 199134Location: USSetting: CommunityDesign: Randomized, parallelNumber of Sites: multipleStudy Years: 1986-1987 | Study of: ChildrenN: 210Intervention 1:% Male: 50Mean Age/Range/Age at Baseline: 13.2Race: NRSystolic BP: 113.6Diastolic BP: 63.4Magnesium: NRCalcium: NROther Minerals: NRMean BMI: 22.5% with Hypertension: NR% with history of CVD: NR% with Type 2 diabetes: NR% with Kidney disease: NR% with history of Kidney stones: NRIntervention 2:% Male: 52Mean Age/Range/Age at Baseline: mean 13.3 (SD 0.1)Race: NRSystolic BP: 114.2Diastolic BP: 66.6Magnesium: NRCalcium: NROther Minerals: NRMean BMI: 22.3% with Hypertension: NR% with history of CVD: NR% with Type 2 diabetes: NR% with Kidney disease: NR% with history of Kidney stones: NRComparator:% Male: 51Mean Age/Range/Age at Baseline: mean 13.4 (SD .01)Race: NRSystolic BP: 113.7Diastolic BP: 65.3Magnesium: NRCalcium: NROther Minerals: NRMean BMI: 22.2% with Hypertension: NR% with history of CVD: NR% with Type 2 diabetes: NR% with Kidney disease: NR% with history of Kidney stones: NRInclusion: Blood pressure at rescreening was > 109 mm Hg for boys and 108 mm Hg for girlsExclusion: SBP>=140/DBP>=90 on average, DBP>100 on any visit, history of renal disease with significant hematuria or proterinuria, or serum creatinine>1.5 mg/dl. Hypokalemia, chronic system illness, compliance issues | Intervention Type(s):Intervention 1: Dietary/lifestyle counseling (single or multiple sessions, including dietary advice) to reduce sodium intakeDescription: Reduce sodium intake to 70 mmol/dayForm of Administration: Dietary Modification: Trained nutritionists instructed patients on how to reduce dietary sodiumDose: NRNa/K ratio: Boys: 2.9 ; Girls: 2.7Magnesium: NRCalcium: NROther Minerals: NRIntervention 2: Use of potassium supplement to increase potassium levelsDescription: NRForm of Administration: Oral potassium supplementDose: 1 mmol/kg body weight potassium chloride per 24 hours (Max 80 mmol per 24 hours) administered in capsulesNa/K ratio: Boys:2.1 mmol/24h; Girls: 2.2 mmol/24hMagnesium: NRCalcium: NROther Minerals: NRComparator: PlaceboDescription: Participants asked not to change their usual dietForm of Administration: PlaceboDose: placebo capsules same shape and color as the potassium chlorideNa/K ratio: Boys: 3; Girls 3.5Magnesium: NRCalcium: NROther Minerals: NRDuration: 36 monthsExposure to Follow Up Time: NR | Sodium measure: Single 24-hour urine analysis with validationBest sodium measure recorded: 3 times, 1 year apartSodium, Method of Validation: Pill counts, Single 24-hour urine analysis with validationSodium Status Intervention 1: Boys: 162 mmol/24h; Girls: 119 mmol/24hSodium Status Intervention 2: Boys: 176 mmol/24h; Girls: 173 mmol/24hBest potassium measure recorded: 3 times, 1 year apartPotassium, Method of Validation: Pill countsPotassium Status Intervention 1: Boys: 64 mmol/24h; Girls: 49 mmol/24h Potassium Status Intervention 2: Boys: 100 mmol/24h; Girls: 93 mmol/24hHow was blood pressure measured? Measured two times on the right arm and with the student in the seated position by trained personnel using a standard clinical sphygmomanometer (following a standardized protocol).Blood pressure was measured every 3 months for 3 years. | Subgroup: GirlsRate of increase in diastolic BP-sittingFollow-Up Time: 3 yearsComparison: Intervention 1 vs ComparatorMD -1.70 (95% CI: -3.09 - -0.31)Comparison: Intervention 2 vs ComparatorMD -0.90 (95% CI: -2.29 - 0.49)Rate of increase in systolic BP-sittingFollow-Up Time: 3 yearsComparison: Intervention 1 vs ComparatorMD -1.90 (95% CI: -3.01 - -0.79)Comparison: Intervention 2 vs ComparatorMD -0.90 (95% CI: -2.01 - 0.21)Subgroup: BoysRate of increase in diastolic BP-sittingFollow-Up Time: 3 yearsComparison: Intervention 1 vs ComparatorMD -1.40 (95% CI: -3.48 - 0.68)Comparison: Intervention 2 vs ComparatorMD -1.60 (95% CI: -3.54 - 0.34)Rate of increase in systolic BP-sittingFollow-Up Time: 3 yearsComparison: Intervention 1 vs ComparatorMD 0.60 (95% CI: -0.65 - 1.85)Comparison: Intervention 2 vs ComparatorMD 0.30 (95% CI: -0.81 - 1.41) |