

Total sugar intake significantly associated with systolic blood pressure in small sample population

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Introduction

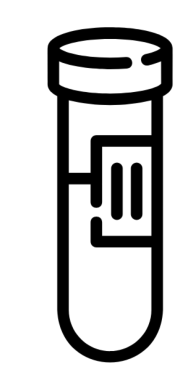
High Blood Pressure is related to
45% of all deaths from heart disease
51% of deaths from strokes



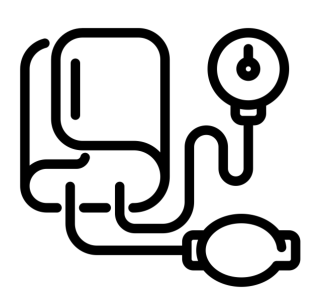
Objetive

To assess the impact of dietary sugar intake, Na⁺, K⁺ and Na⁺/K⁺ ratio on hypertension and cardiometabolic biomarkers

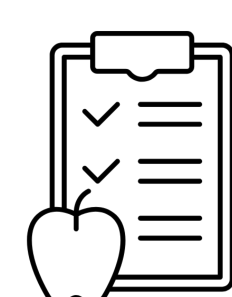
Methods



Blood was collected to measure glucose, triacylglycerols, total cholesterol, HDL-c, ApoA1, ApoB, or hs-CRP (enzymatic and turbidimetric techniques), oxidized LDL (ELISA), IL-6 and TNFa (Luminex)



Blood pressure (SBP, DBP, and HR) measured at least twice



Dietary intake was obtained using semi-quantitative FFQ, comprising 82 items

Results

78 participants
Aged from 19 to 80 years old
(M=48.5±13.5)

47% taking hypertensive medication

BMI ranged from 19.7 to 41.1 Kg/m²
(M=29.2±5.4)

Average intake

Na ⁺	3805±1397 mg	K ⁺	3980±1300 mg	Na/K	1.65±0.38	Sugar	21.4%
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Correlations

None found between Na⁺ or K⁺ with SBP, HR, and the cardiometabolic biomarkers (p>0.05)

% sugar intake and
Systolic Blood Pressure - positive = 0.29, p<0.05, also significant after adjusting for BMI
Triacylglycerols - positive = 0.23, p =0.0561 (borderline of significance)

Conclusions

Na⁺, K⁺, and their ratio do not associate with SBP, HR and cardiometabolic biomarkers, but % of sugar intake did

Sugar intake might have an important role in the etiopathology of **hypertension**