



P106 Effect of Açai-Juçara on Central Pressure in Individuals with Overweight or Obesity

Tainah Ortiz^{1,*}, Fernanda Gorski², Tatiana Lehnen³, Liliana Boll¹, Bruna Eibel¹, Alexandre Lehnen¹, Eduardo Barbosa⁴

¹Institute of Cardiology of Rio Grande do Sul/Foundation University of Cardiology, Porto Alegre, Brazil

²Federal University of Health Sciences of Porto Alegre (UFCSA), Porto Alegre, Brazil

³Thyroid Section, Endocrine Division, Hospital de Clínicas de Porto Alegre, Porto Alegre, Brazil

⁴Hypertension League, Porto Alegre, Brazil

ABSTRACT

Introduction: Açai-juçara is a fruit with a antioxidant content that can modify the vascular environment and attenuate the effects of obesity.

Objective: To evaluate the effect of açai-juçara on pulse pressure parameters in overweight or obese individuals.

Methods: Randomized clinical trial with 23 individuals of both sexes, 37.7 ± 1.5 y, body weight 85.0 ± 4.8 kg, BMI 32.4 kg/m². The volunteers were randomly assigned to: control group (C, $n = 10$) and açai-juçara group (AJ, $n = 13$). Both received hypocaloric diets, representing 20% below the total energy value. AJ received, in the composition of the diet, 200 g of açai-juçara for daily consumption. The intervention was 12 weeks and the follow-up was performed with weekly meetings. We analyzed parameters of peripheral blood pressure: systolic blood pressure (SBP) and diastolic blood pressure (DBP); parameters of central blood pressure: central pulse pressure (PPc), central systolic blood pressure (SBPc) and pulse wave velocity (PWV) with the oscillometric method (Mobil-O-Graph). Descriptive statistics (mean \pm standard deviation) were performed and normality of the data was tested by Shapiro-Wilk. Possible differences were tested by ANOVA of repeated measures (Bonferroni post-hoc) with significance level of 5%. Results: After 12 weeks of intervention, body weight decreased in both groups (C: $\Delta 3.2$ kg; $p = 0.050$; AJ: $\Delta 5.2$ kg; $p = 0.001$). The peripheral SBP, PPc and PWV was lower in both groups (C: $\Delta 3.8$ mmHg, $p = 0.040$, AJ: $\Delta 7.1$ mmHg, $p = 0.031$); (C: $\Delta 5.5$ unit, $p = 0.044$; AJ: $\Delta 7.8$ unit, $p < 0.001$); ($p = 0.047$) with greater effect in the AJ group ($\Delta 0.4$ unit; $p = 0.006$). Both groups reduced SBPc with more effect in the AJ group ($\Delta 6.3$ mmHg, $p = 0.034$).

Conclusion: AJ showed benefits on peripheral SBP, PPc, PWV and SBPc when compared to the control group.

© 2019 Association for Research into Arterial Structure and Physiology. Publishing services by Atlantis Press International B.V. This is an open access article distributed under the CC BY-NC 4.0 license (<http://creativecommons.org/licenses/by-nc/4.0/>).