PHYSICAL AND CHEMICAL EVALUATION AND ANTIOXIDANT ACTIVITY OF CAJÁ MIXED DRINKS ENRICHED WITH GREEN ACEROLA POWDER

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Currently, there is a new trend in food consumption, with an increasing demand for foods with high nutritional and functional properties, especially in mixed drinks made from tropical fruits. Acerola is known for its high amount of bioactive compounds, especially vitamin C. Studies show an even higher concentration of vitamin C in the green stage of the fruit. This study developed four formulations of a cajá blend, adding percentages of green acerola powder of 0 %(F1), 1 %(F2), 2.5 %(F3) and 5 %(F4). The study aimed to develop a blend with an amount of vitamin C and antioxidant activity higher than that of cajá juice. Analysis of the pH, titratable acidity(TA), soluble solids(SS) and SS/TA, vitamin C, total extractable polyphenols(TEP) and total antioxidant activity(TAA) was conducted. The pH, SS, TA and SS/TA ranged from 2.67(F1) to 3.91(F4); 14.37(F1) to 18.6(F4) ºBrix; 0.46(F1) to 0.52(F4) % of acidity and from 31.89(F1) to 35.67(F4), respectively. The analysis showed a proportional increase in the addition of green acerola powder. The amount of vitamin C for F1, F2, F3 and F4, respectively, was 28.20; 157.53; 376.72 and 749.15 mg/100g of pulp. As for the TEP, values ranged from 269.79(F1) to 2,589.15(F4) mg/100g of pulp. The TAA values ranged from 2.48(F1) to 27.02(F4) µM trolox/g of pulp. The results showed an increase of vitamin C, PET and AAT in accordance with the increase in the percentage of acerola, demonstrating the importance of these blends in obtaining a product with a high antioxidant capacity.