EFFECTS ON PLASMA HIGH-SENSITIVITY C-REACTIVE PROTEIN (HS-CRP)
CONCENTRATION AFTER THE INTAKE OF COOKED OR BARBECUED MEAT AND
ASSOCIATION WITH CONCOMITANT PHENOLIC COMPOUNDS INGESTION

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The cooking process of meats may cause lipid oxidation and toxic compound production. Consumption of a meal containing a high load of oxidized and oxidizable lipids leads to an increase in plasma level of lipid hydroperoxides, which may produce cell injury and inflammatory responses. It has been accepted that lipid oxidation products are related to atherosclerosis. On the other hand, the consumption of phenolic compounds is associated with reduction of inflammatory process. The objective of the study was to investigate the effects caused by the intake of a high-fat meal and related to the cooking method, on plasmatic inflammation marker, namely High-Sensitivity C-Reactive Protein. A group of 23 male volunteers, 20-40 years old, consumed 3 test-meals at three different weekends, in a randomized crossover design. Before and five hours after each meal, plasma hs-CRP concentrations were measured. The test-meals consisted of barbecued meat associated with either placebo capsules (Test-meal 1) or açai pure antioxidants capsules (1g dose) (Test-meal 2) and cooked meat associated with placebo capsules (Test-meal 3). The meals provided around 70 g of lipids. The median hs-CRP did not change significantly between the test-meals at time 0 and 5 hours, respectively: Test-meal 1 = 2.36 ± 2.94 mg/L and 2.31 ± 2.99 mg/L, Test-
meal 2 = 2.17 ± 2.92 mg/L and 2.48 ± 3.03 mg/L, Test-meal 3 = 2.13 ± 2.39 mg/L and 2.20 ± 2.53 mg/L. The present study found no diet effects on markers of inflammation.