ANALYSIS OF THE CONTENT OF PHENOLIC COMPOUNDS, FLAVONOIDS AND ANTIOXIDANT ACTIVITY OF STRAWBERRY TEA

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The infusion tea is obtained by the most popular form of use, contributing to the prevention of disease by the presence of biologically active compounds such as flavonoids and polyphenols. The objective of this study was to evaluate the concentration of these compounds and antioxidant activity of strawberry tea. The extracts were obtained by macerating tea, extraction with different solutions: hot water (80°C), cold water (15°C) and, solution of 45% methanol, 45% ethanol and 10% acetone. For quantification of total phenolics used the 9110 method of AOAC (1980) by reading absorbance at 760nm. For flavonoids used the method of Zhishen et al. (1999), with readings of the absorbance at 510nm, both in a spectrophotometer. The antioxidant activity was tested by the method of scavenging free radicals with DPPH. It was observed that the content of phenolic compounds was minimal for hot water (323.65 mg/100g), and up to an alcoholic solution (575.02 mg/100g). Since the flavonoids were reduced in the extraction with cold water (171.64 mg/100 g), increasing to hot water (191.65 mg/100g) and the alcoholic solution (375.02 mg/100g). For antioxidant activity, the extracts showed a behavior directly proportional to the concentration. The alcoholic extract showed a higher percentage of antioxidant activity reaching 75.8% at the maximum concentration tested. The extracts with hot and cold water showed lower activity reaching 63.6%. Thus, we conclude that after the brewing of tea strawberry, remains the same with high levels of bioactive compounds and may help prevent diseases arising from oxidative stress.