CHEMICAL ANALYSIS OF FLOUR OF STRAWBERRY (Fragaria sp.)

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Nowadays, there is an increasing interest in the world market, in offering foods with bioactive characteristics, containing substances that influence physiological or metabolic activities. The strawberry, Fragaria sp., is an important source of phenolic compounds, flavonoids and especially anthocyanins. However, the progressive restriction they are subject to many synthetic dyes by the laws of the FAO / WHO, FDA and the National Secretariat for Sanitary Surveillance Ministry of Health of Brazil, has helped to stimulate the search for natural dyes, non-toxic. The objective of this study was to determine the bioactive compounds present in strawberry flour obtained by drying process. The strawberries used were purchased in local shops in Chapecó-SC in 2011. Later, an experimental design was conducted to determine the optimum drying. The phenolic content was analyzed by the spectrophotometric method of Folin-Denis, using gallic acid as standard. The total flavonoids followed the methodology espectrofotométrica with standard catechin. The determination of total anthocyanins was performed according to the spectrophotometric method, and anthocyanins monomer used if the pH differential method. To determine the antioxidant activity, the method via DPPH (2,2-diphenyl-1-picrylhydrazyl). The concentration of bioactive compounds in flour strawberry total phenolic compounds was 128.94±0.1mg GAE/100g, total flavonoids Cé 39.82 ± 1.56 mg / 100g, total Anthocyanins 32.93 ± 0.2 mg / 100g, monomeric anthocyanins 33.41 ± 0.12 mg CYD-3g / 100g, Active Anti-DPPH 18.02±0.106mg/mgDPPH EC50. From these results, strawberry flour can be considered a functional food can be used as powder for food.