

In vitro Bioaccessibility of Phenolic Compounds from Fruit Spray Dried and Lyophilized Powder

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Abstract : The health benefits of bioactive compounds such as phenolics are well known. The main source of these compounds are fruits and derivatives. This study had the objective to study the bioaccessibility of phenolic compounds from grape pomace and juçara dried extracts. For this purpose both characterized extracts were submitted to a simulated human digestion and the total phenolic content, total anthocyanins and antioxidant scavenging capacity was determined in digestive fractions (oral, gastric, intestinal and colonic). Juçara had a higher anthocyanins bioaccessibility (17.16%) when compared to grape pomace (2.08%). The opposite result was found for total phenolic compound, where the higher bioaccessibility was for grape (400%). The phenolic compound increase indicates a more accessible compound in the human gut. The lyophilized process had a beneficial impact in the final accessibility of the phenolic compounds being a more promising technique.

Keywords : bioaccessibility, phenolic compounds, grape, juçara

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