

Antioxidant Activity of *Hibiscus sabdariffa* Extracts Incorporated in an Emulsion System Containing Whey Proteins: Oxidative Stability and Polyphenol–Whey ...

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Description

This study was designed within the scope of industrial exploitation of antioxidant extracts from *Hibiscus sabdariffa*. Efficiency in the extraction of antioxidants (total phenolics, flavonoids and anthocyanins) from calyces was assessed through different processes involving solvents (water, 80% acetone and 80% methanol), microwaves and ultrasounds. Results indicated that microwave extraction with 80% acetone gave the highest yield for total phenolics, expressed as gallic acid equivalents (GAE) per g dry weight (DW) (3.73 GAE/100 g DW), while the highest results for total flavonoids and anthocyanins were found in the microwaved aqueous extracts. Antioxidant activity of the extracts reported the highest reducing power for aqueous extracts with microwave extraction, while 80% acetone and methanol samples exhibited the highest antioxidant activity by high-performance thin-layer chromatography (HPTLC ...

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