

عنوان مقاله:

Production of phenolic antioxidants from apple residue using *Rhizopus oligosporus*

محل انتشار:

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خلاصه مقاله:

In this research the 2 sub varieties of *Rhizopus oligosporus* was used for production of antioxidative bioactive compounds from whey protein concentrate (WPC) and apple pomace. Total phenolic compounds, free radical scavenging ability by DPPH and antioxidant protection factor were evaluated in 48 determined treatments. Effect of Incubation temperature in three levels 23, 27, 31°C, incubation time at 3, 8, 13 days, and Apple pomace/WPC ratio at three levels of 50:50, 70:30, and 90:10 were studied. The polyphenol content, percent of DPPH inhibition and APF of the extracts was found to be in the range of 6.01-11.12 mg GAE/g DW, 65.8%-95.2% and 1-1.55 of samples respectively, depending on the ratio of Apple/WPC, time of incubation, type of fungi and temperature. The highest obtained efficiency was related to *Rhizopus oligosporus* PTCC NO.5287 and the results showed that the time of incubation had the most effect on measured parameters

کلمات کلیدی:

Antioxidant, Apple pomace, *Rhizopus oligosporus*, Whey Powder

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