



TEA WITH HERBAL ADDITIONS: THEIR ANTIOXIDANT ACTIVITY AND ITS DEPENDENCE ON HIGH PRESSURE PRE-TREATMENT BEFORE EXTRACTION

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ABSTRACT

The antioxidant effects of developed tea drinks on the lipid peroxidation in rats' blood during swimming stress were investigated by malondialdehyde and conjugated dienes levels' measurement. Components of tea drinks from common Ural plants were selected based on their antioxidant action, contributing to prevention of oxidative stress, as well as high consumer properties. Developed tea drinks have high organoleptic characteristics, high content of flavonoids and high antioxidant activity. It was established that the use of developed tea drinks in the diet of rats can reduce the stress impact on the rat organism on biochemical and morphological levels. Processing of developed blends with high pressure (200 MPa, 60 s) significantly intensifies the subsequent yield of biologically active substances during extraction and the antioxidant activity of the extract. Good prospects of using common Ural plants for the development of tea drinks formulations with strong antioxidant effect are shown in our study.
