

EFFECT OF PASTRY PRODUCTS, WHICH INCLUDED RAPE POMACES, ON BIOCHEMICAL PARAMETERS OF RATS

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Increasing biological value of foods of food industry is urgent actual problem, in particular, for flour pastry wares. It is related to the fact that component of pastry wares is top grade wheat flour, that is why got wares, contain a insignificant quantity biologically active substances: macro- and microelements, food fibres. On the other hand, it is known that rape is one of the most productive oil-bearing cultures in the world agriculture. Main wastes of rape oil-extraction enterprises are pomaces and shrots, that contain the sufficient amount of proteins, fat acids, including essential, and antioxidizing substances (Nizova, Dubovskaya, 2006). So, the use of foods of rape processing in the production of pastry wares can increase their biological value. Thus the aim of our work was determination of effect of the use of some flour pastry wares, that contained rape pomaces, on the biochemical indexes of white outbredrats.

White nonlinear male rats with weight of 160-200 g were divided into groups. The first group included rats that were kept on the standard ration of vivarium. The ration of rats of 2-4 groups had wheat loaves, loaves with addition of rape pomaces, cakes named

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"Stolichny" (made on the standard compounding), cakes named "Stolichny" with addition of rape pomaces. Common amounts of pomaces in wares presented 5% of rape from the amount of wheatflour of top grade and accordingly diminished amount of flour. Rats were fed for 6 weeks before taking in experiment. In the organs of rats activity of piruvatedehydrogenase, 2-oksoglutaratedehydrogenase, succinatedehydrogenase, lactatedehydrogenase, aspartateaminotransferase, alanineaminotransferase, concentrations of pyruvate, 2-oksoglutaric acid, malonic dialdehyde, hydrogenated glutathione, ascorbic acid, cholesterol, triglycerides, total protein, urea, urinary acid, etc. The results show inconsiderable differences in biochemical parameters of rats, which were fed by loaves and cakes that contain rape pomaces, compared to the performance of rats fed by the corresponding usual products. This suggests the possibility of using rapeseed processing products in the production of pastry.