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Klevanova V. S., Trzhetsynskiy S. D. ANTIOXIDANT PROPERTIES OF BLOOD BURNET'S EXTRACT (IN VITRO RESEARCH)

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Introduction. Reducing of antioxidant system effective work plays an important role in the pathogenesis of type 2 diabetes. activation of lipid peroxidation is the reason of nearly 100 diseases, including diabetes. From our previous studies we confirmed hypoglycemic activity of the Blood burnet's decoction and its ability to reduce insulin resistance and glucose tolerance.

Aim: the aim of the study was to evaluate and characterize the antioxidant properties of Blood burnet's extract.

Materials and methods. We measured the level of TBA-active products and oxidative modification of proteins using liver homogenate and lipoprotein of egg yolk.

Results and discussion. The results of the study confirmed the presence of antioxidant activity of Blood burnet's extract. Defined antioxidant activity according to the level of TBA-active products in liver homogenate was 39.47% and in the experiment with egg yolk's lipoproteins was 28.49% compared to the intact group.

As in the previous study with egg yolk's lipoproteins the effectiveness of Blood burnet's extract decreased with higher concentrations in liver homogenate. Overall decline of oxidative modification of proteins was 22.46%, which is almost twice less than effect of low dose.

Conclusion. We have determined the ability of biologically active components of Blood burnet's extract to prevent oxidative damage of proteins and lipids. Also our results clearly demonstrate the negative impact of high concentrations of Blood burnet's extract on the activity of liver antioxidant system.