from diabetes - 1, 69. Thus, statistical data show influence of urbanization on health of the population in the North which major factors are infringement of the balanced feed, decrease in physical activity, and increase of psycho emotional pressure.

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## CYTOPLASMIC RNA CHANGES IN SKIN HAIR FOLLICLE EPITHELIAL CELLS OF GUINEA-PIGS AT MICROWAVE INFLUENCE

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In the available literature there are no cytophotometric data about the cytoplasmatic RNA changes in skin hair follicles' epithelial cells when affecting by thermogenous intensity microwaves. All this conditioned, especially with due account for the possibility of the obtained experimental data extrapolation for a human, the necessity to carry out our research.

The research was carried out on 65 mature guinea-pig males weighing 400-450 g, from which 35 were used in the experiment, and 30 served as the control. The experimental animals were exposed to the effect of single general microwave irradiation (length of wave - 12,6 cm, frequency -2375 MHz, power flow density (PFD) - 60  $mW/cm^2$ , exposure time – 10 min). Excluding the animals from the experiment and sampling the materials were done immediately, in 6 hours, on the 1<sup>st</sup>, 5<sup>th</sup>, 10<sup>th</sup>, 25<sup>th</sup> and 60<sup>th</sup> days after finishing the exposure. . The flaps of skin were taken from different areas (head (cheek), back, stomach). The photometric activity definition of the cytoplasmic RNA content was performed in 50 cells of outer root sheaths of each cut hair follicles. The hematological control (total count of erythrocytes and leucocytes) was carried out during the experiment.

Right after finishing the microwave effect the decrease, compared to the control, of cytoplasmic RNA is registered, to the maximum extent – in the stomach skin epitheliocytes – up to 86,7%, while in the head and back skin – up to 98,3% and 97,2% from the original accordingly (p<0,05). In the following terms after finishing the exposure to the thermogenous intensity SHF waves a further decrease of the cytoplasmic RNA content in skin cells of all localizations, especially head and stomach, is observed. Thus, on the 5<sup>th</sup> day after finishing the SHF waves exposure the cytoplasmic RNA

content is maximally decreased in the specified epitheliocytes of head and stomach skin – by 23,1% and 35,8% from the control level accordingly (p<0,05). Beginning with the  $10^{th}$  day an increase of the cytoplasmic RNA content in the cytoplasm of outer root sheaths epitheliocytes of all localizations skin hair follicles is close to the original one (p>0,05).

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## INFLUENCE OF NATURAL 1-O-ALCYLGLYCEROLS ON ANTIOXIDANT DEFENCE SYSTEM OF RATS AT ALIMENTARY DISLIPIDEMY

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In recent years a great interest has been attracted to pharmaceutical preparations of sea hydrobionts containing 1-O-alkyl-diacylglycerols (ADG). ADG at entry to digestive tract are broken down to form high activity biological compounds, when affected by lipases, - 1-O-alkylglycerols (AG), which are responsible for hemopoietic, radioprotective, antitumor properties of ADGcontaining pharmaceutical preparations. In single publication there is information about antioxidant properties of the preparations rich in ADG. It is AG that are supposed to play an important role in the manifestation of antioxidant properties of the given pharmaceutical agents. The purpose of the work has been the study of 1-O-alkylglycerols' influence on the antioxidant defence system in rats at alimentary dislipidemy (DLP), the 1-Oalkylglycerols being obtained from natural ADG.

The model of alimentary DLP was caused by unbalanced fat composition nutrient budget including high-caloric products and cholesterol. The model development criterion served the cholesterol level in blood serum and liver of the rats exceeded the initial one by more than 1/3. After the development of DLP the rats were given AG intragastrically in the dosage of 0,4 g/kg from the rat's body mass for 30 days (Novgorodtseva T.P., 2007). The 1-O-alkylglycerols were obtained by the method of ADG hydrolysis from the liver lipids of Commander Squid *Berryteuthis magister*. The total antioxidant activity (TAA) of rats' blood