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CONTENT OF PROTEIN AND POLYUNSATURATED FATTY ACIDS OF THE OMEGA-3 AND OMEGA-6 FAMILIES IN THE BLOOD OF REPAIR HEIFERS UNDER DIFFERENT ENERGETIC VALUE OF DIETS

The peculiarities of physiological and biochemical regularities of conversion and transformation of protein in the body and growth of repair heifers of 1–6-month old age, by introducing into their diet of biologically active polyunsaturated fatty acids of omega-3 and omega-6 families were studied.

It was shown, that as a result of introduction rapeseed oil and the synthetic compound doxan into the diets of repair heifers in research group, in their blood plasma in the age of 4, 5 and 6-month, due to more intensive transformation of biologically active polyunsaturated fatty acids increases concentration of omega-3 (linolenic, eicosapentaenic, docosatrienic, docosapentaenic and docosahexaenic) and omega-6 (linoleic, eicosadienic, eicosatrienic, eicosatetraenic-arachidonic, docosdienic and docosatetraenic) fatty acids. comparing to animals of the control group

It was established the optimal amount of biologically active polyunsaturated fatty acids of the omega-3 and omega-6 families in the feed rations, which provides higher level of conversion and retention of some nutritional fodder compounds (namely – of essential fatty acids) in the organism and more intensive growth of the repair heifers of 1–6-months of age.

It was shown also, that the additional feeding of rapeseed oil to repair heifers of 1–6-months of age leads to increase in the biological (from the side of the precursors of the biologically active polyunsaturated fatty acids of the omega-3 and omega-6 families, respectively, linolenic and linoleic acids) and energetic (at the expense of adding vegetable fat) value of the diet of repair heifers.

It is established, that as a result of the introduction of rapeseed oil and the synthetic compound "Doxan" to diet in the blood serum of repair heifers of 4, 5 and 6-month-old age, due to greater retention and transformation of nitrogen in the digestive canal the protein content increases.

It has been shown that due to the introduction of rapeseed oil and synthetic compound doxan into the diet in blood plasma of 4, 5 and 6-month repair heifers due to more intensive transformation of essential polyunsaturated fatty acids – linolenic and linoleic – the concentration of biologically active polyunsaturated fatty acids of the omega-3 and omega-6 families, respectively is increased.

It is also established that the introduction of rapeseed oil and the synthetic compound doxan in the diet, as result of increasing its biological and energy value leads to increase of the growth energy of repair heifers of 4, 5, and 6-month-old age. It was worked out more, balanced by the content of essential polyunsaturated fatty acids of the omega-3 and omega-6 families, rations for the repair heifers in the above mentioned age period.