UDC 636.2:577.125

**Oleksandr Dyachenko**
Institute of Agriculture of Carpathian Region of NAAS

# CHANGES IN THE CONTENT OF POLYUNSATURATED FATTY ACIDS OF THE FAMILY ω-6 IN THE LIVER AND SKELETAL MUSCLE OF FATTENING BULLS FOR USING IN RATIONS OF SUNFLOWER OIL

Comparative evaluation of the content of biologically active polyunsaturated fatty acids families ω-6 in the feed ration with their content in liver and skeletal muscle and average daily gain of young cattle are conducted.

It is established that the introduction of sunflower oil (as a source of linoleic acid which is a precursor of polyunsaturated fatty acids of the family ω-6) and substance doksan (as inhibitor processes biohydrogenazation of unsaturated fatty acids) in the diet of fattening young cattle due to the intensive transformation, causing a significant increase in the content of biologically active polyunsaturated fatty acids of the family ω-6 in the liver and skeletal muscle. The increase in the transformation of linoleic acid from the digestive canal and increase the content of biologically active polyunsaturated fatty acids of the family ω-6 in liver and skeletal muscle accompanied by an increase in the transformation of the alimentary canal the other polyunsaturated fatty acids – linolenic. Given the changes suggests that the increase in the digestive canal of the transformation of fatty acids family ω-6 growth is accompanied by the transformation of fatty acids family ω-3.

At the same time, increase the content of biologically active polyunsaturated fatty acids families ω-3 and ω-6 in the above mentioned tissues by stimulating metabolic processes in the body, helps likely to increase average daily gains of body weight of fattening young cattle. There is a direct relationship between the content of linoleic acid in the diet and polyunsaturated fatty acids family ω-6 in the tissues of experimental animals with their productive characteristics and biological value of beef.

It is known that the more long-chain and unsaturated fatty acids families ω-3 and ω-6 in the body of animals perform different functions in the composition of these derivatives, such as prostaglandins, thromboxane and leukotrienes. It should be noted that fatty acids of the family ω-3,

compared to the fatty acids family ω-6, more markedly increased functional activity of cell membranes and thereby stimulate at the highest level of metabolic processes in the animal organism. This ultimately leads to the improvement of productive traits of animals.