

EFFECT OF FASTING AND IMMOBILIZATION ON THE ACTIVITY OF GLYCOLYTIC ENZYMES IN RABBIT TISSUES

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Experiments were carried out on 6 months old, New Zealand rabbits bred at the agricultural Academy in Cracow subjected to 72-hrs fasting and a 72-hrs immobilization with an access to water and food. In the liver, kidney and blood serum homogenates the aldolase (by the method of Bruns) and the glucose-6-phosphate isomerase (by the method of Bodansky) activities were measured. We observed a decrease in the aldolase activity in all the experimental groups, but only in liver and serum of fasted females the changes were significant.

The activity of glucose-6-phosphate isomerase also decreased in females and males due to fasting and immobilization. Significant changes were observed in females after fasting in all the examined tissues and after immobilization in the kidney. In males significant changes were observed after fasting.

The observed decrease in the activity of aldolase and glucose-6-phosphate isomerase may indicate a decrease in the glycolysis rate in the rabbit tissues due to fasting and immobilization.