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## The efficiency of L-carnitine in nutrition of sows

### S u m m a r y

The aim of this study was testing the effect of L-carnitine supplementation of sows' diet during the last pregnancy stage and lactation, on biochemical indicators in blood and milk as well as production results. The experiment was carried out on 40 multiparous sows of the synthetic Line 990. Sows were divided into two groups - experimental and control. Both groups were fed at complete diets according to the farm program. Fifteen days before parturition and during lactation stage the sows of the experimental group were fed diet supplemented with 50 mg L-carnitine per 1 kg of the mixture. The L-carnitine's supplementation had no significant influence on examined biochemical indicators in blood and milk of sows (during 17 to 18 day of lactation). Estimation of the number of born piglets, body weight of a piglet and weight of litter at birth as well as reared piglets on 28 day of life did not reveal any statistically significant differences between two sows' groups. However, it should be noticed that sows which were fed added of L-carnitine during the last 15 days of pregnancy gave birth to statistically significant ( $P < 0.05$ ) fewer stillborn piglets (0.5 piglet per litter) than sows from control group (1.52 piglet per litter). Thus sows from experimental group produced more born alive piglets per litter (10.25) than the control group (9.57) but the differences were not statistically significant.