

# ***THE PRODUCTIVITY of EWES with LAMBS' TWINS under DIFFERENT LEVELS of ENERGY in their DIETS***

**M. M. Svistula, D. V. Yefremov, S. V. Horb**  
ascitsr\_zavlabgodivlya@ukr.net

Ascania Nova Institute of Animal Breeding in the Steppe Regions  
named after M. F. Ivanov – National Scientific Selection-Genetics  
Center for Sheep Breeding  
1, Soborna Street, Askania Nova, Chaplynka district,  
Kherson region, 75230, Ukraine

*The problems of correction the energy of feeding the Merino ewes with lambs' twins during lactation have been considered.*

*It was found that the increase of 10 and 20% concentration of metabolizable energy in rations of ewes provides improved feed conversion into the products of sheep breeding, increasing the milk productivity of ewes on 32 and 35 kg, or 6 and 16.6% ( $P < 0.05$ ) relative to their control analogues. This diet contributed to the increase of the absolute live weight of lambs during the suckling period from 18.3 kg in the control to 19.2 and 21.7 kg in the experimental groups. At the same time, the intensity of growth in test animals has increased to 192 and 217 g, that 5 and 18.5% ( $P < 0.05$ ) is higher than the results of their control peers (187g). These sheep productivity data are confirmed by studies of physiological and biochemical parameters of the blood of animals. It was observed, the gradual rise, in blood of ewes of the experimental groups of the hemoglobin level by 12% ( $P < 0.05$ ), protein 9.5%, including by 19.5% ( $P < 0.05$ ) due to the albumin fraction, 14 % ( $P < 0.05$ ) concentration of phosphorus, which indicates a more efficient metabolism of protein and mineral in the body. In general, the use of the adjusted exchange energy concentration at rationing of feeding of the lactating Merino ewes enhances the metabolic processes in their bodies, which provides an increase of 6, 0-16, and 6% of dairy productivity of sheep and increased the intensity of lambs' growth in the suckling period.*

*In order to realize the potential productivity of sheep fine-fleece breeds, with lambs' twins, in lactating period it is advisable to raise their demand in the exchange of energy by 20% in relation to the existing norms of feeding.*

**Keywords:** ewes, lambs, energy, ration, feed, milk productivity, weight gain, wool clip.