

THE EFFECT OF DIFFERENT DIETARY PROTEIN LEVEL ON GROWING AND BLOOD PARAMETERS OF YOUNG MINKS

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Summary. Minks usually feed with raw meat and fish mixed with cereals and water. The mixture of such products can vary according to the nutritional needs of the animals. It is possible to change the percentages in order to obtain a balanced diet with the appropriate supply of proteins, fats, fibres and carbohydrates.

The aim of the present study was to evaluate the effect of different protein level in the diet on growing of young minks. Fourty young minks were randomly divided into 4 equal groups of 10 minks in each – control (Group 1) and 3 experimental groups (Groups 2-4). All minks were kept in the individual cages and experiment lasted for 60 days. The control animals (Group 1) were fed a diet composed of 54% raw-frozen lean fish byproducts, 35% raw-frozen meat byproducts, 8% cereals, 1% vitamin/mineral premix, and 1% water. The experimental Groups 2–4 were assigned to dry pelleted feed supplemented with increasing levels of protein mixture in form of fish meal – 26.3%, 35.4% and 44.1%, respectively. In all groups the energy value was approximately 499 kcal (2089 kJ). Throughout the experiment minks were weighed on days 30, 45 and 60. During the experiment all minks had a normal appetite and the rations were completely consumed. In all groups the average weight increased gradually. At the end of experiment average live weight of minks in Group 2 decreased on 4.4% ($P<0.05$), in Groups 3 and 4 increased on 5.4% ($P<0.05$) and 6.1% ($P<0.01$) compared to controls in Group 1, respectively. The highest average size of the fur was registered in Group 3 (68.8 cm). The level of protein, glucose, cholesterol in blood of all mink groups were within the physiological norm and the differences between groups were not significant ($P>0.05$).

Keywords: protein, live weight, fur, blood parameters, minks, nutrition.