

## **QUALITY OF MEAT OF SLAUGHTERED DUCKS AT DIFFERENT LEVELS OF NUTRIENT ENERGY FODDER**

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*It is studied the yield of the products of slaughter and chemical composition of the muscles of young ducks, depending on the levels of metabolizable energy in mixed fodders. Established the optimum level of metabolizable energy for young duck meat production.*

### **Ducks, metabolizable energy, mixed fodders**

It is proved that the main factor determining the cost of feed per unit of output, is the content of metabolizable energy in the feed, the level of revenues which the body depends on poultry performance by 40-50%. At present, the production of duck meat is used mostly hybrid bird, which is characterized by a high level of metabolism and energy. In order to develop scientific - standards-based feeding and balancing and improving nutritional diets such birds need to know the features of its use of energy feed.

**Material and methods research.** The material for the experiment served as a young ducks cross "Star 53 HY". The experiment was carried out by groups under experimental base problem research laboratory of the Department of feed additives and animal nutrition technology feed. For experiment took away 300 head daily ducklings, of which the principle of analogues formed 3 groups: control 1 and 2 D, 100 units (50 females and 50 males) each.

Experimental herd ducks during the whole period of the experiment were kept on the floor, stocking rate per 1 m<sup>2</sup> of which was - 8 heads, feeding and watering the front - 3 cm. Microclimate in the room where retained poultry, answered the recommended safety standards.

The main period of the experiment lasting 42 days was divided into two sub-periods: 1-14 and 15-42 days, each of which is divided according to 2 and 4 sub-periods (lasting 7 days each). At the end of the primary period of the experiment upon reaching the ducklings 42-day old poultry slaughter was carried out to study the anatomical and morphological composition of carcasses.

**The results of their research.** The highest live weight in all periods of cultivation had 2 young research group received a diet containing 1.33 MJ metabolizable energy per 100 g of feed in the first period of growing and 1.43 - in the second. The studies indicate that the use of feeding ducks animal feed with different levels of metabolizable energy affects the yield of products of slaughter .

Thus, growing ducklings group 2 to compound feed with a high level of metabolizable energy boosted output napivpatranoyi and patranoyi carcasses respectively 1.8 and 1.2%, while consumption youngsters 3rd of animal feed with a low level of metabolizable energy - reducing these indices respectively 3,6 (p <0,05) and 2,2% (p <0,001) compared with the control group birds. According to the results of the studies, different levels of metabolizable energy in compound feed ducks chickens not appreciably affected the chemical composition of the pectoral muscles and leg muscles.

Thus, increasing its level in compound feed calves in group 2 boosted the content in breast muscle dry matter 0.5% organic matter and 0.3% fat, ash and MAR 0.1%, while for protein significant difference from the control group counterparts is not installed. Along with feeding birds 3rd of animal feed with a low content of metabolizable energy in their pectoral muscles observed reduction in dry and organic matter by 0.7%, ash and fat to 0,1% (p <0,01) and protein 0.4%. The content MAR these muscles compared to the control group differences birds were found.

Such changes are characteristic of the chemical composition of leg muscles ducklings in group 2, in which the dry matter and protein contained 0.1% fat and 0.6% increase, although the content of organic matter and MAR inferior under control 0.2 and 0.8%.

By feeding ducks chickens animal feed low in metabolizable energy observed some changes in the chemical composition of the leg muscles. In particular, they observed reduction in dry matter, protein and fat 0.3% organic matter by 0.5% and increased content MAR 0.1% compared to the control counterparts.

**Conclusions:** 1. Balancing rations ducks chickens modern cross over the content of metabolizable energy in growing from 1 to 14 days at 1.33 and in the second period of growth (15-42 days) at 1.43 mJ / 100 g feed improves their ante live weight by 1.8% and reduce the cost of feed per 1 kg live weight gain of 4.3%. 2. Feeding ducks animal feed with low levels of metabolizable energy in firstperiod at 1.09 MJ / d and 100 second period - 1.17 MJ / 100 g feed leads to a decrease ante live weight by 10.7%, out patranoyi carcass - 2 2% pectoral muscle - 1.7%, thigh muscles - 0.4% and increased consumption of feed per 1 kg increase in body weight by 8.1%.

### Referenses

1. Ковацкий Н. С. Новое в промышленном утководстве. Н. С. Ковацкий– М.: Агропромиздат. – 1988 – с. 52-57
2. Маслиева О. И. Анализ качества кормов и продуктов птицеводства. О. И. Маслиева– М.: Колос, 1967. – 334 с.
3. Топорова Л. В. Энергетическое питание кур. Л. В. Топорова // Сельское хозяйство за рубежом. – 1980. – №2. – С.33-38
4. Me Naughton I. L., Reece F. N. Response of broiler chickens to dietary energy and lisine levels in a warm environment I. L. Naughton, F. N. Reece // Poultry Science – 1984. – Vol. 63. №6. – P. 1170-1174
5. Men X., Brian O., Preston T. Use of duckweed (Lemna spp) as replasement for soya bean meal in a basal diet of broken rice for fateniHg ducks Livestok Research / X. Men, O. Brian, T. Preston – 1995 – Vol. 7, №3., – P. 48–52.