

EFFECT OF INNOPROVET PROBIOTIC ON MEAT QUALITY OF EGG LAYER CHICKEN

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Abstract

This article presents the results of veterinary sanitary assessment and composition study of the meat of chickens and the meat obtained from them when the probiotic "Innoprovect" is given to laying hens.

Keywords: slaughter yield, tissue, peptone, cell, growth indicator, probiotic, immunity, calcium, phosphorus, total protein and trace element.

Introduction

Poultry farming serves as an important resource in meeting the demand for food products of our people. The development of theoretical foundations and preventive measures to ensure the productivity of poultry at the level of genetic potential is one of the main tasks facing the veterinary field today [1,3].

Currently, there are highly productive poultry breeds and crosses in our country. However, deficiencies in poultry nutrition: poor-quality feed, lack of vitamins, macro- and microelements and other biologically active supplements in the rations cause a decrease in their productivity, reproductive ability and resistance to diseases, as well as defects in the hatching of chicks [2, 3,6,8].

To provide the population of our republic with food products and to increase the competitiveness of the production of poultry products, to organize poultry clusters using the experience of advanced foreign countries and to widely apply innovative technologies, to increase the types of poultry products and to further strengthen market relations in order to take measures to increase the popularity of different directions of poultry farming, to ensure a more stable need for poultry meat and eggs in households, and to increase domestic poultry species in rural areas, as well as the recommended minimum requirement of poultry meat In the course of our research, tasks such as revision of commodity standards, adaptation of egg-oriented chicken breeds to local conditions, introduction of cooperation system and creation of value added chain at the expense of establishment of specialized poultry breeding farms is studied [2,5,6,7].



Material and methods

The experimental part of our research 30 heads of 4.5-month-old "Lohman Sandi" breed chickens were allocated for experiment in "Korasuv Parranda Fayz" poultry farm of Jomboy district of Samarkand region. The experimental group of egg-laying chickens was given the probiotic "Innoprovet" produced on the basis of the innovation project number PZ-2020123121, and the control group was fed the same as the experimental group. Chickens in the experimental and control groups were continuously monitored by observation, measurement and live weight control. Chicken meat was examined at the State Center for the Diagnosis of Animal Diseases and Food Safety in the laboratories of the Institute of Bioorganic Chemistry named after Akademik A.S.Sodikov and the results were obtained.

The obtained results and their analysis.

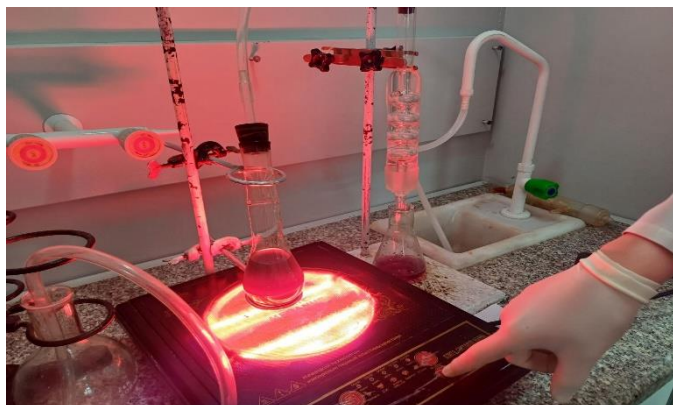
The chemical composition of chicken meat determines its nutritional value. The ratio of proteins, carbohydrates, fats, vitamins and minerals, extractive substances in meat varies depending on the breed, sex, age, quality of nutrition, obesity and many other factors [5,7,8]. When examining the chemical composition of meat from chickens in the experimental and control groups, the following results were obtained (Table 1):

1 - Table

Groups	Protein		fat		Moisture		Ash	
	%	n %	%	n %	%	n %	%	n %
Experience	22.79±0.09	112	8.82±0.46	102	70.7±1.01	98.6	1.04±0.06	122
Control	21.99±0.18	100	8.73±0.23	100	71.8±1.03	100	1.02±0.06	100

N % is a percentage of control.

Of the chickens in the experimental and control groups, it was found that the protein content in the experimental meat was 22.79 % and in the control group it was 21.99 %. At the same time, it was found that the content of fat and ash in chicken meat in the experimental group was 8.82 and 1.04 %, respectively, and these indicators were 8.73 and 1.01 in the control group. Humidity is 70.7 % in the experimental group and 71.8 % in the control group.



3 - 4 - pictures. Common in chicken meat protein quantification process.



In the experimental and control groups was studied and the following results were obtained (Table 2):

Table 2 In experimental and control groups chicken meat total amino acid content

Amino acid	Control	Experience
	Concentration mg/g	
Aspartic acid	3.054876	3.567576
Glutamic acid	1.150063	1.620113
Cool	0.118941	0.689732
Glycine	0.238111	0.335476
Asparagine	0.479756	0.98072
Glutamine	1.041833	0.52656
Cysteine	4.510383	6.934426
Threonine	1.40176	0.427175
Arginine	12.45273	19.79976
Alanine	4.027056	3.884466
Proline	13.69903	9.956311
Tyrosine	0.410941	0.270992
Valin	0.345394	0.843417
Methionine	0.821046	0.307372
Histidine	6.664808	6.222429
Isolae t syn	0.207916	0.158314
Ley t sin	1.380508	1.248311
Tryptophan	0.351161	0.258557
Phenylalanine	0.181634	0.1786
Lysine	0.098998	0.149299
Total:	52.636945	58.359606

Chickens in the experimental and control groups, it was found that the amount of non-essential amino acids in the experimental meat was 1.17 % higher in the experimental group than in the control group.

An increase in the amount of non-essential amino acids in the composition of meat leads to an increase in nutritional value.

It can be seen from the data in the above table that the amount of total amino acids in chicken meat was found to be 0.11% higher in the experimental group than in the control group.



Summary

From the results of the research, it is clear that in chickens supplemented with probiotics, as a result of a positive effect on the cells and tissues of internal organs, the growth rate was higher compared to the control group. It was found that the amount of total amino acids in the experimental chickens was higher by 0.11 % compared to the control group.

Due to the acceleration of metabolism in chickens supplemented with probiotics, the increase in the amount of protein and fat and amino acids in the meat of the experimental chickens compared to the meat from the control group increases its nutritional and energy value.

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