

THE EFFECT OF INNOPROVET PROBIOTICS ON RABBIT MEAT QUALITY AND VETERINARY SANITARY ASSESSMENT

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Abstract

This article publishes the results of the assessment of meat obtained from rabbits from a veterinary Sanitary Unit, the composition of which is carried out when rabbits being raised for meat are given the probiotic “Innoprovat”.

Keywords: Slaughter output, slaughter weight, tissue, pepton, occiproline, tryptophan, cell, live weight, carnivory index, probiotic, innoprovat.

Introduction

Rabbit meat is not inferior to poultry in its softness and taste, and in terms of digestibility it surpasses beef and pork. In our studies, the protein quality indicator of meat (PQI) also received a good indicator when we determined in rabbit meat the ratio of the amino acid tryptophan, which is a full-value protein in muscle tissue, to oxypirrolin, which is a completely worthless protein in pay tissue. In particular, the utility is M from jixat. F. Nesterina and I.M. According to the “Chemical composition of food products” (Moscow, “Pitshevaya promishlennosti”) of skrukhhina, it was found to store 1.25 gr in beef fat, 1.40 gr in sheep fat, 0.33 gr in pork, 0.11 gr in veal, 0.4 gr in rabbit meat. As can be seen from the data given by scientists, the beef we want a lot, mutton has a high cholesterol content, and rabbit meat has a significantly lower amount. Therefore, it is envisaged to improve the activities of family farms engaged in rabbit farming in our country, develop mechanisms for their promotion and state support, increase the volume of rabbit meat production from 100 tons to 23 thousand tons, increase the consumption of rabbit meat per capita by more than 3 kilograms. The sustainable provision of the population of our republic with food products and the expansion of production opportunities in livestock and its industries will be studied during our research on such tasks as revising the recommended minimum consumption norms of rabbit meat, adapting meat-oriented rabbit breeds to local conditions and introducing a cooperative system at the expense of the establishment of specialized rabbit.

Material and methods

The experimental part of our research was carried out in rabbits of the “Khikol” breed of 40 Head 2 months, which were allocated for the experiment in the Shakhrisabz rabbit cluster of the Kashkadarya region LLC “Diyorbek olun rabbits”, as well as in the Payarik district. To rabbits taken for experiment



PZ-2020123121 was added to the water of the probiotic “Innoprovot”, which is being developed on the basis of an innovative project, and the control group was provided with the same feeding as the experimental group. Meat from rabbits in the experimental and control group is carried out in the educational laboratories of the Samarkand State Veterinary Medicine, the University of livestock and biotechnology, the Republican State Center for the diagnosis of animal diseases and the safety of food products, academician A.S. The results were checked in the laboratories of the Sodiqov Institute of Bioorganic Chemistry. During the investigations, the meat samples were evaluated organoleptic and degustative under UzSSSt "Uzstandart" 7269-79 for veterinary sanitary evaluation. Physicochemical indicators of rabbit meat were checked by state standards. When determining the freshness of rabbit meat, GOST 20235.0-74 rabbit meat. Sampling method. Orgonaleptic method in determining freshness as well as gost 20235.1-74 rabbit meat. State standards such as determining the freshness of meat were used chemically and microscopically

Results and their análisis

The results of the study show that when organoleptic evaluation of meat bodies from experimental and control groups, no pathological changes were detected, there was a good level of bloodlessness, no changes in meat color and smell, and the indicators were assessed as follows:

Results of organoleptic evaluation of rabbit meat

Specification	Control group	Experimental group
	Features of rabbit meat	
The outer surface of the carcass	Pink	Pale pink
External and internal oils	White yellow	White yellow
Meat consistency	Dense and elastic	Dense and elastic
Smell of meat	Has a specific smell	Has a specific smell
The state of meat soup	Transparent, fragrant	Transparent, fragrant

As can be seen from the data presented in the table, all the main organoleptic indicators of meat bodies from rabbits correspond to the characteristics of fresh, high-quality meat.

To study the meat productivity of rabbits in experimental and control groups in determining the tissue morphological composition of rabbit carcasses, rabbits from 5 to 130 days were slaughtered from each group. The results were obtained as follows by determining the slaughter weight (slaughter mass) and slaughter output in slaughtered carcasses, determining the meatiness index based on the amount of muscle, bone, fat and connective tissue and the ratio of bone to meat.

The innoprovot probiotic is given as well as the tissue-wise morphological parts of the rabbit carcass in the control group

Specification	Groups (n=5)	
	Experimental group	Control group
Live weight, gr	3228±8,6	2998±21,5
Slaughter weight, gr	1815±17,85	1665±14,83
Slaughter output, %	56	55
Muscle tissue, gr	1387±19,29*	1262±16,57
Isolated muscle tissue, %	76,41	75,79
Bone tissue, gr	220±7,84	217±5,79**
Isolated bone tissue, %	12,10	13,03
Adipose tissue, gr	130±5,73	119±10,2
Isolated adipose tissue, %	7,16	7,14
Connective tissue, gr	72±5,9	67±4,32
Isolated connective tissue, %	3,96	4,02
Meatiness index	6,30	5,82

*P<0,01; **P<0,1

From the results of our investigations, it can be seen that in the experimental group, the sum of the nimta meat and internal fat of slaughtered rabbits (slaughter weight) was found to be 1% higher than the control group, compared to the mass determined by 12 hours of starving live weight. The experimental group found that muscle and adipose tissue were 0.62% and 0.02% higher compared to the control group, with bone tissue 0.93% less connective tissue 0.06%. By comparing the ratio of muscle to bone tissue, the meatiness index was determined to be 6.3 in the experimental group and 5.82 in the control group. These indicators are considered important when assessing meat nutritional indicators and energy satiety.

Gost 20235.1-74 rabbit meat for a fuller assessment of meat quality. Based on the state standard for determining the freshness of meat chemically and microscopically, samples were taken as follows: pH, Amine-amiacal nitrogen, acidity oxidation coefficient, volatile fatty acid quantities and reaction to copper sulfate, peroxidase reactions:

The results of the assessment based on the physical and chemical indicators of rabbit meat in the given and control group of probiotics Innoprovot

Specification	Sample of meat in the experimental group	Meat sample in the control group
pH indicator	5,73±0,08	5,85±0,07
Acidity oxidation coefficient	0,50±0,01	0,52±0,05
Amine-amiac nitrogen, mg	1,54±0,05	1,68±0,05
Volatile fatty acid content KOH / g	1,61±0,04	1,65±0,08
Reaction to copper sulfate	Filtrate clear	Filtrate clear
Peroxidase reaction	Positive (blue-green)	Positive (blue-green)

The development of rotting microorganisms in meat depends on the alkali mozzanate of the acid. Lactic acid is formed from the breakdown of glycogen in the process of meat maturation 24 hours after the slaughter of rabbits, and the hydrogen ion concentration of the meat acquires a weakly acidic environment. In the experimental group, the average pH was found to be 5.73 while in the control group it was found to be 5.85. The acidity oxidative coefficient was virtually indistinguishable in experimental and control groups. Autolytic processes that occur in meat cause an increase in Amine amiacl nitrogen. Mature meat was found to contain 1.54 mg in the experimental group and 1.68 mg in the control group, indicating that the indicators were good quality meat. The amount of volatile fatty acids in stale meat is exceeded when experimental and control groups were examined and found to be 1.61, 1.65 KOH/g, respectively. Reaction to copper sulfate and peroxidase reactions have also shown the freshness of the meat. The determination of physicochemical indicators in the assessment of meat from a veterinary Sanitary Unit can be a solution to many issues.

Conclusion

From the results of the study, it can be seen that in rabbits additionally fed with probiotics, organoleptic indicators of their meat improve, live weight increases, slaughter weight, slaughter output increases, the amount of muscle tissue increases compared to bone and connective tolerances. This has a positive effect on the coefficient of meatfulness. Provides economic efficiency for farms.

The determination of physicochemical indicators in the assessment of meat from a veterinary Sanitary Unit can be a solution to many issues. The quality, freshness of the meat were tested in experimental and control groups and positive results were obtained. It has been found that complementary feeding with probiotic does not negatively affect the physio-chemical indicators of meat, but rather an improvement in indicators.

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