VETERINARY SANITARY EXPERTISE OF MEAT PRODUCT IN RABBITS FEEDED WITH PROBIOKORM PROBIOTICS

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Abstract. Today, the production of food products from rabbit meat, which contain a large amount of protein, essential amino acids, vitamins, minerals with a low fat content, is considered very promising in the meat industry. Due to these properties, the demand for rabbit meat, which is widely used in dietary nutrition, has increased. The purpose of this work was to conduct a veterinary sanitary examination of rabbit slaughter products when using a feed additive in the diet. The article describes the veterinary sanitary examination of meat products from rabbits, in whose diet the probiotic "ProBioKorn" was additionally used .

Keywords: meat, rabbit, antioxidant, quality assessment, food safety, veterinary sanitary examination

Relevance of the topic. Currently, improving animal nutrition and producing environmentally friendly products is one of the important issues. Probiotics are widely used in livestock and rabbit breeding and are recognized as an effective tool for strengthening animal immunity, increasing growth rates and improving meat quality. In this regard, the issue of meat quality of rabbits fed with the probiotic "ProBioKorn" and its assessment through veterinary and sanitary expertise is one of the current research areas. ProBioKorn probiotic improves the digestion of feed, activates beneficial microflora and helps suppress the development of pathogenic microorganisms. This can improve the general physiological condition of rabbits and cause changes in their meat composition. Therefore, the effect of this probiotic on the quality of rabbit meat and its assessment through veterinary and sanitary expertise is a question of scientific and practical importance. The results of this study will allow for the development of new diets for rabbit farms, recommendations aimed at producing environmentally safe and high-quality products. At the same time, they will serve to increase the importance of veterinary sanitary expertise in ensuring food safety and human health.

Probiotics are live microorganisms that have a beneficial effect on the body, mainly helping to support the intestinal microflora. They often help increase the number of beneficial bacteria in the colon and play an important role in maintaining intestinal health and immune system function.

Probiotics may provide the following benefits :

1. Improve intestinal microflora
2. Support the functioning of the digestive system
3. Strengthening the immune system
4. Prevent or treat certain intestinal diseases

"ProBio K orm" was developed by employees of the Institute of Microbiology of the Academy of Sciences of the Republic of Uzbekistan to improve and enrich the quality of animal feed, improve digestion and absorption of nutrients, prevent various bacterial diseases in animals, and increase productivity. The universal probiotic feed additive "ProBioKorm" for livestock is intended for feeding farm animals, in particular rabbits and poultry. In addition to being a feed additive, the universal probiotic "ProBioKorm" can also be used to treat various diseases in animals and increase their productivity. Tables 1 and 2 below present the analysis of the GOST physical, chemical, and microbiological special tests of the domestic universal probiotic "ProBioKorm".

Table 1

Classification of probiotics "ProBioKorm" organoleptic, physicochemical and safety indicators

Indicator name	Descriptions and standards		Control methods
	Liquid form	Dry form	
1Appearance	Liquid mass	Free-flowing powder	Visually
2 Color	Cream, light brown		Visually
3 Smell	Pure milky, without foreign tastes or odors		Organoleptically
4 Solubility index, min, max	Unregulated	2 - 7	GOST 30305.4
5 Humidity, %, not more than	Unregulated	Up to 5	GOST 24061
6 Hydrogen ion concentration, pH, at the limit	3.5 -7.0	Unregulated	GOST 26188
7 The number of useful viable cells, CFU/ml, not less than	1.109	1.109	GOST 10444.11
8 Microscopy:	Gram-positive rods, granular, thin, densely packed, single or in chains, diplococci		GOST 9225

9 Escherichia coli bacteria (coliforms), CFU/g, not more than	10.0	2.0	GOST 30518
10 Staphylococci (Staphycoccus aurens), K CFU/g, not much	10.0	2.0	GOST 10444.2, GOST 30347
11 Pathogenic microorganisms , including salmonella , CFU / g, not more than	50.0	10.0	GOST 10444.5, GOST 10444.15, GOST 30519
12 Yeast count, CFU/g, not more	10.0	10.0	GOST 10444.12
13 Mold count , K CFU/g, not more than	10.0	10.0	GOST 10444.12

Table 2

Special bacterial strains contained in the feed additive "ProBioKorm"

Microorganisms and their strains present in the dry and liquid form of the probiotic "ProBioKorm"	
1.	- *Bacillus subtilis;*
2.	- *Lactobacillus plantarum;*
3.	- *Lactobacillus paraplantarum.*
4.	- *Lactobacillus acidophilus;*
5.	- *Pediococcus pentosaceus;*
6.	- *Weissella viridescens;*
7.	- *Propionibacterium freudenreichii;*
8.	- *Bifidobacterium animalis;*
9.	- *Saccharomyces cerevisiae.*

Work progress : 30 rabbits were taken for the experiment. The rabbits were fed with ProBioKorm probiotic for a month. The probiotic made up 2% of the daily diet. During the study, rabbits were selected at an age of 4-5 months and of the same sex - female rabbits. The same care and feeding conditions were created for the rabbits.

Rabbit meat products underwent organoleptic, physicochemical and microbiological veterinary-sanitary examination. Organoleptic indicators - appearance, color, smell and texture - were examined. Physicochemical indicators - moisture, protein content, fat content and pH level were evaluated.

According to the results of the examination, the meat product from healthy rabbits was normal in terms of organoleptic indicators. The meat was clean in appearance, dark

pink in color, had a specific pleasant smell, and had a uniform texture. The physicochemical indicators were also found to be normal: moisture content was 74%, protein content was 20%, fat content was 5%, and pH level was 6.2.

Compared with the meat product of rabbits not fed probiotics, an increase in muscle size was observed both qualitatively and quantitatively. The protein content in the meat of these rabbits increased by up to 22%, and the fat content decreased by up to 4%. In addition, the presence of pathogenic microorganisms was not detected in rabbits fed probiotics, which ensured the safety of the meat.

Conclusion: The results of the study show that the use of ProBioKorm probiotic improves the quality and safety of rabbit meat. The probiotic feed additive was proven to be effective in increasing the protein content of meat, reducing fat content, and eliminating pathogenic microorganisms.

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