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VETERINARY-SANITARY EXAMINATION OF DAIRY PRODUCTS AND CONSUMER SAFETY

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ANNOTATION: This article discusses the veterinary-sanitary examination of milk and dairy products, their role in ensuring the quality and safety of products. It analyzes the types of biological, chemical and physical contamination, methods for their detection, as well as the prevention of zoonotic diseases transmitted through dairy products. It also discusses modern approaches to laboratory testing of dairy products and the role of veterinary specialists in this process. The article reveals the relevance of veterinary-sanitary control in ensuring food safety.

Keywords: dairy products, veterinary-sanitary examination, microbiology, safety, zoonoses, analysis, food quality.

АННОТАЦИЯ: Мазкур маколада сут ва сут махсулотларининг ветеринарно-санитарная экспертиза отказилиши, махсулотларнинг сифати ва хавфсизлигини та’минлашдаги роли йоритилган. Унда биология, кимёвий ва физик, если есть обратная связь, уларни аниклаш методы, шунингдек, сут махсулотлари или юкадиган зооноз касалликларнинг стардини олиш масалалари тахлил килинган. Шунингдек, сут махсулотларини, лаборатория текширувлардан, отказишнинг замонави йондашувлари ва ветеринарная мутаксассилранинг бу джарайондаги ахамияти хакида фикр юритилган. Макола озик-овкат хавфсизлигини та’минлашда ветеринария-санитария назоратининг долзарблигини очиб беради.

Калит со’злар: сут махсулотлари, ветеринарно-санитарная экспертиза, микробиология, хавфсизлик, зоонозлар, тахлил, озик-овкат сифати.

Introduction

Milk and its products are an important source of nutrition for human health. However, if their quality and safety are not ensured, they can become a source of various infectious and zoonotic diseases. Therefore, before releasing dairy products for consumption, they must undergo veterinary and sanitary examination.

Research Objective

To study the hazardous factors found in dairy products, methods for their detection, and the role of veterinary specialists in ensuring safety.

Main part

Dairy products include foods such as raw milk, pasteurized milk, cream, sour cream, yogurt, kefir, cottage cheese, cheese, butter. These products are a source of protein, fat, carbohydrates, calcium, B vitamins, and minerals that are important for the human body. At the same time, they require hygienic control, as they may contain rapidly multiplying microorganisms.

The main task of veterinary and sanitary expertise is to assess the suitability, safety, quality, and compliance with standards of milk and dairy products. This expertise plays an important role in

ensuring food safety, protecting consumer health, and preventing the spread of zoonotic diseases. For this, products are subjected to organoleptic, physicochemical, microbiological, and toxicological analyzes. Detailed information about each type of analysis is provided below:

- Organoleptic examination - an assessment is made based on the appearance, smell, taste, color, and texture of the product. Tasting is carried out only after the milk has been boiled. The color of the milk is determined by the light of a lamp in a white glass cylinder, the smell and taste - by the senses, and the consistency is determined by the trace left on the wall of the cylinder after pouring the milk. For example, raw milk should be naturally whitish in color, with a neutral odor and not have a sharp taste.

- Physico-chemical analyzes - the density, acidity, fat content, dry residue, protein content, alcohol tests and other laboratory indicators of the product are determined. These tests make it possible to determine whether the product meets the standards.

- Microbiological examination - the presence of harmful microorganisms (for example, Salmonella spp., Listeria monocytogenes, Escherichia coli, Staphylococcus aureus) in dairy products is determined. This risk is especially high in products that have not undergone pasteurization.

- Toxicological analysis - determines the presence of residual antibiotics, pesticides, mycotoxins, heavy metals (lead, mercury, cadmium) in milk. High levels of these substances are dangerous to human health.

Also, veterinary and sanitary examination takes into account factors such as the origin of dairy products, production technology, storage conditions, shelf life. The product must have a label and documents, and meet state sanitary requirements.

Zoonotic diseases such as brucellosis, tuberculosis, leptospirosis transmitted through dairy products pose a serious health risk. In particular, the likelihood of contracting these diseases is high through drinking raw milk. Therefore, it is not recommended to consume milk that has not been thermally treated.

Only products that have undergone veterinary and sanitary examination should be sold in markets and stores. Regular laboratory tests should be conducted by specialists, and an official conclusion should be issued on the suitability of the product for consumption. In addition, manufacturers and sellers must strictly adhere to hygiene requirements.

Conclusion

The safety and quality of dairy products are of paramount importance in maintaining the health of the population. Veterinary and sanitary expertise is the main tool for identifying and eliminating the risks contained in these products. Modern laboratory methods, the qualifications of specialists and the control system ensure high-quality, safe and edible products. In ensuring food safety, every veterinary specialist must carry out his activities with great responsibility.

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