

HYGIENE REQUIREMENTS IN MILK PRODUCTION

Soatov Mirmuksin Makhmatmurot ugli

mirmuhsinsoatov@gmail.com

Assistant of the Department of hygiene of Samarkand State Medical University

Asliddinova Shakhzoda

Student of medical prevention at Samarkand State Medical University

ABSTRACT: In the general system of high-quality milk production, issues of animal care and creating comfortable living conditions also play an important role. In this way, we ensure high quality of products and raw materials in all aspects, especially in terms of hygiene. In the modern conditions of milk production, the sanitary condition of the milking equipment, the timely provision of preliminary disinfection, and the observance of personal hygiene rules by the service personnel have a decisive effect on the quality indicators of milk.

Keywords: Milk, hygienic requirements, microorganism, sanitary-hygienic, personal hygiene.

INTRODUCTION

In milk production today, along with new technological processes, obtaining a high-quality product is an important aspect. We will have to determine the factors that significantly affect the sanitary-hygienic quality of the produced milk. As an example of this, we can cite the sanitary-hygienic condition of milking equipment, strict non-compliance with the rules of personal hygiene of employees and the technology of milking animals.

MATERIALS AND METHODS

This article was based on scientific data, methods and statistics and analyzed the results of these data.

RESULTS AND DISCUSSION

In order to maintain the high quality of milk, not only the sanitary-hygienic condition of milking equipment, strict adherence to the rules of personal hygiene of employees and the technology of milking animals, but also the supply of animals with high-nutritional products and biologically active substances are important. In order to obtain high-quality milk, it is necessary not only to feed the animals properly, but also to strictly follow the rules of sanitation and hygiene in farms and complexes.

Violation of the above rules leads to the development of microorganisms, along with a significant bacterial effect on the quality of milk. As a result, the milk spoils quickly, and the amount of nutritional quality changes.

Animal keeping conditions also cause bacterial and mechanical contamination of milk and violation of organoleptic properties.

The physico-chemical composition of the air in warehouses where milk is stored is important in the production of high-quality milk. In this case, CO₂, NH₃, H₂S, dust particles in the air significantly affect the quality of milk. In order to prevent these defects, there should be local ventilation in the production and in the warehouse. The air flow to the production rooms must be

cleaned of dust. Production rooms with open technological process, air flow coming to sterilized milk pouring units in aseptic conditions should be cleaned of dust in cleaning filters. In this case, it is appropriate to place the lower part of the air-bringing ventilation at a height not lower than 2 meters from the ground level. The air coming out through exhaust ventilation should be placed at a height of not less than 1 meter from the roof of the dairy production enterprise, and it should be discharged through suction shafts.

The distance between the air from the ventilation system to the atmosphere and the air receivers of the supply ventilation should be placed not less than 10 meters horizontally or 6 meters vertically.

Violation of the quality of milk also depends on the storage conditions, which includes a number of factors - the sanitary condition of the milk storage warehouse, the containers in the storage conditions, the hands and clothes of the service personnel, the period of contact of the milk with air and equipment, also depends on the length of the milk pipe.

During the milking of cows and the initial processing of milk, microbes enter it. It is not possible to completely prevent the entry of microorganisms into milk, we only need to carry out work in compliance with strict sanitary rules. The milk released from the mammary gland already contains several hundred to several thousand microbes per 1 ml.

If the milking machines are not hygienic, the level of contamination will be higher than that of hand-milked milk. Streptococci, enterobacteria, pseudomonas, and flavobacteria found in the apparatus damage the milk as a result of their addition to the milk.

In order to prevent this, milking machines should be disinfected and neutralized on time. Every milk production enterprise should have a monthly schedule of washing and disinfection in order to strictly carry out sanitary cleaning of equipment and milking machines in the established period. After disinfection, equipment that has not been used for more than 6 hours is disinfected a second time before starting work. Microbiological control of the quality of washing and disinfection is carried out in the laboratories of the enterprise immediately before starting work.

1- Table

<p>The table shows the number of bacteria entering milk from different sources depending on the hygienic conditions of milking</p>		
	<p><i>The number of bacteria in 1 ml of milk in a hygienic</i></p>	<p><i>The number of bacteria in 1 ml of milk under adverse</i></p>

Source of pollution	<i>environment, pcs</i>	<i>conditions, pcs</i>
The coverings of the animal	50-55	20000
Air during milking	1-3	10-20
The hands of the milking operator	1-3	1000-1050
milking bucket	1-3	10000
Milking machine	1000	1000000

Fresh milk has a temperature of about 35 ° C. Milk should be cooled to at least 10°C as soon as possible. If the milk is stored at a temperature above 10 ° C, various bacteria begin to appear in it in the first hours after the bactericidal phase.

In milk stored at temperatures below 10 °C, almost no growth of lactic acid bacteria occurs, which helps (albeit slowly) the growth of bacteria that multiply at low temperatures (usually from the genera *Pseudomonas* and *Achromobactos*) and cause the breakdown of proteins and fats will give.

CONCLUSION

In conclusion, high-quality milk can be obtained only if sanitary and veterinary regulations are followed in the milk production enterprise. The main factors that effectively affect the preservation of milk quality are quick and efficient cleaning, cooling immediately after milking, skillful storage and proper transportation.

REFERENCES

1. Андрей Павлович Палий САНИТАРНО-ГИГИЕНИЧЕСКИЕ УСЛОВИЯ ПОЛУЧЕНИЯ МОЛОКА. ИЗВЕСТИЯ ВЕЛИКОЛУКСКОЙ ГСХА 2016 №1
2. СУТ ВА СУТ МАҲСУЛОТЛАРИНИ ИШЛАБ ЧИҚАРУВЧИ КОРХОНАЛАРИГА ҚЎЙИЛАДИГАН САНИТАРИЯ-ГИГИЕНА ТАЛАБЛАРИНИ (0039-22-СОН САНҚВАН) ТАСДИҚЛАШ ТЎҒРИСИДА <https://sanepid.uz/sut-va-sut-masulotlarini-islab-ciqaruvchi-korxonalariga-qiladigan-sanitariya-gigiena-talablarini-0039-22-son-sanqvan-tasdiqlas-tgrisida>
3. Tuxtarov B. E., Soatov M. M. O. G. L., Saydaliyeva M. Z. Q. UMUMTA'LIM

- MAKTABLARI VA MAKTABGACHA TA'LIM MUASSASALARILARDA BOLALAR VA O'SMIRLAR GIGIYENASINING TUTGAN O'RNI //Scientific progress. – 2023. – T. 4. – №. 2. – C. 12-17.
4. Maxmatmurot o'g'li S. M. UMUMIY O'RTA TA'LIM MUASSASALARIDA O'QUVCHILAR OVQATLANISHINI GIGIYENIK TASHKILLASHTIRISH //PEDAGOGS. – 2024. – T. 49. – №. 1. – C. 41-46.
 5. Maxmatmurot o'g'li S. M. et al. UMUMIY OVQATLANISH KORXONALARIDA FOYDALANILADIGAN JIHOZLARGA QO'YILADIGAN GIGIYENIK TALABLAR //INTERNATIONAL JOURNAL OF RECENTLY SCIENTIFIC RESEARCHER'S THEORY. – 2024. – T. 2. – №. 2. – C. 128-132.
 6. qizi Ramazonova K. U. et al. MAKTABGACHA TA'LIM MUASSASALARIDA BOLALARNING OVQATLANISHINI GIGIYENIK BAHOLASH //GOLDEN BRAIN. – 2024. – T. 2. – №. 1. – C. 281-290.
 7. Mirmuhsin S. et al. MAKTAB JIHOZLARNING O 'QUVCHILAR SALOMATLIK HOLATIGA TA'SIRINI GIGIENIK TAHLILI. – 2022.
 8. Maxmatmurot o'g'li S. M. BOLALAR VA O'SMIRLARDA TEMIR TANQISLIGI ANEMIYASI. – 2023.
 9. Абдурахмонова М. Ш., Соатов М. М. САНИТАРНАЯ ЭКСПЕРТИЗА КОЛБАСНЫХ ИЗДЕЛИЙ //PEDAGOGS. – 2024. – T. 53. – №. 1. – C. 72-74.
 10. Соатов М. М. и др. ЗДОРОВОЕ ПИТАНИЕ–ЗАЛОГ ЗДОРОВЬЯ //PEDAGOGS. – 2024. – T. 53. – №. 1. – C. 64-67.
 11. Tuxtarov B. E., Mirmuhsin Maxmatmurot O. G. 'Li Soatov, Mohira Zayniddin Qizi Saydaliyeva UMUMTA'LIM MAKTABLARI VA MAKTABGACHA TA'LIM MUASSASALARILARDA BOLALAR VA O'SMIRLAR GIGIYENASINING TUTGAN O'RNI //Scientific progress.–2023. – 2023. – T. 2.
 12. Абдурахмонова М. Ш., Соатов М. М. ПРАВИЛЬНОЕ ПИТАНИЕ ДЕТЕЙ И ПОДРОСТКОВ //PEDAGOGS. – 2024. – T. 53. – №. 1. – C. 68-71.
 13. Мусаева О. Т., Элмуродова Л. Х., Халилова Б. Р. Старение Как Область Научных Исследований И Организация Гериатрической Медицинской Помощи //Central Asian Journal of Medical and Natural Science. – 2023. – T. 4. – №. 2. – C. 317-322.
 14. Мусаева О. Т., Номозбоева М. А., Халилова Б. Р. ФАКТОРЫ РИСКА ПРИ ВОЗРОСТНЫХ ЗАБОЛЕВАНИЙ И ИХ ПРОФИЛАКТИКА //European Journal of Interdisciplinary Research and Development. – 2023. – T. 14. – C. 8-14.
 15. qizi Elmurodova L. X. et al. SUVNI KOAGULYATSIYA QILISHNING GIGIYENIK ANAMIYATI //GOLDEN BRAIN. – 2023. – T. 1. – №. 30. – C. 67-71.
 16. Файзибоев П. Н. и др. ОЗИҚ-ОВҚАТМАҲСУЛОТЛАРИДАН БАКТЕРИАЛ ЗАҲАРЛАНИШНИ ОЛДИНИ ОЛИШДА НАССР ХАЛҚАРО ТИЗИМИНИ TUTGAN ЎРНИ //INTERNATIONAL JOURNAL OF RECENTLY SCIENTIFIC RESEARCHER'S THEORY. – 2023. – T. 1. – №. 7. – C. 226-229.
 17. Туйчиевна, М. О. ., Махматмуротович, С. М. ., & Расуловна, Х. Б. . (2023). Основные Возрастные Заболевания И Состояния Распространенные Среди Мужчин И Женщин Пожилого Возраста. *Research Journal of Trauma and Disability Studies*, 2(4), 14–25. Retrieved from <http://journals.academiczone.net/index.php/rjtds/article/view/674>
 18. Eshnazarovich T. B. et al. Hygiene Requirements for School Furniture //Web of Synergy: International Interdisciplinary Research Journal. – 2023. – T. 2. – №. 2. – C. 245-248.