

STUDY OF THE MICROBIAL CONTAMINATION OF COSMETIC CREAMS

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Intraduction: Among all types of cosmetic products the most susceptible to microbial contamination of cosmetic creams. Large water content, organic and mineral components, storage at room temperature, failure to observe hygienic rules of taking the cream creates favorable conditions for the development of different groups of microorganisms. Contaminated with pathogenic and conditionally pathogenic microflora creams can be sources of biological hazards for users.

Aim: The study of the dynamics of microbial contamination of cosmetic creams after opening in the process of applying for three weeks and influence the rules of taking the cream to the level of microbial contamination.

Materials and methods. Have identified bacterial and fungal contamination, 6 samples of cosmetic moisturizing creams for the face after opening and use within three weeks. Three samples of cream users before applying to the face took arms, three specimens with special applicators. In accordance with the requirements of regulatory documents in Ukraine in the safety assessment of cosmetic products evaluated total microbial count and presence of bacteria *Staphylococcus aureus*, *Pseudomonas aeruginosa*, *Enterobacteriaceae*.

Results and their discussion: Total microbial count in creams after opening the package did not exceed 30 CFU/g After 3 weeks of use and storage at room temperature total microbial count in samples of cream that people took arms made 96-109 CFU/g in one of samples of creams were identified fungi of the genus *Candida*. In creams applied applicators - total bacterial count amounted to 35-50 CFU/g. Among the identified microflora dominated coagulase positive staphylococci, spore-forming bacteria of the genus *Bacillus*. Bacteria of the family *Enterobacteriaceae*, *P. aeruginosa* and *S. aureus* was not detected.

Conclusions: Despite all the beauty creams after opening stored at room temperature, those specimens which were taken by the applicators, had lower level of microbial contamination, which proves the importance of the observance of hygienic rules in the capture of beauty creams.