STUDY OF COSMETICS WITH BACTERIOPHAGES

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Introduction. Bacteriophages, also known as viruses that kill bacteria, are perfect antibacterial agents. They only act on "their own" microorganism, don't have any adverse events and it's not necessary to keep treatment regimen strictly when you use them. For that reason bacteriophages came in view of scientists again nowadays. Different kinds of bacteriophages are used in medicine. These are: staphylococcal, streptococcal, dysenteric multivalent, klebsiella, piobacteriophage, colibacteriophage, proteus and coliproteus bacteriophages and so on. Bacteriophages are also used in gene engineering.

The safest and "ecologically cleanest" method of controlling with microbial infections is the usage of natural regulation levers of population level also known as biological limiters. Natural biological limiter for bacteria is bacteriophages. The use of bacteriophages with narrowly-specific lytic activity at the stage of anti-inflammatory and antibiotic therapy allows not only to destroy pathogenic microorganism population (including antibiotic-resistant stain), but also improves "beneficial" normal flora bacteria development conditions.

Contemporary issues of phagotherapy are in a major focus of interest nowadays. The generalization of the accumulated data on the results of the use of phage-containing agents and close co-operation of virologists, microbiologists, practicing physicians, biotechnologists and veterinaries allows to create such agents that have no analogues in the world of microorganisms. It's also possible to use them for prevention of microbial etiology diseases by purification from opportunistic bacteria. One of such argents is Gel Sengara for make-up removal. It has bacteriophages and prebiotics in its content.

The main **aim** of the work is to show all the prospects of cosmetic products based on bacteriophages as well as objectivation of the need for biotechnology researches of cosmetics on the activity of stated bacteriophages.

Results and discussion. Currently at the Department of Biotechnology of National University of Pharmacy it being planned a research of bacteriophages used at production of cosmetics "Sengara" for its peculiarity. As an object we have chosen gel Sengara for make-up removal with bacteriophages and prebiotics in it (manufacturer is LLC "NVC Agrovetzashchita S.-P.", Russia, for request of LLC "Sengara" for PLC "Faberlic").

Conclusions. Its peculiarity is characterized by the presence or absence of bacteriophages lytic activity. The gel is being researched for the presence of mentioned above bacteriophage (Wolinella Spp., Actinovyces Spp., Actinobacillus actinomycetemcomitans, Porfiromonas gingivalis, Campylobacter Spp., Bacteroides Spp., Staphylococcus aureus, Streptococcus pyogenes, Streptococcus mutans, Pstudomonas aeruginosa, Proteus vulgaris, Klebsiella).