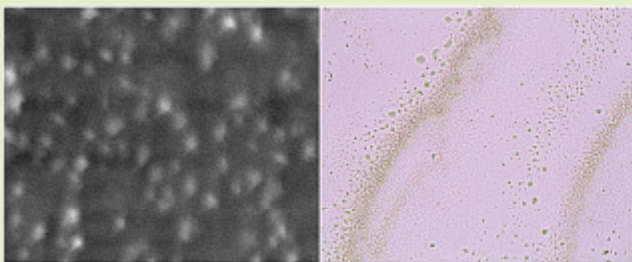


APPLICATION OF SILVER NANOPARTICLES IN FOOD INDUSTRY

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MICROSCOPY

Electron microscopy of colloidal silver obtained by electrochemical synthesis; 10000X magnification (left).
 Microscopy with light microscope; 1000X magnification (right).

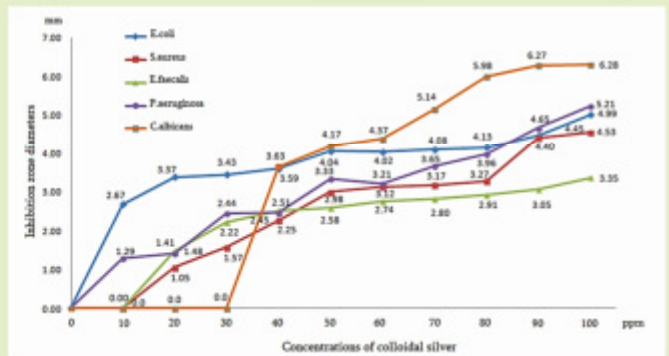


SILVERTON

It was suggested to use colloidal silver, which is known under the trade name "Silverton", as an antibacterial and antifungal agent.

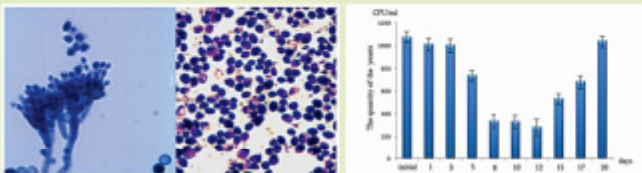


ANTIMICROBIAL AND ANTIFUNGAL ACTIVITY



Antibacterial and antifungal activity of colloidal silver «Silverton» against *E. coli* ATCC 25922, *P. aeruginosa* ATCC 9027, *S. aureus* ATCC 25923, *E. faecalis* ATCC 29212 and *C. albicans* were studied. The disk diffusion method was applied. After the incubation period, the growth inhibition zones of the test cultures were measured.

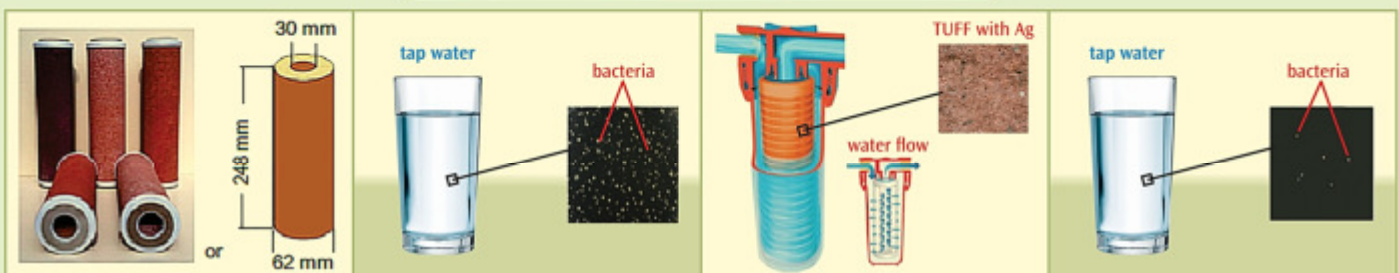
PRESERVATION



On the basis of the research it was suggested that the «Silverton» could be used as a preservative for prolongation of the shelf life of dairy products. Addition of colloidal silver to the sour cream leads to inhibition of the growth of yeasts and molds that cause spoilage of product.

Article:
<http://www.foodprom.ru/journals/pischevaya-promyshlennost/1058-pischevaya-promyshlennost-2-2017>

DESINFECTATION OF WATER



Nanocomposite filters, having antimicrobial activity, were developed by sorption of Ag nanoparticles into the matrix of household filter consisting of porous mineral tuff and their subsequent chemical deposition.

Articles:
<http://mas.asi-oa.am/6313/>
<http://biology.asi-oa.am/11282/>
<http://aqua.iwaponline.com/content/early/2018/01/29/aqua.2018.161>