

THE COMPLEX APPROACH IN CREATION OF MULTIFUNCTIONAL COSMETIC

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Using of high concentration emulsion of liquid silicones in cosmetics is connected, first of all, with their ability to dissolve large quantity of oxygen and carbon dioxide and cause effective transdermal gas exchange. Inclusion of various bioactive substances in silicon emulsion leads to multifunctional action of compositions that is a condition for creation of effective cosmetic. One of interesting modern directions is use in cosmetic mineral salts. Inclusion of such components in silicon emulsion leads to new attractive properties.

In this study the activity of aqua-mineral complex (AMC), representing reversed emulsion of water carolinum salt solution in liquid silicon, was investigated. It is shown intensification of skin thermogenesis after application of studied emulsions. Corresponding rise of temperature is observed on essential distance from the place samples application. Biochemical researches have show intensification of oxidative phosphorylation in mitochondria in presence of AMC. It is supposed that observed rise in thermogenesis is connected with action of carbon dioxide as tissue gas exchange modulator, which amount increases in skin after application of AMC and can cause both local and resorbative action.

The received results provide a new direction in creation of perspective cosmetic on the basis of tissue gas exchange regulators, and also specify necessity of use in creation of new cosmetic complex approach, which is taking into account presence both local, and system (resorbative) action, leading to biological effects at organism level.