



The Role of Proteins in Cosmetic Preparations

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The use of proteins as active cosmetic substances dates back to ancient times, the reason for their use in cosmetic preparations is that they have been found to improve skin that is old (mature skin with visible signs of aging), have a positive effect on hair and nails. The use of proteins in cosmetic preparations contributes to repeated cellular division of skin cells, hydrates the epidermis, stimulates the creation of collagen and elastin, restructures collagen and regenerates elastin, thus increasing the elasticity of the skin, these processes on the other hand however, the application of proteins in cosmetic preparations slows down the aging process of the skin. With the presence of proteins in cosmetics, it is possible for the epidermis to be constantly moisturized on the skin itself and the transepidermal water loss from the skin is reduced. In addition to being used in creams, serums and gels for old skin, proteins can also be found in a large number of cosmetic preparations such as shampoos, hair masks, hair conditioners whose purpose of the proteins present in these preparations (mostly keratin) is to regenerate the damaged hair and scalp, which are most often damaged during various chemical changes to the hair (dyeing, bleaching and cold permanent undulation). Various proteins of animal origin improve the condition of the skin, hair and nails. The most used are scleroproteins: collagen, elastin and keratin. Protein complexes are also used together with PAM (surface active substances) and fatty acids (used in preparations, they act as antimicrobial or antiseptic). Nowadays, vegetable and microbial proteins are mostly used. In this paper, the characteristics of proteins that are an integral part of the formulations of cosmetic preparations will be shown.

Materials used for the formulation of anti-aging protein cream are the following substances: active component mango extract (Mangiferin) 3% w/w, fatty phase stearic acid 10% w/w, cetyl alcohol 6% w/w, liquid paraffin 6.6 w/w. Aqueous phase – glycerine 5% w/w, methyl paraben 0.05% w/w, propylene glycol 30% w/w, distilled water made up to 100%. Mango extract is the carrier of the proteins in the formulation.

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