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最新の保湿研究

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Recent Research Trends in regard to Skin Moisturizing

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Abstract

The stratum corneum (SC) plays an important role in maintaining skin moisture levels and epidermal barrier function. A natural moisturizing factor consisting of amino acids, organic acids, and salts exists in the SC and functions to maintain moisture, while intercellular lipids in the SC maintain the epidermal barrier function. However, it has been reported that a decline of those functions was involved with dryness, ultraviolet irradiation, stress, and aging, which are generally countered with topical application of cosmetic moisturizing agents such as glycerol, propylene glycol, and pyroglutamic acid. Moisturizing by application of such agents has been termed moisturizing with supply. In addition, strategies for skin moisturizing have changed according to the progress of physiological dermatology, with increasing the production of moisturizing factors by the skin itself a newly reported approach, termed moisturizing from within. Further, recent research has revealed the characteristics of aquaporin, which is involved with water flow within the skin, and the tight junction of the skin, which is related to the barrier function, except for that contained in the SC. Also, a new method for measuring water content in skin using confocal Raman spectrometry has been developed. We consider that approaches for moisturizing and methods for measuring moisture in the skin will continue to progress.

Key words: recent research, trends, skin, moisturizing.