〈シンポジウム「水と美容」〉

4. 皮表水分の測定法について

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Measurement of Skin Moisture

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Abstract

The variation in the moisture content in the outer layer of skin (stratum corneum) is extremely complicated, the result of many factors both environmental (e.g. temperature, humidity) and internal (e.g. secretion of sweat and sebum). The moisture holding mechanism of skin has yet to be fully understood.

Cosmetics are generally for use on healthy skin, and one of the goals of cosmetic research is to maintain the moisture-content at normal and healthy levels. In pursuit of this goal, various methods for measuring skin moisture have been studied, and both in vitro and in vivo methods are becoming established.

For in vitro measurement, test methods using simulated skin have been rapidly advancing. In vivo methods require that testing and measurement be accomplished without damaging the skin, as cosmetic researchers do not take skin samples by biopsy. In spite of the limitations, in vivo methods have been progressing.

This paper describes both in vitro and in vivo methods for measuring the moisture-maintaining properties of cosmetics, and also presents some of the measurement results.