

〈一般論文〉

各種サンスクリーン剤のアンケート調査での
推定塗布量とボランティアでの実塗布量の比較

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**Comparison of Usage Amount of Various Sunscreen Products
by a Questionnaire Survey and Application Study on Volunteers**

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Abstract

Sun protection factor (SPF) is as an index to measure the ultraviolet B (UVB) blocking effect of a sunscreen product, and the amount applied at the time of SPF measurement test is 2.0 mg/cm² according to international standards. However, the actual applied amount of a sunscreen emulsion has been reported to be approximately 1 mg/cm². Since formulations of sunscreen products have diversified in recent years, in this study, we investigated the actual usage amount of each form. A questionnaire survey was conducted among 131 women in their age ranged from 20s to 50s. The four commonly used formulations of sunscreen products were ①milky lotion, ②gel, ③base cream, ④spray, and their actual usage amount on the face was ①0.3, ②1.2, ③0.5, ④0.5 mg/cm², respectively, and that on the arm was ①0.3, ②0.9, ④0.2 mg/cm², respectively. The amount of application was calculated by actual measurement in 20 volunteers, and no divergence from the questionnaire results was found. This survey also demonstrated that the actual usage amount of the sunscreen product is less than the applied amount at the time of SPF measurement and that sufficient UVB blocking may not be achieved.

Key words: sunscreen, actual usage amount, UV, SPF, photoaging.