

Abstract

Polyphenols in green tea have been known for their protective activity against some types of skin cancer both *in vivo* and *in vitro*. The aim of this study was to determine the absorption of (-) epigallocatechin-3-gallate (EGCG), the main bioactive polyphenol in green tea, administered topically to mouse skin. One hundred milligram of lotion formulated in our laboratory containing 0.2 % green tea extract was applied on mouse skin *in vitro*. The absorption of EGCG was measured after 24 hours. The results showed that EGCG in the lotion formulated could absorb into and through skin more than that of the formulation reported for its activity in protection against psoralen plus ultraviolet A -induced photochemical damage to skin.