

Instituto de Pesquisas, Ensino e Gestão em Saúde – IPGS
Pós-Graduação em Nutrição Clínica e Estética

**RELATIONSHIP BETWEEN THE CONSUMPTION OF DIETARY
PHOTOPROTECTIVE FOODS WITH THE SKIN REACTION TO UV
RADIATION DUE TO SUN EXPOSURE OF A VACATIONING
POPULATION OF THE SOUTHERN COASTLINE OF BRAZIL**

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Introduction. Skin aging is a continuous process that affects skin functioning as well as its appearance. Intrinsic and life style related factors contribute to cutaneous aging. The hazardous effects of chronic exposure to ultra-violet (UV) radiation can be responsible for some of these effects (Chung et al, 2001). Certain micronutrients commonly found in the diet, such as carotenoids, tocopherols, ascorbic acid, flavonoids and some fatty acids have protective capacities against UV radiation. **Methods.** Transversal study. The population consisted of adults vacationing in Xangrilá beach (southern Brazil) . The Fitzpatrick Classification Scale was used to evaluate the skin photo type (Kawada, 2000).The nutritional status was classified through the Body Mass Index (BMI) (WHO, 1995). To determine the consumption of photoprotective nutrients a food frequency questionnaire was used (Fisberg, 208). The statistics analysis was performed using SPSS Software. The T of Student Test was applied for the association analysis. **Results.** 86 individuals were studied. Among them, n=48 (55,8%) presented a normal BMI and n=34 (39,5%) were overweight (BMI \geq 25 kg/m²). N=61 (70,9 %) were among photo types I to III; and n=25 (29,1%) between photo types IV and V .The frequency of regular dietary intake (consumption \geq 5 times/ week) of photoprotective nutrients was respectively: Vitamin E n= 73 (84,9%); Vitamin C n=42 (48,8%); Carotenoids

n=68 (79,1%); Polyphenols n=35 (40,7%) e; Selenium n=16 (18,6%). The relationship between the regular intake of dietary sources of photoprotective nutrients with the skin photo type presented a positive association for Vitamin E (p=0,017) and Selenium (p=0,049). There was no significant association between regular consumption of photo protective nutrients with the gender, age and BMI variables. **Conclusion.** There was a high prevalence of individuals with a skin photo type more sensitive to UV radiation that did not present a regular adequate consumption of photoprotective nutrients.

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