

VIEWPOINT

A Skin Cancer Prevention Campaign Spreading the Word on Sugar Packets

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An increased incidence of various types of skin cancer has been observed worldwide. Despite the importance of other predisposing factors, including genetic ones, excess or inadequate sun exposure throughout life is known to be the most important risk factor for the development of skin cancer, at earlier ages and in different skin phototypes.¹ Daily and cumulative sun exposure is associated with an increased incidence of actinic keratosis and squamous cell carcinoma and some forms of basal cell carcinomas.¹ Acute exposure, even if sporadic, to UV radiation, particularly in tropical climates and when the skin has not been progressively prepared for sun exposure, or exposure to tanning beds, is associated with higher incidence of basal cell carcinoma and melanoma.^{1,2} In fact, frequently people are exposed to high levels of UV radiation without recognizing not only the short-term but also the medium- and long-term risks.

Skin cancer primary and secondary prevention campaigns have never been so important. To be more accepted by the general public, these messages can be transmitted directly by public figures, television stars, or sports idols in a simple format.^{2,3} This led to the idea of using sugar packets as a vehicle for skin cancer prevention.

The Portuguese Skin Cancer Association (<http://www.apcancrocutaneo.pt>), with the support of the

Portuguese Society of Dermatology and the Directorate-General of Health, developed an original partnership with Delta Cafes, the most important coffee company in Portugal. From 2010 until 2012, every summer, 30 tons of sugar packets were manufactured (5 million 6-g packets per year) with 4 main messages reminding consumers of the care to take with sun exposure and the importance of early diagnosis of skin cancer (**Figure**). These packets were mainly distributed in coffee shops and restaurants throughout the country, which has a population of 10 million. All packets displayed on 1 side the message, "Delta Coffee and your dermatologist wish you a tasty and safe...Summer..." and on the other side, 1 of the following 4 statements: "Summer without sunburn, sun with moderation, shade as protection..."; "Sports in the summer, with safe protection..."; "Sunbeds age the skin and induce skin cancer..."; and "Skin cancer can be cured, if detected at an early stage, but it can also be prevented..." The statement was immediately followed by, "Do not overexpose yourself to the sun... The choice is yours." Each year, these campaigns were announced in different social media and gained wide attention among the population. Although we cannot accurately measure the impact of such large-scale campaigns on overall skin cancer incidence, morbidity,

Figure. Sugar Packets



The sugar packets conveyed 4 main messages: avoid sunburn and obtain sun exposure in moderation; use adequate sun protection during outdoor sports; avoid using sunbeds; and seek early diagnosis of skin cancers.

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and mortality, we consider this to be an original approach with potential to reach large populations that may be applicable to other regions and distribution mediums.

Sunburns have been recognized as one of the most important risk factors for melanoma.¹ Moderate and brief sun exposure can be psychologically beneficial and of benefit in various skin disorders; it also contributes to the synthesis of vitamin D. The number of people practicing outdoor sports is increasing, and many of these practitioners are not aware of how to adopt sun protection strategies (with the use of a hat, sunglasses, nonporous clothing with a design that protects the neck, shoulders, arms, and forearms, and sunscreen with sun protection factor ≥ 30).^{3,4} It is also important to recommend that these sports should not be practiced during the higher solar incidence period (ie, between 11 AM and 4 PM). Exposure to tanning beds must be reduced and, ideally, prohibited as in Brazil and Australia. Fortunately, in Portugal, sunbed use is among

the lowest in Europe, in contrast to geographically and culturally similar countries such as Spain and Italy.⁵ Campaigns warning about the risk of sunbed use (not only the increased risk of skin cancers at young ages but also the premature aging of the skin) have influenced sunbed use in Portugal, in addition to legislation established in 2005 that restricted sunbed use to those 18 years or older and required information about the risks of sunbed use to be displayed including visible warnings in the sunbed itself, written consent before the first use, protection equipment for the eyes and male genitalia, and adequately trained personnel present for the entire use of the sunbed. Additionally, it is important to highlight that the various skin cancers can be cured if detected and treated early, but can also be prevented by proper sun exposure behavior. Finally, the use in all the sugar packets of the statements, "Do not overexpose yourself to the sun" and "The choice is yours ..." is designed to induce more responsible behavior and transmit the final decision to each individual.

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