SPF on your plate: Researcher connects the Mediterranean diet with skin cancer prevention

Science Daily

In a study recently published in *Nutrition Reviews*, Dr. Shapira has shown that a diet rich in antioxidants and omega-3 fatty acids, like the diet eaten in Mediterranean regions where melanoma rates are extremely low, can help protect us from skin cancer.

The sun's rays damage both the skin and the immune system by penetrating the skin and causing photo-oxidation, she explains, affecting both the cells themselves and the body's ability to repair any damage. Her prescription is to "go Greek" with foods such as olive oil, fish, yogurt and colorful fruits and vegetables to fight the oxidizing effect of the sun, as well as regular applications of sunscreen and appropriate body coverings such as hats, beach coverups, and other sportswear.

Drinking to your health

Previous research demonstrated that the sun's UV rays damage the skin by exciting its molecules and causing them to become oxidized, says Dr. Shapira. "My theory was that if you prepared the body with sufficient and relevant antioxidants, damage could be reduced."

For a study at the Baltic Sea, Dr. Shapira and Prof. Bodo Kuklinski of Rostock University organized two groups. One group was provided a drink high in antioxidants, while the other enjoyed beverages such as sodas. Those who hydrated with the antioxidant-rich drink had fifty percent fewer oxidation products (i.e. MDA) in their blood at the end of the two-week period, which included five to six hours of exposure to the sun daily. Further studies proved that these antioxidants, especially carotenoids -- fruit and vegetable pigments like red from tomatoes and watermelons and orange from carrots and pumpkins that accumulate in the skin where they serve as a first line of protection -- had delayed the phenomenon of skin erythema, which indicates the initiation of tissue and DNA damage that can lead to skin cancer.

This information is invaluable, especially in light of climate change, notes Dr. Shapira. As temperature and humidity get stronger, which aggravates the damaging effect of solar UV rays, it is increasingly difficult for sunscreen alone to protect effectively. So while covering up, slathering on the sunscreen, and avoiding the sun during peak hours are still important to prevent a burn, consider dietary changes too, to promote skin health.

Go fish with a glass of red … and other colors

It might be tempting to load up on dietary supplements instead of changing the

diet, but according to Dr. Shapira, supplements are simply not as effective. Foods provide nutrient "synergy," she says. "In foods, many vitamins and various antioxidants and bioactive ingredients work to support one another and the body's natural protective mechanisms. Synergies between the nutrients in your food, which make a significant contribution to health, may contrast with the relative isolation of a vitamin supplement."

The research is getting attention: for the first time, the Israeli Cancer Association has included the nutritional information as part of their "Smart in the Sun" advisories.

It's not necessary to move to Greece, Israel or Turkey to get the benefit of the diet. Most of the appropriate foods are stocked in American grocery stores. Olive oil, fresh fish, fruits and vegetables, red wine in moderation, whole grains, beans and lots of water should be at the top of the shopping list, Dr. Shapira advises.

And there are some foods to avoid, she points out. Go light on red meat, processed foods, and alcohol (red wine is preferable), and be wary of foods that contain the photosensitizing compound psoralen, such as parsley, celery, dill, cilantro and figs.

SOURCE [1]

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