

IT'S TIME FOR A SERIOUS TALK ABOUT SUNSCREEN & CANCER

LET ME START out by reporting that my April call for a Summit in Sunscreens is gaining traction.¹ I received several encouraging remarks from individuals in our field who expressed the need for such action and for a summit in the future. Sunscreens are under attack in the media from consumers, environmentalists, a few in the medical community and, ironically, even the FDA. Recent publications by the FDA revealed that seven of the currently used ultraviolet filters penetrate the blood stream and failed the MUSt test, and designated zinc oxide and titanium dioxide as the only two currently approved GRASE UV filters. The FDA has added to the anxiety of not only consumers but also to practitioners in the field in dermatology, academia, regulation, law-making and those involved in creating sunscreens and the promoting of ultraviolet filters.

The FDA has consistently rebuffed efforts for a public dialogue among consumers, educators, scientists and practitioners in the field, relying instead, on



Regulators must open their eyes to UV damage.

its own internal expertise and advisors. I believe that sunscreen experts, the medical field, informed consumers, and environmentalists can effectively assist the FDA with the daunting job of reconciling all the issues that confront the finalization of comprehensive regulations in the US. I understand that the task of issuing a Final Monograph in today's environment of chaotic use of UV filters in sunscreens and anti-aging products is challenging. With tanning salons still operating, with the reckless behavior of consumers in heeding the warnings of unchecked solar radiation exposure, with the spiraling cases of skin cancers and other factors, a call for, at the very least, a reflection as to how we got here in the first place is warranted and long overdue.

How We Got Here

When regulations were enacted in 1978,

solar radiation protection by sunscreen products was at a minimal, achieving a tan was not yet the rage, skin cancers were not well documented and, most importantly, available technology for designing superior UVA and UVB filters was primitive. Today we have a \$10 billion industry that produces products used by the vast majority of consumers, albeit inadequately by some users, with sunscreens and antiaging products promoted for year round use, rain or shine, indoors and outdoors, in a variety of vehicles including sprays, mousses, powders, lip balms, creams and lotions.

In the meantime, incidences of skin cancer resulting primarily from overexposure to solar radiation are spiraling, and consumers and some scientists, especially environmentalists, are putting some of the blame on sunscreens. Their concerns are real regardless whether the data generated is reliable or not, or



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if the science is real or flawed; the net result is the consumer is confused and is demanding answers from our policy makers, our regulators, our industry and our scientists in academia, medicine or consumer companies.

The Environmental Working Group (EWG) and other organizations annually publish sunscreen guides.² The EWG ranks UV filters based upon their perceived hazard as 1-8, where 8 is the worst. Oxybenzone has a ranking of 8, octinoxate 5, homosalate 4, octocrylene and octisalate 3, and avobenzene and ecamsule 2. TiO₂ varies from 1-6 and ZnO from 1-4 depending if those two inorganic particulates have nano particles and if they are in spray format. Regardless whether industry approves these conclusions, many consumers seek their guidance.

Consumer Reports (CR) publishes a Sunscreen Report every year in June and reveals its "best picks" of the sunscreens sold in the US.³ Without exception, CR's top picks contain the controversial ingredient oxybenzone. The American Academy of Pediatrics suggests that parents may want to use an oxybenzone-free sunscreen on their children, especially after the devastating FDA reports that this aromatic ketone is immediately absorbed into the bloodstream. I am not necessarily condemning any molecule that maybe absorbed into the bloodstream without a full study as to its potential toxicity at elevated levels.

Recent Studies

The most comprehensive report on the adverse effects of sunscreens on both health and the environment was published in June by two French environmental groups, WECF France and Agir pour l'Environnement.⁴ Researchers evaluated 71 sunscreen products for children in France and identified 29 ingredients of concern. Ten were classified as "Very High Concern," seven as "High Concern," and 12 as "Concern." Regardless of whether we approve of their methodologies or conclusions, they are making an impact at least in Europe.

The researchers rated six UV filters as "Very High Concern;" namely, octinoxate, homosalate, octocrylene, TiO₂, ZnO nano and 4-MBC. Oxybenzone is not used in children's products in France and so it did not make the list. The first five are important UV filters in the US and the last one is on the Time and Extent Application (TEA) list of potential future ingredients in the US. Among "High Concern" ingredients, researchers list avobenzene, TiO₂ and ZnO non nano along with three TEA ingredients, bemotrizinol, bisoctrizole and isocotrizinol.

I am aware that a few may consider me an alarmist and that much of these negative reports and debates today may not necessarily be accurate or scientifically reliable, but it's my duty to highlight all these issues and bring them to the forefront and to appropriately

address them in order to avoid the chaos and confusion that we are experiencing today. I look forward to hearing from all concerned. I welcome your suggestions, your criticism, and your participation in addressing the vital issues of providing the proper protection of our consumers from harmful solar radiation. ●

References:

1. Nadim Shaath, Happi, The Sunscreen Filter, "We need a Sunscreen Summit in Washington DC", April 2020.
2. Environmental Working Group, www.ewg.org, 2020 Sunscreen Guide.
3. Consumer Reports, www.consumerreports.org, best sunscreens of 2020
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