Sunscreen Facts

Shedding Some Light on Sunscreen Use

Sunscreen continues to be recommended by health professionals and skincare experts promoting its use to reduce the risk of skin damage caused by overexposure to UV rays.

Sunscreen plays a crucial role in preventing sunburn, premature aging, and the development of skin cancer, including melanoma. Healthcare providers, and other health organizations around the world emphasize the importance of using sunscreen as part of a comprehensive sun protection strategy, while also seeking shade, wearing protective clothing, and avoiding sun exposure during peak hours (11:00 to 3:00). Ninety percent (90%) of skin cancer cases can be attributed to too much exposure to the sun.

The Sunscreen Misconception

What We Are Hearing

Concern #1: Sunscreen products contain "toxic" chemicals that pose serious health risks

One of the primary concerns raised by independent research reports is the presence of so-called "toxic" ingredients in conventional sunscreens.

In June 2021, the Food and Drug Administration (FDA) made updates to sunscreen regulations, shedding light on the potential risks associated with certain chemical sunscreen ingredients. The FDA conducted its research on active ingredients in chemical sunscreens, revealing that six such ingredients exceeded the FDA's threshold of concern in certain U.S. products.

In response to the June 2021 investigation of 294 sunscreen and after-sun products by Valisure, an independent US pharmaceutical product testing company, that found some sunscreens in the United States contained detectable levels of benzene. A similar finding has not been demonstrated in Canada.

The benzene contamination was likely due to a manufacturing process problem as:

- Benzene was not a listed ingredient in any of these products.
- Levels of benzene varied significantly from batch to batch, even within a single brand; and that ingredients within the sunscreen did not cause benzene to form.
- The US Federal Drug Administration (FDA) will review a Citizen Petition to investigate the manufacturing processes of sunscreen manufacturers.

Concern #2: Does sunscreen use block the absorption of vitamin D?

> Excessive use of sunscreen may result in a decrease in vitamin D, but it won't be a problem for most people, because they can easily absorb vitamin D from their diet through foods such as fatty fish and green vegetables, as well as from supplements.

Sunscreen Recommendations

The Canadian Dermatology Association (CDA) recommends the continued use of sunscreen following the U.S. investigation. As certified dermatologists the CDA encourages individuals to be sun safe to reduce the risk of skin cancer and continue to protect your skin from the sun's harmful ultraviolet radiation by:

- Limiting sun exposure, especially between 11 am and 3 pm (during mid-day).
- Planning outdoor activities in the shade as much as possible.
- Wearing a wide-brimmed hat, sunglasses and clothing that covers as much of your skin as possible; and
- Continue to apply liberally and frequently broad-spectrum sunscreens with a SPF of 30 or higher to exposed skin. Look for products with the *Recognized Sun Protection CDA* logo.

Mineral-based (physical filter) vs Chemical (filter) sunscreen

Amid the concerns over chemical (filter) sunscreen ingredients, mineral-based (physical filter) sunscreens have gained popularity as an alternative option.

What are mineral-based sunscreens?

Mineral-based sunscreens offer a host of benefits that have made it increasingly popular among health-conscious consumers. Unlike chemical sunscreens, mineral sunscreens use natural minerals, primarily zinc oxide and titanium dioxide, as their active ingredients. These minerals work by creating a physical barrier on the skin's surface that reflects and scatters UV rays away from the skin, effectively shielding it from sun damage.

One of the key advantages of mineral-based sunscreens is their ability to provide broad-spectrum protection against both UVA and UVB rays. Moreover, mineral sunscreens are typically less irritating to the skin, making them suitable for individuals with sensitive or allergy-prone skin.

The Importance of Informed Decision-Making

Reading product labels and understanding the differences between chemical (filter) and mineral (physical filter) sunscreens can help individuals choose products that align with their preferences and skin needs. Sunscreen remains a vital tool in protecting our skin from overexposure to UV rays and reducing the risk of skin cancer. To make informed decisions about sunscreens, consumers should be aware of the different types of products available and their respective benefits and drawbacks.

Adapted from:

Canadian Dermatology Association 15 July 2021: https://dermatology.ca/sunscreen-and-benzene-update/

Sunscreen - safety of sunscreens; Health Canada: https://www.canada.ca/en/health-canada/services/sun-safety/sunscreens.html#a6

Deadly Sunscreen Controversy: Unraveling the Truth Behind Sunscreen Toxicity and The Mineral-Based Alternative - Emily Hartwell, Medium, July 27 2023 - https://medium.com/@radiantglow92/deadly-sunscreen-controversy-unraveling-the-truth-behind-sunscreen-toxicity-and-the-mineral-based-d8c0adfae0c4