

## Research Assignment

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### Sunscreen

Sunscreen has been a huge topic in the news over last few months and is a major topic of discussion in my family. My Father died of Merkel skin cancer, my husband is a 12 year survivor of optical melanoma and my seven year old Granddaughter is a two year survivor from renal cancer. We have become very clear as to what goes on our bodies is very important to our health. The recent concerns on sunscreen has been alarming. Even the sunscreens that say they are pure and organic may come up as a 9 out of 10 on the Think Dirty App.

According to the Skin Cancer Foundation and the American Cancer Society, skin cancer strikes more Americans each year than all other cancers combined. Its statistics show that the rates of melanoma have been steadily rising over the past 30 years around the world. Melanoma ranks as the 19th most common cancer in both men and women, the World Cancer Research Fund says.

The U.S. Food and Drug Administrators data reveals that there are chemicals in the sunscreen that are unsafe.

Nearly two-thirds of all sunscreens evaluated by the Environmental Working Group would not pass safety tests proposed by the US Food and Drug Administration. FDA new data reveals chemicals in sunscreens are absorbed into the human body at levels high enough to raise concerns about potentially toxic effects. We have been told to slather large areas of our bodies multiple times while in the sun and the new testing has proven that sunscreens lasts in your blood stream over twenty four hours after application.

According to the FDA, 12 sunscreen ingredients lack enough data to support whether they are GRASE. They are cinoxate, dioxybenzone, ensulizole, homosalate, meradimate, octinoxate, octisalate, octocrylene, padimate, sulisobenzene, oxybenzone, and avobenzone.

The chemical of most concern is oxybenzone. This has been linked to damage of the coral reefs and marine life as well as lowering testosterone levels in adolescent boys, hormone changes in men, shorter pregnancies and disrupted birth weights. There are questions about its potential to be an endocrine disrupter, a chemical that can cause cancer, birth defects, and other developmental disorders.

According to *ewg.org*, active ingredients in sunscreens come in two forms: mineral and chemical filters. Each uses a different mechanism for protecting skin and maintaining stability in sunlight. The most common sunscreens on the market contain chemical filters. These products typically include a combination of two to six of the following active ingredients: oxybenzone, avobenzone, octisalate, octocrylene, homosalate and octinoxate. Mineral sunscreens use zinc oxide and/or titanium dioxide. A handful of products combine zinc oxide with chemical filters. Mineral sunscreens are unpopular, although a safer choice because they tend to leave a white chalky film on the skin.

An article by Sandee LaMotte, *cnn.com*, states over 60% of the products evaluated do not offer adequate sun protection or contain potentially harmful chemicals. The FDA says there is no good data showing that sunscreens can protect past a level of 60+ SPF. Labeling sunscreen at levels higher than 60+ could be misleading by providing a false sense of sun protection. Some sunscreens boost SPF to 100+ and higher but can fail to adequately protect against equally dangerous UVA rays, which age and damage the DNA in skin cells, contributing to skin cancer. Only sunscreens labeled as broad-spectrum protect against both types of ultraviolet light. The FDA's proposed guidelines say sunscreens with an SPF of 15 or higher must be broad-spectrum, offering protection against UVA rays.

*ewg.org* talks about another area of FDA concerns with spray sunscreens and the possible danger posed by spray and powder forms of sunscreen application. Sprays are potentially combustible and both sprays and powders can enter the lungs if particles are small enough. Environmental Protection Agency studies of particle pollution, the fine film of water and dust, chemical/soot/acid particles that hangs in the air, show that anything 10 micrometers in diameter or less poses the greatest health problems because they can enter the lungs.

"Once inhaled, these particles can affect the lungs and heart and cause serious health effects in individuals at greatest risk, such as people with heart or lung disease, people with diabetes, older adults and children (up to 18 years of age)," the EPA says. (In lieu of this information, is not advisable to use spray or powder sunscreen.)

With all the panic about sunscreen, what can we do to keep safe and protected? Downloading the free Think Dirty App will help evaluate what is in your sunscreen and help you pick safer choices. The Environment Working Group (EWG) has safer product choices on their website that you can review to purchase from their company's websites. The Environment Working Group recommends choosing a mineral sunscreen containing titanium dioxide and zinc oxide when possible, while the American Academy of Dermatology recommends talking to a board-certified dermatologist if you are concerned about the safety of the sunscreen's ingredients.

Both organizations and Young Living say there are ways to protect yourself and your family other than sunscreen. Seek shade, especially between 10 a.m. and 2 p.m. when the sun is at its hottest, and whenever your shadow is shorter than you. Use protective clothing, such as long-sleeved shirts and pants and a hat with a wide brim, and don't forget the sunglasses. Seeking shade, using clothes and when necessary using sunscreen.

A great sunscreen is Young Living's mineral sunscreens SPF10 and SPF50.

Young Living's Mineral sunscreen lotion SPF 50, provides 80 minutes of water and sweat resistant's. The lotion is recommended by the Skin Cancer Foundation as an effective broad spectrum sunscreen. The active ingredient is Zinc oxide and it also has essential oils in it. Some of the essential oils are lavender, Myrrh, carrot seed, Helichrysum, and Frankincense. This natural sunscreen is chemical-free, making it a healthy alternative for adults and kids. It is lightweight, fast-absorbing sunscreen into your skin for added protection from UVA and UVB rays. This is a dermatologist tested product and is formulated to easily smooth on skin without leaving a white residue. Young Living's mineral sunscreen is also Reef Safe.

My research was taken from articles from [upi.com](http://upi.com), [cnn.com](http://cnn.com), [webmd.com](http://webmd.com), [www.aad.org](http://www.aad.org), [sun-sentinel.com](http://sun-sentinel.com), [www.ewg.org](http://www.ewg.org), [FOX 8.com](http://FOX 8.com), and [Youngliving.com](http://Youngliving.com)