



A SUMMER SYMPOSIUM:

Sunscreen's Synthetics & Your Sexual Health

Starting to get ready for a summer on the beach, by the pool, or perhaps gardening in your community garden? We all love some fun in the sun...Unless the fun ends in a lobster-red sunburn. We've learned that lesson once or twice, and that's why we head to the sunscreen aisle when summer arrives.

When buying a sunscreen and protecting ourselves from the sun's ultraviolet rays, we have to decide on a level of sun protection factor (SPF), the duration of protection, and the type of sunscreen — cream versus spray. Unfortunately, that's not all.

[Research](#) tells us that we have a whole lot more to consider in choosing a sunscreen because most sunscreens contain hormone-disrupting toxic chemicals that are harmful to reproductive and sexual health. There's a lot to consider when seeking out a sunscreen that's safe for both your reproductive health and your largest organ, your skin. Here are some tips to help you navigate the sunscreen aisle:

SPF: THE HIGHER, THE BETTER? THINK AGAIN

A high SPF may seem like the most basic or intuitive label to seek out when purchasing a sunscreen. SPF was initially designed to protect against ultraviolet B rays, the kind of rays that lead to sunburn. They do not necessarily protect against ultraviolet A rays, which are associated with aging and skin damage, and now also skin cancer. Recent changes to Food and Drug Administration (FDA) regulations require sunscreens to be "broad spectrum protection," so that they protect against both types of rays. Despite a [common misperception](#), evidence indicates that sunscreens with [higher SPFs are not in fact more effective](#).

SYNTHETIC HORMONE-DISRUPTING CHEMICALS IN SUNSCREEN

In addition to worrying about what rays we must protect ourselves from, and how long we will be

protected for, another major concern is the health risks that many sunscreen ingredients can pose. Although we grew up thinking that sunscreen was our trusty best friend for summer safety, active ingredients in sunscreens are either mineral or chemical filters, both of which can be hazardous to our health. Most sunscreens in the U.S. are [chemical-based](#), and usually include a combination of three to six of the following: oxybenzone, avobenzone, octisalate, octocrylene, homosalate and octinoxate. No, it doesn't sound good to us either.

The Environmental Working Group [reports](#) that several sunscreen chemicals mimic estrogen when they enter our bodies through the skin and can disrupt the normal functioning of our endocrine system, causing [issues](#) ranging from endometriosis to sperm damage. Because of their ability to penetrate the skin, some of these chemicals [are even linked to tissue damage](#) and can trigger allergic skin reactions.

Try to stick to [zinc oxide and titanium dioxide](#), both mineral filters, as active ingredients in your sunscreen. While these [may also pose some](#)



[health-threat](#), due to the presence of new, nano-formulations of the minerals, recent studies indicate that they are better at [blocking UV rays](#) than their larger counterparts since they reflect rather than absorb ultraviolet radiation.

AVOID THE COMMON SUNSCREEN ADDITIVE, VITAMIN A

About a quarter of all sunscreens contain a form of vitamin A, usually retinyl palmitate or retinol. The sunscreen industry markets the additive as an ingredient that slows skin aging, but it simultaneously [makes skin more sensitive when exposed to the sun](#) and can, in turn, speed the development of skin tumors and lesions.

IF IT SMELLS GOOD, IT'S PROBABLY NOT GOOD FOR YOU

Like most personal care products, many sunscreens are scented. It might make them smell nice, but it also means they are loaded with hormone-disrupting chemicals called [phthalates](#). In order to protect you and your loved ones from the health effects of hormone disruption, look for fragrance-free sunscreens.

IF IT'S NOT GREAT FOR YOU, COULD IT BE BAD FOR THE ENVIRONMENT TOO?

A few studies indicate that ingredients from our sunscreens are appearing in detectable levels in both fresh- and sea-water systems, showing up in [fish tissue samples and causing coral bleaching](#). Four ingredients commonly found in sunscreens, paraben, cinnamate, benzophenone, and a camphor derivative, can “[awaken](#) dormant viruses in the symbiotic algae called zooxanthellae that live inside reef-building coral species.”

Coral reefs are among the most biologically productive and diverse ecosystems in the world, but sunscreens in water systems could also [harm other aquatic animals](#) and could be transformed into toxic by-products. In all, half a billion people could be affected.

WHY DO I NEED A PHD IN CHEMISTRY TO CHOOSE A SAFE SUNSCREEN?

It seems ridiculous that before buying sunscreen in order to enjoy summer activities, we first have to do research on things like oxybenzone and phthalates. That's because it is. And it illuminates our nation's painfully [glaring need](#) for [chemical policy reform](#).

Last month, the late Senator Lautenberg and Senator Vitter jointly introduced the Chemicals Safety Improvement Act, a bipartisan effort to update our chemical regulation policies. While the bill indicates some exciting momentum for this issue, [it must be strengthened](#) to ensure the best protection for both public health and the environment. In its current form, the Chemicals Safety Improvement Act would not provide adequate protection for vulnerable populations, including women and children, especially in low-income communities and communities of color.

[Tell your senators](#) that you support strengthening the Chemicals Safety Improvement Act! And as the summer progresses, check back with [Safer Chemicals, Healthy Families](#) for updates on the bill and further action you can take.

We hope while you safely enjoy your summer outdoors, you'll join us in making a splash on Capitol Hill for strong chemical policy reform so that we can all have toxic-free summers and toxic-free lives, year-round.



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