## health

## Should You Add Blue Light Skincare to Your Anti-Aging Routine?

Blue light skincare products may be the protection your skin needs for all that time spent in front of a screen. Experts explain why.

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Fact checked by Marley Hall



In today's world, many of us spend hours tethered to a screen of one type or another—whether it's a phone, tablet, or a laptop computer.

All of that screen time however, may be impacting your skin thanks to the blue light—or short-wavelength light—that's emitted, which research has shown can cause everything from premature aging to dark, long-lasting hyperpigmentation.

While it's unlikely that any of us are about to abandon our phones and computers, there's a growing variety of skincare products that have been designed to block harmful blue light rays and also address some of their impacts. But are these products all hype? Do they actually help? And if so, what exactly do they do? Here's a closer look.

## What Is Blue Light and Why Is It Harmful?

For those who may not be familiar with the term—blue light is a color on the visible light spectrum that's emitted by computer screens, TVs, phones, and even as part of regular sunlight, board-certified dermatologist J. Rodney, MD, founding director of Eternal Dermatology Aesthetics and professor of dermatology at Howard University and George Washington University, told *Health*.

"It's literally everywhere," Dr. Rodney said of blue light.

There was a great deal of initial concern in recent years about blue light's impacts on eyesight and sleep cycles which are worrisome issues in their own right. But now there's a growing body of research that has linked higher levels of exposure to blue light—which is also known as high-energy visible light (HEV)—to skin changes including DNA damage and cell and tissue death. Those impacts can, it seems, speed up the aging process and contribute to things like fine lines, wrinkles, and skin discoloration, Dr. Rodney said.

One recent study pointed out that the consequences of modern life is that we are all not getting enough natural light during the day and are conversely being "overexposed" to high levels of artificial light. The study went on to say that our skin is bearing the brunt of that exposure in the form of high levels of "oxidative stress" and that the link between oxidative stress and aging is well documented.

"Recent studies show that exposure of human skin cells to light emitted from electronic devices, even for exposures as short as 1 hour, may cause reactive oxygen species (ROS) generation, apoptosis, and necrosis," said the study.

Translation: all of that screen time is not doing you-or your skin any favors.

"Blue light...penetrates deeper into the skin than UV light and stimulates activity of pigment-producing cells," Joshua Zeichner, MD, director of cosmetic and clinical research in dermatology at Mount Sinai Hospital in New York City. That can lead to hyperpigmentation of your skin, among other things, he said. It can also cause melasma, a skin condition that causes patches and spots.

Keep in mind, though, that not all blue light is bad.

"In dermatology, we use blue light for photodynamic therapy in the treatment of acne and [premature] skin cancers," Cindy Wassef, MD, assistant professor at the Rutgers Robert Wood Johnson Medical School, told *Health*. "The concern is the more constant, frequent exposure to blue light."

## What Is Blue Light Skincare Exactly?

Blue light skincare takes many forms—from sprays, creams, and gels to sunscreens that can be used to block blue light and also rejuvenate your skin. There are also night creams that promise to reverse the fine lines and wrinkles brought about by blue light and digital defense serums that promise to block the light's rays to prevent wrinkling in the first place.

Blue light sunscreens meanwhile, work to block UV rays along with the blue light itself, Dr. Zeichner said. The standard sunscreen you grab from your drugstore shelf doesn't generally offer that double benefit.

"Regular sunscreen doesn't cover blue light as ideally as the ones targeted to blue light," Dr. Rodney said. "Blue light tends to get through these, both chemical and mineral sunscreens."

But there is a caveat here—*tinted* sunscreens actually do protect against blue light.

"Tinted sunscreen with SPF 30 and higher can protect the skin from blue light as well as UVA and UVB," New York-based dermatologist Gary Goldenberg, MD, told *Health*. It's due to the iron oxide pigments in the tinted sunscreen, Dr. Zeichener explained, noting that "the latest generation of sunscreens now contain antioxidants with visible light protection."

It's important to note that the research into blue light's impact on skin is ongoing, Dr. Wassef added. Nevertheless, dermatologists say blue light sunscreen seems to be worth the hype.

"It gives you a better end result," Dr. Rodney said.