

Yes, blue light from your phone can harm your skin—a dermatologist explains

July 25 2024, by Michael Freeman



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Social media is full of claims that everyday habits can harm your skin. It's also full of recommendations or advertisements for products that can protect you.

Now [social media](#) has [blue light](#) from our devices in its sights.

So can scrolling on our phones really damage your skin? And will applying creams or lotions help?

Here's what the evidence says and what we should really be focusing on.

Remind me, what actually is blue light?

Blue light is part of the visible light spectrum. Sunlight is the strongest source. But our [electronic devices](#)—such as our phones, laptops and TVs—also emit it, albeit at levels [100–1,000 times](#) lower.

Seeing as we spend so much time using these devices, there has been some concern about the impact of blue light on our health, including on our eyes and sleep.

Now, we're learning more about the impact of blue light on our skin.

How does blue light affect the skin?

The evidence for blue light's impact on skin is still emerging. But there are some interesting findings.

1. Blue light can increase pigmentation

[Studiessuggest](#) exposure to blue light can stimulate production of melanin, the natural skin pigment that gives skin its color.

So too much blue light can potentially worsen hyperpigmentation—overproduction of melanin leading to dark spots on the skin—especially in people with darker skin.

2. Blue light can give you wrinkles

Some research [suggests](#) blue light might damage collagen, a protein essential for skin structure, potentially accelerating the formation of wrinkles.

A laboratory [study suggests](#) this can happen if you hold your device 1 centimeter from your skin for as little as an hour.

However, for most people, if you hold your device more than 10 cm away from your skin, that would reduce your exposure [100-fold](#). So this is much less likely to be significant.

3. Blue light can disrupt your sleep, affecting your skin

If the skin around your eyes looks dull or puffy, it's easy to blame this directly on blue light. But as we know, blue light affects sleep—what you're probably seeing are some of the visible signs of sleep deprivation.

We know blue light is particularly good at [suppressing](#) the production of melatonin. This natural hormone normally signals to our bodies when it's time for sleep and helps regulate our sleep-wake cycle.

By suppressing melatonin, blue light exposure before bed disrupts this natural process, making it harder to fall asleep and potentially reducing the [quality of your sleep](#).

The stimulating nature of screen content further disrupts sleep. Social media feeds, [news articles](#), video games, or even work emails can keep our brains active and alert, hindering the transition into a sleep state.

Long-term sleep problems can also [worsen](#) existing skin conditions, such as acne, eczema and rosacea.

Sleep deprivation can elevate [cortisol levels](#), a stress hormone that breaks down collagen, the protein responsible for skin's firmness. Lack of sleep can also weaken the skin's natural barrier, making it more susceptible to environmental damage and dryness.

Can skincare protect me?

The beauty industry has capitalized on concerns about blue light and offers a range of protective products such as mists, serums and lip glosses.

From a practical perspective, probably only those with the more troublesome hyperpigmentation known as [melasma](#) need to be concerned about blue light from devices.

This condition requires the skin to be well protected from all visible light at all times. The only products that are totally effective are those that block all light, namely mineral-based sunscreens or some cosmetics. If you can't see the skin through them, they are going to be effective.

But there is a lack of rigorous testing for non-opaque products outside laboratories. This makes it difficult to assess if they work and if it's worth adding them to your skincare routine.

What can I do to minimize blue light then?

Here are some simple steps you can take to minimize your exposure to blue light, especially at night when it can disrupt your sleep:

- use the "night mode" setting on your device or use a blue-light filter app to reduce your exposure to blue light in the evening
- minimize screen time before bed and create a relaxing bedtime routine to avoid the types of sleep disturbances that can affect the health of your skin
- hold your phone or device away from your skin to minimize exposure to blue light
- use sunscreen. Mineral and physical sunscreens containing [titanium dioxide](#) and iron oxides offer broad protection, including from blue light.

In a nutshell

Blue light exposure has been linked with some skin concerns, particularly pigmentation for people with darker skin. However, research is ongoing.

While skincare to protect against blue light shows promise, more testing is needed to determine if it works.

For now, prioritize good sun protection with a broad-spectrum sunscreen, which not only protects against UV, but also light.

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