

BLUE LIGHT, BAD NEWS?



Summer, and all that glorious sunshine, is just around the corner. Your clients should already be well versed in the dangers of UVA and UVB rays, but another 'silent ager' which they may be unaware of is: blue light.

Blue light is a topic hotter than the scorching summer we had last year. Like UV rays, the biggest source is the sun, but it's also emitted by the hypnotic glow of the ubiquitous devices and computer screens that we're becoming increasingly dependent on. According to Ofcom, we're spending more than a day a week online. People are, on average, online for 24 hours a week, twice as long as 10 years ago. More worryingly, one in five of all adults spend as much as 40 hours a week on the web and this is particularly true of millennials. So what's all this blue light exposure doing to our health and skin?

WHAT IS BLUE LIGHT?

First, let's look at what blue light is. Did you know that a lot of the 'white' light we're exposed to is actually made up of blue rays, which have short wavelengths and more energy than warmer colours found in light, such as red and orange? Blue light gives the sky that beautiful blue colour on a cloudless day.

THE SILENT AGGRESSOR

Although research into the effects of blue light on skin is still in its infancy, there is mounting evidence to suggest that it has an ageing effect. A study in the *Journal of Investigative Dermatology* found that when participants were exposed to equivalent levels of UVA and blue rays, they experienced more pigment, redness and swelling after the blue light exposure.

Another study published in the *Journal of Oxidative Medicine and Cellular Longevity* suggested that over exposure to blue light, might stimulate the production of free radicals. Dermatologists are increasingly seeing pigmentation on the sides of the face, where a mobile phone would be held, giving credence to the view that hand held devices cause skin damage.

Environ® founder Dr Des Fernandes agrees that there is a link between exposure to blue light and pigmentation. "I believe that the blue

section of the light spectrum may well have an important role in initiating and promoting the production of melanin", he says.

OUT OF RHYTHM

Blue light is partly responsible for governing our circadian rhythm, making us feel awake during the day and sleepy at night. However, too much screen time before bed interferes with this process because it suppresses the sleep hormone melatonin, tricking the body into thinking it's daytime, hence the advice to turn devices off at least an hour before hitting the hay.* It isn't called beauty sleep for nothing as without 7-8 hours a night, skin won't renew and repair itself effectively. Blue light also interferes with the circadian rhythm of skin cells themselves, along with other 'internal clocks' and this has even been linked to cancer.**

A SIGHT FOR SORE EYES

Eyes are adept at filtering out most UV rays, but this isn't the case with blue light. According to the charity

