

DID YOU KNOW ...

... that blue light can be dangerous, yet it's also essential for good health?

In particularly hot summers with intense sunshine, high levels of UV radiation can pose a problem. As well as protecting your skin with sunscreen, it's also important to protect your eyes by wearing high-quality sunglasses. But what many people don't realize is that our eyes are increasingly exposed to blue light even when we're indoors because of modern light sources such as computer screens and smart phones. And this high-energy light can be hazardous to our eyes.

Long-term exposure to visible blue light with a wavelength shorter than 460 nanometers can have a harmful effect on our eyes. Allowing unfiltered blue light to enter the eye for long periods may contribute to photochemical damage of the retina, increasing the risk of macular degeneration over time. The macula is the part of the retina which provides the sharpest vision because it contains the highest concentration of photoreceptor cells. Any damage to this area can cause problems with key visual tasks such as reading, recognizing people's faces, and perceiving fine details.

However, blue light also has a positive effect on people's health. At wavelengths longer than 460 nanometers it plays an important role in regulating our melatonin levels, which influence our circadian rhythms and general well-being. Too much of this high-energy light makes your body think it's daytime, which is why experts recommend switching off the computer well before bedtime.

What we need are 'intelligent' filters which reduce the levels of potentially harmful light without affecting the spectrum of light that is essential for good health. That's the goal behind specially coated lenses such as ZEISS DuraVision Blue Protect which can help keep your eyes healthy over the long term.