Blue light - learn the fact and fiction behind this modern threat





By Iris Technologies Team

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<u>Introduction</u>

Have you ever tried researching blue light on the Internet?

Are you left confused by all the articles claiming different things?

Are you wondering if you should be worried or if it's all just another marketing play from big corporations trying to sell you stuff?

Well look no further!

Here are 7 debunked myths and 5 truths about blue light you should consider worrying about.



Blue light is not natural - FICTION

The harmful effects of blue light became prominent after the introduction of digital devices like laptops, smartphones and TVs. But blue light is very much natural.

Just look up at the sky!

What you may now consider as something bad and harmful to your health is just regular light that is, well, blue.

The Sun is actually our main source of blue light.

The problem however is that introducing too much blue light at night confuses our biological clock and can cause many problems with our eyesight in the long run.



2. All blue light is harmful - FICTION

As you already learned humans have been experiencing blue light long long before the invention of computers. Natural blue light helps synchronise our biological clock—i.e tell us when it's day so we should be awake and notify us that we should be going to sleep at night.

BODY CLOCK

This is why blue light from the monitor can cause sleeplessness – it confuses our organism and it doesn't know it's already night.

That confusion is not always a bad thing though. Many people who are constantly tired or suffering from diseases that cause sleep episodes can benefit from blue light exposure.

Studies have shown that with the right amount of blue light productivity increases.

Blue light treatments can also help with different kinds of harmful bacteria that eat away your teeth or cause gastritis for example.

It can also help with different kinds of skin problems like red spots for example.

Blue light therapy can also help treat seasonal affective disorder (SAD) or help people with dementia reduce their sleeping problems or depression.

3. UV light is more dangerous than blue light—FICTION

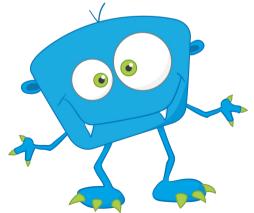
Now if you know a thing or two about the light spectrum you should know that UV light is much more energetic and with a shorter wavelength than blue light—therefore it should be much more dangerous.

However there is something important you're forgetting.

The ozone layer that we so adamantly want to protect blocks more than 80% of all UV light coming from the Sun.



Don't misunderstand UV radiation is still harmful and can cause things like cataract and pterygium, however we are much more exposed to blue light in our everyday lives and that is the main reason why to us specifically blue light is more dangerous.

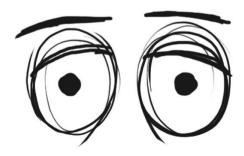


4. Your eyes are not strong enough to block blue light—

FACT

It is true that our eye does a very good job when it comes to protection from UV light.

But the cornea and lens of the eye can't block the blue light like it does with the UV light.



Blue light easily reaches our retina (which by the way is super sensitive) and causes a number of damages.



So why do we wear sunglasses to protect ourselves from UV light but do nothing about our exposure to blue light?

5. Exposure to blue light increases your chances of various diseases — FACT

Since the invention of digital devices, our exposure to harmful blue light has skyrocketed.

Laptops, smartphones, TVs, LED lights are all around us.



And overtime prolonged exposure to harmful blue light can cause various diseases like cataracts, macular degeneration, blurred vision, muscle strain and even permanent blindness.



Blue light can also have a negative effect on memory, sleep cycles and hormonal balance.

All of this can also lead to various mental health issues like depression, seasonal affective disorder and anxiety.



Blue light reduces sleep quality—FACT

Too much blue light suppresses the production of melatonin which is essential for knowing when it's time to sleep.

Like we've already mentioned seeing the bright blue sky during the day shows that you should be awake.

But if you expose yourself to too much blue light at night, that's basically telling your body it's always day, I should never sleep. And that is definitely not good for you.

Not enough sleep can be detrimental not only to your physical health but your mental health and productivity as well.



7. Lowering the brightness is enough—FICTION

You've probably had this idea—I'll just tinker with my computer settings a little bit, lower my brightness or saturation, change my wallpaper to something darker and that should be enough.



Well that's not completely true.

There's much more than just blue light that can be harmful to your eyes like PWM, flickering, blurred and small fonts, etc.

The best way to take all precautions on your devices is to use computer glasses, screen overlay or install a software that deals automatically with all the negative effects of blue light.



Wearing glasses will worsen your vision—FICTION

It's an absolute myth that when you start wearing glasses you'll begin to rely on them and that will cause your eyesight to worsen.

If you choose the right prescription for your problems and wear your glasses for the recommended by a professional amount of time you definitely won't experience any decrease in vision.

Or if you do it won't be because of your glasses.

However wearing inappropriate diopters or too heavy or embellished frames can cause problems with eyesight and strain to your nose and ears, and even cause headaches.

In fact wearing fitting glasses can ease your eyes and let them relax and work properly.



9. You can wear blue light glasses all the time—FACT

If you already have dioptric glasses there are places that can get you a protective computer filter for them.

If you don't however you can get specialised computer glasses that can very well be used as an accessory in your everyday life.



Some blue light protection glasses also block harmful UV light as well or work like sunglasses outside.

There are many different options you can choose from and find the one that's best for you and your needs.

10. You'll get used to wearing glasses—FACT

You're probably thinking—well I've never worn glasses in my life, if I start now it will be super annoying and won't help me at all.

Well let me tell you this as a person who's worn glasses for almost 10 years—there's nothing like washing your face with your glasses still on because you forgot they were on your face.

What I'm trying to say is don't be discouraged.

Many companies and optometrists nowadays offer personalised eyewear that will fit your head like a glove, or well, a hat.



And be sure that once you start wearing glasses and working with them you'll forget all about them very soon.

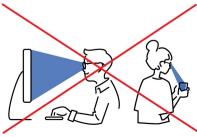
Not only that but all that's left will be the helpful effects they'll have on your vision.

11. There's nothing you can do about the negative effects of blue light—FICTION

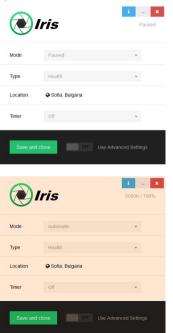
Today there are so many ways to reduce blue light on all of your devices.

You can choose between glasses, screen protectors, different programs and apps that filter blue light.

You can try and see which option works best for you.



You can also try Iris – a software for eye protection from blue light that can ease your life in a second.





Protect your Eyes. Be Healthy. Achieve more



Download <u>Iris</u> now and change your life forever!

12. Using blue light filters will prevent all diseases—FICTION

Don't be fooled though.

No matter how many of our preventing tips you've followed you can't just become invincible and immortal.

That's mainly because many eye related issues and diseases are due to old age, genetic reasons, diabetes and various things that cannot be accounted in your life.

Conclusion

That doesn't mean that you should abandon all hope though.

If you properly protect yourself from the preventable negative effects of blue light you can live a long happy life and prosper.



Resources used for this E-book:

- https://www.countingsheep.net/ blue-light-sleep/
- https://medium.com/@caseorgan ic/why-blue-light-is-so-bad-the-s cience-and-some-solutions-d992 a352464b
- https://www.health.harvard.edu/ staying-healthy/blue-light-has-adark-side
- <u>http://www.bluelightexposed.co</u> m/#what-is-bue-light
- https://www.allaboutvision.com/ cvs/blue-light.htm

Read more about blue light from our articles:

- "How blue light destroyed our sleep"
- "How monitos destroyed our eyes"

And check out our tips for you:

- "10 Tips for falling asleep quickly"
- "7 Tips for eye protection in front of the PC"