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Sleep Problems? Try Cutting Back on Your Blue Light

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Summary: In today's modern society, more and more people seem to be having problems with sleep problems. Studies suggest that it is our heavy use of electronic screens in the evening and before bedtime that can contribute to sleep problems. The good news is that there are many strategies that may be helpful such as: Using orange or blue lights at the bedside; Wearing orange colored low blue light glasses that filter out the blue light; Using device settings to reduce low blue light.

Introduction

In today's modern society, more and more people seem to be having problems with sleep problems (aka insomnia).
It was not always this way however. Throughout most of history, human beings were outside during the daytime, and thus exposed to sunlight (from the sky) that would signal our brains it is daytime. And in the evening, as it gets dark, it is the lack of sunlight that is the normal signal for our brains that it is bedtime, and thus our brains make melatonin to help us sleep. Research suggests that blue light (and possibly also green light) are particularly important in suppressing our melatonin production in the evenings.
The problem with modern society however, is that the modern home has artificial lights and screens such as our televisions, computer screens and worst of all, cell phones and tablets. Although screens are fun to use, the problem is that they have light which tricks our brains into believing it is daytime. As a result, our brains do not make melatonin at night, and thus people have troubles sleeping.
The good news is that if we can work with our brain's biology, there are many things that we can do about this…

What you can do

In the morning when you wake up

- If you live in the northern hemisphere, consider a seasonal affective disorder (SAD) light during winter months. Make sure that you sit near it for 30 minutes in the morning before work/school.

During the daytime

- Get lots of sunlight during the daytime, especially in the mornings ideally by being outside (and wear sunscreen). During daylight hours, get at least an hour outside a day. Being indoors in modern buildings is not enough light unfortunately, as modern buildings block too much of the light that we need. Even being beside windows will limit light exposure, so it is important to actually be outside.

In the evening

- **Dim and/or limit light in the evening.** Try to limit as much light as possible in the evening. Turn off lights that aren't necessary. Install dimmers on your lighting so that you dim the lights. The goal is to try to simulate the gradual darkness that triggers our brain to make melatonin.

Prior to bedtime (1-2 hrs before)

- Wear orange (i.e. low blue light) glasses. These will block the blue light so that your brain can make its own melatonin. These are available online from many places, including Amazon.ca or LowBLueLights.com. Search for "low blue light glasses" or "orange or red glasses"

- Get orange or red LED light bulbs for the bedroom. Consider getting a bedside lamp or standing lamp that specifically has a orange/red LED light bulb for bedtime. These can be found online or in lighting stores. There are also newer LED lights that can change their hues, e.g. Phillips Hue.
- Have a screen curfew. Turn off all electronics and stop looking into any screens, at least 1-2 hrs before bedtime.
- Do you absolutely have to use a computer screen in the evening? If so, then explore 'low blue light' software such as:
    - F.lux (http://justgetflux.com) F.lux is free software that can change the hue of the monitor to an orange or reddish light (i.e. lower blue light) so the computer will block less of your body's melatonin.
- Do you absolutely have to use a smartphone or tablet in the evening? If so, then consider:
    - Low blue light sunglasses or,
    - Use a low blue light filter over your device
    - Apps or settings to reduce low blue light on smartphones or tablets have been shown to not really work that well.

Still Having Sleep Problems?

Still having sleep problems despite these strategies? If so, read more information about sleep strategies here.

References

"Blue-blocking glasses to improve sleep and ADHD symptoms developed", ScienceDaily.com, retrieved Mar 30, 2012 from http://www.sciencedaily.com/releases/2007/11/071112143308.htm

About this Document

Written by Dr's. Elliot Lee (Psychiatrist and Sleep Specialist, Royal Ottawa Mental Health Centre) and Michael Cheng (Psychiatrist, Children's Hospital of Eastern Ontario (CHEO), Ontario, Canada). Reviewed by members of the CHEO Health Promotion Committee at the Children's Hospital of Eastern Ontario, Ottawa, Canada.

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