

Preventing Eye Fatigue & Strain, a Growing Complaint Among Smart Device Users

In this day and age of smart phones, Ipads, computer screens and video games, more people are 'plugged in' to some type of smart media than ever before. And while those spending the most time still seem to be the younger generation between the ages of 8 and 18, Americans of all ages are spending an incredible number of hours with their devices. All of these hours spent playing, working and socializing with or on these modern marvels have resulted in several health issues for people of all ages, including neck and back issues, and the most often heard complaint – eye fatigue and tired eyes.

There was a time when people would work on their computers, shut them down and head home for the night; maybe watch some television and relax, says Barry Schechter M.D, F.A.A.O., the Director of Cornea & Cataract Services at Florida Eye's Microsurgical Institute in Boynton Beach. But today, he continues, "times have changed, and instead of just using our eyes at work on our computers or doing busy work with papers or forms, we are now going home and looking at our mobile devices and Ipads to check emails, send texts and play games, and then we are also watching television as well. "

Dr. Schechter says that constantly using these different types of smart media has resulted in a rising number of patients coming in complaining about tired or burning eyes and blurry vision, problems that are arising due to several issues.

"To begin with," says Dr. Schechter, "we are not blinking enough. 16 to 20 blinks per minute are normal, and that number goes down to 6-8 blinks per minute with mobile device usage or computers or any smart device. Extended reading, writing or other intensive "near work" can also cause eyestrain. When we don't blink enough, we are not bathing the surface of the eye with nutrients and oxygen which can cause dry eye, fatigue, strain... blurriness, and sometimes headaches."

One condition, "asthenopia," occurs when a person focuses their eyes on one thing for too long a time and he or she doesn't allow the eye muscles to relax, so the muscles are constantly flexing trying to accommodate for this interference.

Another problem stemming from constant smart media usage is called vergence/ accommodation conflict. "This is where the eyes are going back and forth between light source (backlighting of the phone) and the actual content, so a person's eyes





have to adjust to both visuals simultaneously," explains Dr. Schechter.

Dr. Schechter offers his patients several tips to combat eye fatigue and/or blurriness, as well as other eye issues resulting in smart device usage. Some of them are obvious, says Dr. Schechter, such as, "blinking more frequently, using proper overhead lighting for reading and increasing the font size on your devices." Other solutions include holding devices further away from your eyes, and using artificial tears to lubricate the eyes."

Other not so obvious solutions to fight eye fatigue that Dr. Schechter says his patients find very useful are utilizing tools such as the 10-10-10 rule. "Basically what this rule means is that every ten minutes you should give your eyes a break and look at something ten feet away for at least ten seconds, allowing the eye muscles to relax." Sitting about 25 inches from the computer screen and positioning the screen so your gaze is directed slightly downward also helps alleviate eye strain.

One of Dr. Schechter's favorite methods of giving his eyes a break is to use a voice dictation app on his smart phone. "I think it's great to be able to send an email or text without having to look at the screen," says Dr. Schechter. Voice dictation apps are available for free or a very nominal fee for most smart phones, and some devices actually now come with a built in 'concierge or operator," such as the Iphone 4S, which has 'Siri' available to ask questions, send texts or emails, take down notes and find phone numbers for its user, all by pressing one button.

A few more points worth mentioning, says Dr. Schechter, is that children who work in dim lighting or hold things too closely to their faces do have a higher chance of developing myopia, or nearsightedness, "so it is in your child's best interests to make him or her aware of this, and an effort can be made to prevent these conditions." Also, "if you are rubbing your eyes or they are burning, stop what you are doing and take a break and apply artificial tears."

And when it comes to sitting too close to the television, well, that's a myth, says Dr. Schechter. "Sitting too close doesn't cause damage to your vision, but it can cause eye strain and fatigue," so again, use your best judgment along with common sense, and you should be fine."

Top Tips to Prevent Eye Fatigue

- Blink more often
- Use artificial tears to lubricate the eves
- Increase font sizes
- Use proper lighting
- Distance yourself properly from your computer screen or other devices
- Use the 10-10-10 rule regularly
- Try a voice dictation app

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