

Screen Time: Where do you draw the line?



Our world has become enormously **digitised**. We spend hours and hours in front of electronic screens. We either devote our time to working or playing on **laptops, tablets, desktops and/or cell phones**. Even things like reading, taking notes, making lists, reminders, online shopping, ordering food, paying for parking etc. are stored or made available on some digital device.

The **COVID pandemic** has increased our dependence on these **digital screens**, where **home office** and **online learning** have become the norm.

The question is – *are their risks?* And if any, what are they? How many hours does one need in front of a screen before **adverse effects** occur? Where do we draw the line? How much is too much?

One of the most important question for parents is if all this screen time effects **their child's eye health**.

Let's look at some recent research done on this topic.

Negative outcomes of prolonged screen time:

- Eye strain
- Fatigue
- Headaches
- Blurry vision
- Dry eyes



Fortunately, sitting near a television or an electronic screen will **not permanently damage** your child's eyes. Although the above-mentioned symptoms **can intensify**, if exposure to the screen is **increased**, or if your child **sits closer** to the device.

Did You Know?

Up to **71% of parents** are concerned about the amount of screen time that their child is exposed to.



KIDS
EYES

Screen Time: Where do you draw the line?



What can you do to prevent these side-effects in your child?

By simply **resting the eyes frequently** and correcting **the position** of the device a lot of eye strain can be prevented. If however you have tried all of the following, and your child **still complains of blurry vision, “tired eyes” or headaches**, it’s vital that your child be assessed by **an eye specialist** as there may be an underlying condition that needs to be diagnosed and treated.



Distance the device

Imagine your child picks up a weight and tries to hold it for an extended period of time, eventually, his or her arm muscles will fatigue and become achy and uncomfortable. A similar thing happens in the muscles of the eye.

When reading books, we tend to have the pages at roughly 40cm away from our eyes. At this distance, the eyes are looking forward and are parallel to each other. Meaning, the muscles are relaxed.

Unfortunately, when we use electronic devices, this distance tends to shorten by 10 to 15 cm, especially cell phones. At shorter distances, the eyes need to turn inwards toward the nose for the words on the screen to remain in focus.

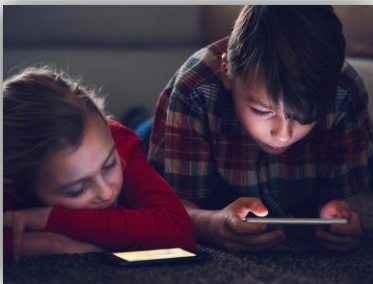
This means that the muscles that are responsible for moving the eyeballs become strained and tired when they hold the eyes in an unusual position for long periods of time.

It is recommended by the American Academy of Ophthalmology that the computer screen be placed at a distance of approximately 60cm (the length of two rulers) from your child’s eyes. Their head should tilt slightly downwards towards the screen.

Tablets should be held at an arm’s length away from their body.

If your child can only use a cell phone for their online work, find a way to prop the cell phone up on a table at arm’s length. Have the phone in “landscape” mode so that the largest possible amount of screen is displayed. If the text is too small for your child to read comfortably, adjust the print size of the information being read until your child can read the words easily.

Remember, it’s the distance and position of the device in relation to your child that causes eye strain.



Adjust device settings

Light settings on a device that are set too high can cause eye strain. Ensure that your child’s device has its light settings adjusted for an indoor environment or “dark mode” is also a good option.

Did You Know?

It is the distance and position of the device in relation to your child that can cause eye strain.



KIDS
EYES

Screen Time: Where do you draw the line?

3

Limit glare on the screen

If your child is sitting with a window directly behind them or working outside, additional glare is thrown onto the device's screen. This forces the eye muscles to work even harder and cause eye strain to occur more quickly.

Another very important aspect is not to let your child sit in a dark room with the screen as their only source of light.



4

Take regular breaks

When your child takes a break from staring at a screen, the eye muscles no longer need to focus on images near at hand and can straighten up into their "normal" position and relax.

The American Society of Optometrists suggest using the 20-20-20 rule. This means that every 20 minutes, your child should look up from their screen and look at something 20 feet (6 meters) away from 20 seconds. In a busy home these 20-minute breaks may be completely forgotten, so set up a timer or an alarm to remind your child to take a break.

5

Let your child blink regularly

The surfaces of your child's eyes are covered in a thin film of tears. Not only does this provide nutrition and immunological protection to the eye's surface but it keeps the eye moist. Each time your child blinks a fresh layer of tears are spread across the eye's surface.

When we become absorbed in watching or reading something interesting, the rate at which we blink decreases from 15 times per minute to roughly 5 to 10 times per minute. This means that the tear film layer starts to evaporate before a new layer is laid down. The eye's surface can become dry creating an uncomfortable, gritty sensation in the eyes.

Thus, reminding your child to blink when he or she is gazing at a screen for extended lengths of time.



References:

- Pew Survey Research Centre Survey
- "How to protect your Children's Eyes During Remote Learning" by Kelly Hoover Greenway. Published in the New York Times on 17 August 2020
- "Computers, Digital Devices and Eye Strain" by Kierstan Boyd. Published on 3rd March 2020 on the American Academy of Ophthalmology website.
- "Blue Light and Digital Eye Strain" by Daniel Porter. Published on the American Academy of Ophthalmology's website on the 16th of January 2020
- "Ophthalmologists Anticipate a School Year Marked by Complaints of Eye Strain" published on the American Academy of Ophthalmology's website on the 13th of August 2020



DO You Know?

What is the 20-20-20 Rule?

KiDS
EYES