Tinted and coloured filters for visual discomfort

Our advice for patients on using tinted and coloured filters

Visual discomfort is a term often used to describe the symptoms of eye strain or visual-perceptual distortions which may include headaches, difficulty focusing, blurred vision or increased sensitivity to light. Other terms used include visual stress, Meares-Irlen (or Irlen) syndrome, and scotopic sensitivity syndrome. It has been suggested that these symptoms can lead to poor performance in reading.

Coloured filters, in the form of lenses or overlays, are sometimes used to treat visual discomfort associated with eye strain while reading and with visual-perceptual distortions.

Do coloured filters help with visual discomfort?

There are differing views on the evidence and whether coloured filters help with the symptoms of visual discomfort. Coloured filters are not usually available on the NHS. However, the practice of using coloured filters for visual discomfort is fairly common in the UK, and often used in schools.

What we do know about coloured filters

- There is no firm evidence, but many people feel that coloured filters help reduce or get rid of the symptoms of visual discomfort.
- There is little risk of harm in using coloured filters, although your colour perception may be affected.
- More research on this topic is needed before we have definite evidence that coloured filters work in these situations.
- An optometrist, or eye-health professional, can investigate whether there are other causes of your symptoms before considering using coloured filters.
- Your optometrist, or eye-health professional, can advise you on the types of coloured filters available.

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Types of coloured filters or lenses

Overlays
These are the most simple and cheapest method to test if coloured filters help. You can get them for a few pounds and you simply place them over the text you are reading. Some optometrists offer private tests which can help see which colour filter would benefit you the most.

Precision tinted lenses
These are lenses tinted to a precise colour that aims to help reduce visual discomfort. They will often be a different colour to the overlay.

Coloured filters and dyslexia
Visual discomfort can affect anyone, but coloured filters are most commonly used by people with dyslexia – often of school age – to improve reading. Media stories have recently highlighted the use of coloured filters for people with dyslexia, and several national charities for dyslexia in the UK have published information about them, showing their support.

It’s important to make a distinction between visual discomfort and dyslexia. While the symptoms of visual discomfort are often identified in people with dyslexia, there is no clear evidence that visual discomfort affects patients with dyslexia more than others.

Using coloured filters is not a cure for specific learning difficulties such as dyslexia, and won’t help every patient with visual discomfort, dyslexia or reading problems.

What should I do if I’m experiencing visual discomfort?
The first step is to have a sight test, to check your eyes are healthy and find out whether a pair of glasses or contact lenses would help.

The next step is to follow our tips for avoiding visual discomfort. These simple steps help a lot of people.

If none of these steps work, it may be worth investigating coloured filters and lenses.

Tips for avoiding visual discomfort

- Even lighting – avoid bright light sources in your field of vision. Be aware of glare from windows and consider closing curtains or blinds to reduce this.
- Reduce glare from screens – adjust the screen position to reduce the glare from overhead lights.
- Take regular breaks – be sure to regularly take time away from your screen or near tasks, such as reading, during your day.
- Hold digital devices further away – holding phones and tablets close to the eyes involves more effort to maintain focus. Holding these devices, a little farther away can help reduce eye tiredness.