

IRLEN SYNDROME

Irlen Syndrome (sometimes called Scotopic Sensitivity Syndrome) is a condition involving difficulties with visual perception—how the brain perceives and processes visual information. Individuals with Irlen Syndrome often see the printed page differently from normal readers. They may have to deal with various distortions of print, which interferes with their reading efficiency and can cause eyestrain, inattention, and frustration with reading and writing.

Although there seems to sometimes be a linkage between visual insufficiencies and Irlen Syndrome, Irlen Syndrome can be (and often is) present even when the visual mechanisms themselves seem to be working adequately. Because the symptoms of Irlen Syndrome are worse in the presence of high black/white contrast, reading and writing activities are often affected. Light brightness, glare, and the type of lighting used in a room also affect Irlen Syndrome.

Individuals with Irlen Syndrome may have the skills necessary to be good readers, but because of the distortions and eyestrain that they must deal with, cannot easily apply those skills to the reading task. They are often inefficient readers who fatigue after reading for a short time because they must put so much effort into reading. They are often slow readers who seem to be poorly motivated, and whose work production suffers due to frustration, inattention, and low energy levels.

Although ongoing research into Irlen Syndrome is yielding tantalizing insights into its causes, the root causes have not yet been completely identified and defined. Current research indicates that the condition is related to deficiencies in the brain's visual processing pathways, which affect the timing of visual information as it is processed by the brain.

It has been found that modifying the wavelengths, intensity, and nature of the light reaching the eyes can have a profound impact on the condition. These insights form the basis of both testing and remediation of Irlen Syndrome.

During an initial screening, testing figures are utilized that are designed to highlight distortions that may be present. This is necessary because individuals who have grown up with Irlen Syndrome may not realize that what they perceive is at all unusual or different from what others see. Then, colored overlays are placed over the pages to modify the light. The required overlays differ from individual to individual, and the procedure to determine the correct color combination is complex. If the correct overlays are used, distortions may be eliminated, eyestrain is often dramatically reduced, and reading fluency may noticeably improve.

After screening, individuals may be referred to an Irlen diagnostic clinic for further evaluation. An examination by a vision professional is required prior to this testing, to be certain that visual deficits are not contributing to the problem. At the Irlen clinic testing is initiated using non-prescription tinted filters (lenses) rather than overlays to modify the light. This procedure is more exact than the overlay screening procedure and often allows for a much more accurate diagnosis. The specified tint can then be into put lenses already prescribed by a vision professional, or into non-prescription filters (lenses) if glasses are not needed. The filters are worn during any activity where Irlen Syndrome interferes.

Because Irlen Syndrome often interferes with the development of reading skills, this intervention may not eliminate the need for other types of remediation. Skills that have not been learned may yet have to be taught and perfected. However, intervention for Irlen Syndrome may remove a tremendously frustrating hindrance to reading and general classroom performance. For individuals with Irlen Syndrome, there is *Hope*.

For more information, please refer to the website, www.irlen.com.

SYMPTOMS OF IRLEN SYNDROME

General symptoms

- Prefers dim lighting
- Discomfort in sunlight
- Bothered by glare
- Discomfort under fluorescent lighting
- Bothered by headlights at night
- Discomfort with computer use
- Difficulties looking at stripes or patterns
- Strain from visually-intensive activities
- Some colors bright or bothersome

Reading

- Strain or fatigue
- Headaches or nausea
- Falling asleep
- Eye pain
- Indistinct print
- Page background uncomfortably bright
- Problems with sustained reading

Writing

- Writes up or down hill
- Unequal spacing between letters and words
- Copying errors

Mathematics

- Sloppy, careless errors
- Misaligns number columns

Music

- Difficulty reading music
- Difficulty with sight-reading
- Plays better by ear

Depth Perception/Gross Motor

- Coordination problems, clumsiness
- Difficulty judging distances
- Too cautious while driving
- Difficulty with small-ball sports