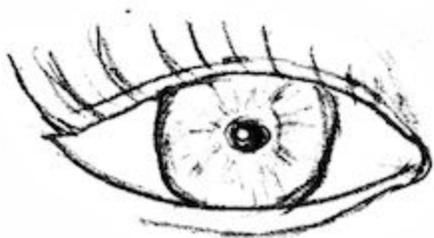


Sports Vision Training

● **Enhance your vision,**
Enhance your game ●



Which visual skills are required for optimum sport performance?

- .. / Visual motor coordination involves correctly seeing the target as well as being able to appropriately perceive its distance and speed in order to predict when and where the target will end up
- .. / Good attentive abilities
- .. / Ability to make rapid eye movements and to use peripheral vision effectively in order to reduce the need for head movements and increase reaction time
- .. / Clear central and peripheral vision while moving in space

With sports vision training, vision therapy is used as a vision enhancement tool in order to strengthen visual and perceptual skills that can help increase reaction time and overall sport performance.

The exercises used in sports vision training target:

- .. / Saccades (rapid eye movements)
- .. / Peripheral awareness
- .. / Eye-hand and eye-body coordination
- .. / Dynamic visual acuity
- .. / Depth perception
- .. / Eye teaming and eye focusing

The following tools demonstrated at Wick Fest are used as part of in-office training in a sports vision training program:

.. / **FITLIGHTS:**

Wireless LED lights arranged to train eye movements, peripheral vision and hand-eye coordination

.. / **Strobe light training:**

Strobe light goggles present a flickering light at varying intensities and speed in order to disrupt visual stimuli that athletes rely heavily upon for effective visual-motor coordination.

Interfering with visual cues forces athletes to strengthen their attention and perceptual abilities which are the other two key components of motor coordination.

As a result, when the strobe light goggles are removed, visual stimuli integration is reintroduced and athletes have quicker reaction times by being able to utilize all areas of their visual-motor coordination.



What is vision therapy?

Vision therapy is an individualized program administered by an optometrist to train deficits in visual skills and visual processing.

If these areas are dysfunctional, an individual may have a slow reading speed, poor accuracy or comprehension when reading, poor hand-eye coordination and a slow reaction time.

The visual system is complex and extends from the eye to various areas in the brain. An efficient visual system requires good eye health, refraction, eye focusing, eye teaming, eye tracking as well as adequate visual perceptual abilities of identification, discrimination and spatial awareness. Furthermore, the individual must be able to effectively integrate information from the visual system with other senses like motor, auditory, vestibular and speech. If any aspects of the visual system are compromised an individual may experience difficulty and strain carrying out seemingly effortless everyday tasks.

Vision Therapy and Sports-Related Concussion or Traumatic Brain Injury

The Centre for Disease Control estimates that in the USA there are between 1.6 and 3.8 million sports-related concussions each year. Furthermore, several studies have shown girls to be at greater risk of concussion than boys.

A concussion does not always involve a loss of consciousness. Headache, nausea, dizziness, light and noise sensitivity and mental foginess are some of the many symptoms of concussion. When these symptoms persist beyond 2-3 months following the concussive event, the

athlete is diagnosed with post-concussion syndrome.

Vision therapy to strengthen visual skills and reduce the risk of concussion

Vision therapy training of athletes as a proactive approach to preventing concussion has shown to be effective. One study revealed that the rate of concussions in players who received vision training was 1.4 concussions per 100 player seasons. Comparatively, the rate in those who did not receive any training was 9.2 per 100 player seasons. There was also a decrease in play time missed in those who received vision training.

In the event of a concussion

Post-concussion syndrome occurs in 5-20% of those who have had a concussion and is defined as when the symptoms following a concussion persist beyond 2-3 months.

Vision therapy can help to reduce the debilitating visual symptoms that these individuals may suffer from.



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