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FRIENDS OF NVT

OFFICIAL NEWSLETTER OF INNEURACTIVE

INTRODUCTION

Happy New Year, and welcome to the final Issue of Volume 5 of our continuing Friends of NVT Newsletter! The place for all your neuro-visual training insights and information. We are excited to be bringing in the new year with you all and appreciate your continual support for our mission in providing cutting-edge NVT methodologies and research. Our next issue will be Issue 1 Volume 6 scheduled to be released on February 3rd 2022.

In this week's issue we are discussing eye dominance. Eye dominance is a common concept when learning how to shoot properly, but a relatively foreign concept in the world of sports. Although, eye dominance is very applicable and just another NVT parameter that can help separate your athletes from their peers.

Our "How To" for this week lays out one of our drills for training the eyes independently through the use of Green & Red, or blue & red colored lens glasses. Training the eyes to be strong independently is analogous to single extremity exercises for muscle development, such as single leg pistol squats, or alternating single arm dumbbell bench press. However, the independent eye training is more focused on the neural conduction throughout the optic pathway and for occipital lobe and brain processing.

As always, we genuinely appreciate your support, and continue to look forward to bringing you the latest updates, philosophies, and strategies of Inneuractive, and our NVT programs. Make sure to follow us on twitter at @FriendsofNVT.

WHAT'S IN OUR LATEST ISSUE:

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Understanding Eye Dominance and Its Role in Performance

We're all generally aware of hand dominance, whether someone is a "righty" or a "lefty". While some fall into the category of very right hand dominant, where they use eating utensils with their right hand, write with their right hand, and throw a ball with their right hand; others fall into a different, more ambidextrous category, where they use eating utensils with their left hand, write with their left hand, but throw a ball with their right hand, have a stronger punch with their right hand. Its rather clear that "handedness" is a spectrum of very single hand dominant to completely ambidextrous. Eye dominance, or your chosen eye for monocular (single eye) tasks is similar to handedness.

Eye dominance is a strange concept to some because typically we use both of our eyes for general, everyday sight. With some exceptions. So how can one eye be dominant over the other? That said, there is evidence to support a spectrum for eye dominance as well. This spectrum can be from very right eye dominant, to very left eye dominant. As eye dominance is a common concept for competitive shooters, it is not widespread throughout more mainstream sports. However, eye dominance can have a major impact on performance across many different sports such as baseball, basketball, football, hockey, soccer, and more. For example, a right-handed batter in baseball who is very right eye dominant might suffer some performance because their dominant right eye has less visual field information to process, and by default will process most of the visual information with their left eye. This could be a problem for the batter and lead to decreased hitting performance. Another example would be a right-handed quarterback for a football team going to throw the ball downfield. In this example, if the quarterback is too heavily dependent on their left eye for scanning down field for an open receiver, their right eye might be slow to process up close information to make a decision based off of the rushing defensive linemen. This may lead to a poor, inaccurate throw due to misperceived pressure, or even lead to an increased risk of injury.

In the how two segment you will note that eye dominance can actually be an eye – hand dominance. Some people will be right eye dominant for left-handed tasks and left eye dominant for right-handed tasks. This occurs, in part, because of the cross over of visual and motor signals. It may be relevant to some sports or performance related tasks so having information related to eye – hand preferences may aid in designing NVT programs.

These examples highlight an important aspect of our neuro-visual training philosophies, being that we strive to improve and optimize the visual processing system from the information entering the eyes, traveling along the optic tract to the occipital lobe, processing visual information in the occipital lobe, making a decision, and taking action based off of that decision. A more balanced reliance on both eyes is important for sports performance, because less than optimal information processing from a weak eye may lead to slow decision making, and thus slower action, resulting in more errors. This is why eye dominance is a foundation of our NVT system. As we'll discuss below in our How To segment, for individuals that rely heavily on one eye, we can train them to be more ambidextrous, decrease their monocular independence and have a more symmetrical process or flow of visual information for the brain to use for decision making.

"HOW TO" – Using Colored Glasses for Eye Dominance Training

As mentioned above, just as an individual can be right or left-handed, they can also be right or left eye dominate. However, both eye and hand dominance fall on a continuum that can be modified over time through continuous training. In the "How-To" section of Issue 2, Volume 3 we discussed the use of eye patching to train/modify eye dominance. While eye patching can be valuable and has utility, there is also the possibility of detraining the dominate eye while working to uptrain the non-dominant eye. Additionally, eye patching limits the options for exercises due to the loss of patient's depth perception while completely occluding one eye.

One of our favorite methods to train eye dominance while maintaining depth perception and minimizing risk of detraining a dominate eye is the use of two-colored glasses. Two-colored glasses for eye dominance training can be utilized with a multitude of exercises such as the Dynavision, Saccades, Near/Far with Hart Charts, and Pitch and Catch. However, for this specific "How-To" we will focus of the use of two-colored glasses with the Dynavision light board.

The Dynavision light board provides the option for two different lights to illuminate: red and/or green. When your colored glasses have either red or green lens the lens will filter out that respective color and the patient must use the eye in which the lens is not filtering out the illuminated color to see and hit the button. By default, when using the two-color setting on the Dynavision it will flash red and green at a 50/50 ratio. However, when working to uptrain a weak eye we can change the ratio of red/green

Figure 1: Red/Blue 2-Colored Glasses

buttons being illuminated to force the patient to use the weak eye more often than the dominate eye, however, the dominate eye is not being completely negated.

While both eye patching and two-colored glasses are valuable ways to train a patient's eye dominance, it is important to note that with either method adjusting a patients eye dominance takes time and persistent training. Additionally, once desired eye dominance has been obtained it may be necessary for continuous reinforcement to minimize backslide.

Announcements

We have to start off our announcements section by thanking our University of Cincinnati Football team! They broke through the College Football Playoff barriers and became the first non-power 5 conference to ever make the CFP. Although they did not get the outcome they wanted, the Bearcats defense held Alabama to their lowest scoring game since 2018. Truly an amazing feat and we are beyond proud of them!

Congratulations to the UC baseball team. During the fall of 2021 they did regular NVT with members of our team and simultaneously posted a team breaking 3.384 GPA. Brains and baseball talent coming from Bearcats' Baseball.

In other exciting news, this issue has concluded Volume 5 of our Friends of NVT Newsletter! We are beyond grateful for your viewership and valuing our NVT content. We will be releasing Issue 1, Volume 6 on Thursday, February 3rd. We're starting off Volume 6 with a great article, so please stay tuned!

Additionally, Inneuractive has completely revamped their website, so please visit www.inneuractive.com and provide any feedback to info@inneuracitve.com. We genuinely appreciate all constructive criticism, as it is vital to us addressing the needs of our customers to the best of our abilities. There have been a lot of back-end developments with Inneuractive, and we are very excited to hit the ground running in 2022!

With that said, Tricerapro™ has experienced great success with the launch of their brain supplement that expertly combines three important supplements that we have recommended for years! For more information about Tricerapro™, please visit their website at www.tricerapro.com.

As always, if you're interested in learning more about Inneuractive, our mission, our products and service offerings, or just Neuro-Visual Training in general, please click the following link: www.inneuractive.com.

Have suggestions for a future issue? Please reach out to clarkjf@gmail.com or info@inneuractive.com and we will do our best to include your request in the future.