FRIENDS OF NEUROVISUAL TRAINING NEWSLETTER. ISSUE 8, VOLUME 1.

August 13, 2020

Table of Contents.

- Introduction
- The Maintenance Phase and Why It Is Important by Jon Vincent
- How To: Gaze Stabilization
- Announcements
- Disclaimer

Introduction.

Welcome to Issue 8 of the Friends of NVT newsletter, the last issue of Volume 1! First off, we would like to express our immense appreciation for your continued support and viewership! We genuinely believe in the power NeuroVisual Training can provide those looking for that extra edge and improving the overall efficiency of your brain.

In this Issue, we discuss the importance of the "maintenance phase" of an NVT program, our philosophy in how to actually develop one, as well as the implications in not taking the maintenance phase seriously. Our "How To" this week is an introduction to Gaze Stabilization, including a couple exercise protocols we use, and how we progress the difficulty of these exercises once a participant shows signs of becoming proficient in the easier levels.

Also, please remember to check out our announcement section following the "How To" section for news, related conference alerts, and other updates!

The Maintenance Phase and Why It Is Important

Athletic training requires many layers for peak development; from strength and conditioning programs, stretching and flexibility training, rest and recovery, as well as diet and nutrition. As it is always important for an athlete to be flexible, have a quality diet, and engage in proper rest and recovery, strength and conditioning comes with a systematic approach that increases and decreases difficulty depending on whether the sport is in season or out of season. While out of season, athletes tend to work on muscle growth and overall development, working on increasing their physical weight as well as the weights they use while exercising, and working to develop their speed and agility. However, during the season, this level of intense strength and conditioning can be too strenuous for an athlete, who is trying to remain at their best to optimally compete during each game. That being said, strength and conditioning programs regularly fluctuate between a "weight gain/muscle growth/speed development" period in the off season, and transition to a "maintenance phase" during the regular season of the sport being played.

This is also the same philosophy we encourage NeuroVisual Training practitioners to partake in when developing an NVT program for an athlete or a team.

Quite commonly, our pre-season NVT programs consist of 4-5 days of training per week for 3-4 weeks. But once the regular season begins, we do not continue this level of training and transition to NVT only once per week. This once per week training during the regular season is known as the "maintenance phase". As you can see, the maintenance phase does not take that much time compared to the out of season growth & development phase. That is because the athletes don't have nearly enough time to participate in the NVT, but also because it would be silly to keep subjecting them to high intensity NVT where large amounts of brain power and concentration are demanded, especially if they have a game the same week.

This demonstrates the importance of the maintenance phase. We use the maintenance phase when developing an in season NVT program, similar to how a strength and conditioning coach would develop their maintenance phase for their program. Let's say that an athlete underwent our neuro-cognitive baseline and was recorded performing the Reading Saccades assessment (See "How To" in Issue 7 of the Friends of NVT Newsletter) and finished in 56.3 seconds; within normal, but still room for improvement. Then during the "muscle building, growth and development stage" of our out of season NVT program, we were able to improve the athletes Reading Saccades score to only take them 48.5 seconds to finish. The maintenance phase would continue to provide them with exposure to the exercise, as well as allow them a relatively easy way to continue to work at what they developed during the off season, but without the fatigue and mental exhaustion which would normally occur. So at the conclusion of the season, this athlete's "exit" neuro-cognitive baseline Reading Saccades assessment may have increased a little bit back to 51.1 seconds, but that is better than returning to their initial baseline score, or performing worse than their baseline.

This is important because it provides the athlete with a better foundation to improve upon during the post-season or out of season muscle building, growth and development stage of NVT. Hopefully it will provide them with the ability to achieve new personal bests at NVT exercises, like obtaining a new Reading Saccades score of 44.7 seconds instead of their initial personal best recorded prior to the start of the past season at 48.5 seconds. The theory and/or goal of the maintenance phase is to hopefully build upon each season personal best, by improving the athlete's foundation and seasonal baseline metrics, just like in strength and condition programs.

Also, as the common saying goes, "use it or lose it". With all the growth and development that occurs annually during the out of season training, if these neurological processes are not worked on throughout the season, this is when the issue with losing your "gains" comes to mind. We actively try to prevent the backsliding with the implementation of a maintenance phase.

With that said, as important as it is to grow and strengthen these neurologic processes and the muscles involved with eyes, it is equally important to maintain their growth so that

an athlete can use their improvements throughout the season without deficits, as well as start from a stronger foundation come the next growth period.

How To: Gaze Stabilization.

Gaze stabilization falls into the NeuroVisual Training Pillar of eye discipline, keeping the eyes on target. The extraocular muscles are moving but keeping the eyes fixed on an object. In this exercise the object could be moving, or the person could be moving. Think about how important it might be for a defensive back in football to keep their eyes fixed on the quarterback while running down a receiver. Their head and body are moving, and they need to stay fixed on the quarterback – that activity includes the skill of gaze stabilization. Gaze stabilization can be important for performance enhancement as well as rehab post brain injury.

A classic gaze stabilization exercise would be the yes-yes and no-no exercises. A person fixates on their thumb and shakes their head or nods their head (shakes yes, nods no). The eyes stay fixed on the thumb. When I teach this drill I have the person first fixate on my left eye. I cover my right eye and have them do yes-yes's and no-no's. Once I'm convinced they can do the drill adequately I have them continue on their own. A common prescription would be 6 thirty second drills split between yes's and no's. We can also do the yes-yes's and no-no's with one eye at a time.

We progress the task as and when needed to involve other sensory systems. For example we can enhance the vestibular system input by doing the drill with the head down or head up. Place the person kneeling on all fours. Put a small coin on the floor right in front of their yes and repeat the yes-yes's and no-no's on the floor. Note, I only do this once I'm confident they are doing the initial exercises well controlled. I use a similar exercise prescription as mentioned above.

We can also do this with the head gaze up. This is part of a progression as the exercises become more complicated. I'll make a decision as to if the person is sitting looking up, standing looking up, or on their back looking up and use the same exercise prescription. Which position depends upon the needs and the abilities of the patient.

Progressing this gaze stabilization task depends upon the patient/client needs and your imagination. Consider doing yes-yes's / no-no's while a person does step ups and downs. We often have people do habituation exercises, of yes-yes's while walking a straight line. Then progress to no-no's while walking.

Another progression possibility is the yes-yes's with the Bates field splitters. This is especially challenging because the yes-yes's need to stay fixed, while the Bates field splitters force the eyes to switch between each other. The field splitters force only one eye to work at a time and require the transition to occur between them. A smooth transition implies good eye discipline, good gaze stabilization and smooth transition between the eyes.

At is core the gaze stabilization exercise is a very simple task or test. But as we layer more complicated and dynamic exercises the benefits of the gaze stabilization exercises become more and more rich. Plus you can use these in sports performance enhancement as well as post brain injury rehab. The elegance of the activity resides in part in its simplicity.

Announcements.

Our first announcement is that this is the conclusion of Issue 1 of Friends of NVT. Thank you for your support. We anticipate the next issue to start on September 3rd. Please feel free to share these.

The University of Cincinnati has announced that it still plans to play football this season and has moved the season opener against Austin Pea to Saturday September 19th. They'll play in Cincinnati's Nippert stadium, the time TBD.

We'll see you in September with Issue 2.

Disclaimer. Nothing in this communication should be construed as a practice of medicine, an endorsement or political action. The opinions are the opinions of the authors.