

The Secret to Success: It's Time to Update Your Training Program

After countless hours spent in the weight room and running on the field at 6 A.M. all summer long, you are more than prepared for the first snap of the season. Or are you? The ball is snapped and you drive your hands into the 300 lbs offensive lineman's chest. He is strong but is no match for your monster bench press that you worked on all summer. You dominated him on initial contact, but all of a sudden that stops and it feels like you are now the submissive one pushing against a brick wall. You realize that your hands are no longer perpendicular to your chest and one of your arms is straight off to the side; a very vulnerable position trying to cross face on 300 lbs. OUCH! The play ends and you jog back to the huddle holding your arm and contemplating what just happened.

This may be a bit dramatic, but often this is one of the reasons for the high number of rotator cuff injuries. Not enough strength programs focus on extreme ranges of motion in various planes. I am in no way speaking out against benches, squats, and incline press. I do these exercises and have my training athletes perfect all of them. However, that is not all that we do. We need to go back to the basics of strength and conditioning and remember why athletes train in the first place (To perform better on the PLAYING FIELD, not just in the weight room). This seems obvious until you take a much deeper look at it. All of the heavy weight training is awesome, but it can't be fully utilized without a solid foundation. What I mean by a foundation is that the athlete should be able to handle his or her bodyweight in various planes of motion.

We have implemented not a template workout, but a philosophy at Carroll College, where I currently play football. The Carroll College Fighting Saints are a five

time National Championship football team, and we have won those five Championships in the last six years. Perhaps more importantly, the trainees that have been on the protocol of the successive pages have been nearly injury free.

As for as a strength and conditioning program, the defensive front seven as well as the offensive line has undergone a strict protocol. Without getting into too much depth, the corner stones of the program that differ from the ordinary are: 1) A focus of muscular strength in various planes of motion. 2) Rotational core strength. 3) Sport Specific plyometrics. Much of the rest of the program is very similar to that of the quintessential General Physical Preparedness (GPP) plan, but let's talk about what's different in more detail.

The three focal points discussed were almost all done on one machine, the Vortex Pro Trainer. Although the movements could have been mimicked to a certain extent without the Vortex, we found it so much more economical and efficient to use it. Therefore, subsequent paragraphs describe how the Vortex assists the strength and conditioning program at Carroll College.

First off, I have mentioned the importance of muscular strength in various planes of motion, but let's expand on that idea. In most athletics, the required movements are in multiple planes of motion and in an unorganized fashion. However, most strength and conditioning programs focus on single planes of motion. This reminds me of a famous quote from Vince Lombardi "Practice doesn't make perfect. Only perfect practice makes perfect".

With this in mind, we should have phases nearing the end of the off season when transferring focus from GPP to Specific Physical Preparedness (SPP) and strengthen the

ranges of motion that we would experience during a game. Therefore, I have found no better way to mimic specific movements than the Vortex. Some of these movements include single-leg step ups (front and sideways), incline and military with Swiss ball, weighted pull-ups or weight assisted pull-ups, multi-directional lunges, RDLs, and this is just a sample. We put posterior chain strength in the forefront of our workouts, and we try and get as much variation as possible. I absolutely love the different variations of weighted pull-ups as well as the hip and back extensions. We do straight-legged dead lift both bilateral and unilateral, and the same can be said for good mornings. We have even implemented DB rows only we perform them with the different angles on the Vortex. I would actually prefer the Vortex because of the different angles and the ability to go as heavy as you want. As you can tell, the movements that we perform can be done without the Vortex, but time is much too precious to me to choose a less efficient route.

Next, I had mentioned our focus on rotational core exercises. The same can be said for generating specific movements for your core. When I say specific I don't mean balancing on a bosu ball either. I mean twisting and bending at various different angles with weight resistance. We originally started doing Russian twists and wood choppers with a typical cable cross-over, but we began experimenting with the Vortex and have found the various angles to be much more effective, and we are able to get a quicker rotation since there are two sides. We like to use weights with our core programs and add that to multiple planes of motion. As a result, we have built some pretty solid cores that have actually had quite an impact on our vertical jumps.

Moving on, I want to tell you about the keystone of the transition of GPP to SPP, plyometrics. Much of our thoughts and progression of plyometrics comes straight from

the source, the founder of the “shock method,” Yuri Verkhoshansky. This is the most intricate part of the program, but let’s focus on four main points.

- 1) We always perform plyometrics first.
- 2) We start with basic movements. i.e. regular box jumps.
- 3) We never perform for more than 5 seconds without brake.
- 4) We always have a complete recovery between sets.

As our athletes become more advanced, we like to add some weights to their jumps. This can be easily done and tracked with the selectorized plates, but we add the resistant bands to the weight stack. Now we have just introduced a more advanced method of training into the program. Everyone has seen or heard about the importance of training with bands, but here is the reasoning behind why we use them.

The bands decrease the time of contraction in the eccentric portion of the jump. Thus causing a greater reaction and utilization of the stretch reflex and sending the athlete higher into the air. This is why they teach jumpers to descend as fast as possible and they will ascend naturally fast and harder. Also, since we are talking about bands let me briefly mention that the increased tension causes a higher percentage of muscle fiber recruitment.

As the athlete becomes more advanced, we then begin to add movements such as position get off into the mix. Our linemen are able to get their in three to four steps, and it is no secret that those steps are often the most important.

This just gives you a sample to our program, but I hope that it opens your eyes to some realities about sport specific training. Also, I hope that opens your minds to the

infinite possibilities to training with the Vortex Pro Trainer. Perhaps Carroll College athletic trainer Brian Coble put it best when he said;

“Regarding the transition from General Physical Preparedness to Specific Physical Preparedness, the Vortex has been amazing from not just a performance standpoint but from an athletic training perspective. Our front seven began using the Vortex in the spring of 2007 and the following season we had no acute or overuse injuries during the season. Keep in mind that this was a season in which we won our 5th National Championship. It is also amazing considering that our season began with 2-a-days in the first week of August and lasted continuously until the Championship in December. I would highly recommend the Vortex for any college, fitness or professional organization as both a performance enhancer and for injury prevention.” (Brian Coble- MS, ATC, PES, CSCS)

The Vortex Pro Trainer has enabled us to create an amazing economical workout. It is a win-win situation, and you really get the best “Bang For Your Buck”. With the Vortex, we have been able to perform more movements and sport specific variations compared to any other equipment available. As a result, Carroll College has sculpted faster and stronger athletes that have been less prone to injuries.

**Garret Garrels, CPT (through ISSA)
Owner, Garrels Training Systems LLC.
Senior Exercise Science major and Business minor at Carroll College.
Inside linebacker for National Championship team.**