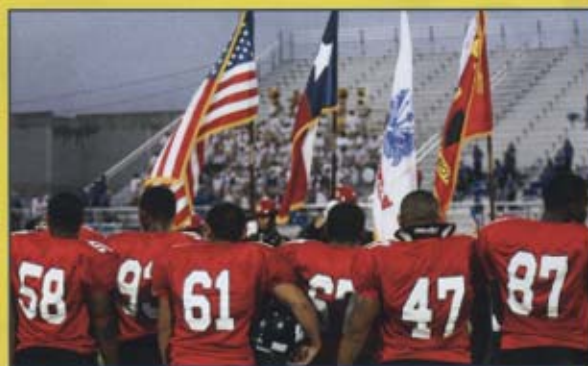


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TRIPLE EXTENSION MOVEMENTS FOR FOOTBALL USING STRONGMAN TRAINING

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As a person watches the world's strongest man contests on TV, what should appear obvious is that these athletes are not only aggressive, fast, explosive, athletic, and flexible, but have a great anaerobic threshold to boot. These amazing athletes are intense and psyched up, similar traits to a good football player. Most textbooks will not teach you to train athletes this way, and many "experts" will not touch the subject. Dr. Maxwell Maltz has words of wisdom on this topic: "Any new knowledge must usually come from the outside. Not from the 'experts', but from what has been defined as 'inpert'." An "inpert", according to Maltz, is someone who develops knowledge outside the prescribed boundaries of a given science.

The Wright brothers were not aeronautical engineers but rather bicycle mechanics. Maltz was a plastic surgeon who developed Psycho Cybernetic techniques to heal his patients psychologically after they had been fixed physically. Personally, I have learned from the experts and it was beneficial, but I remain an inpert. To be on the cutting edge, you must at least attempt to be an inpert. If we don't develop new techniques we will get the same results, doing the same thing over and over and expecting a different result, the definition of insanity.

The body has three energy systems it uses to carry out life's function. The first is the Immediate system, which lasts 0 to 3 seconds (ATP and CP), an example of which would be shot putting. The Anaerobic Glycolysis system, lasting 4 to 50 seconds, would be any explosive activity using glycogen as fuel that takes longer than 4 seconds but less than 50 seconds, such as a 300 yard sprint. The last energy system is the Oxidative system, which lasts more than 2 minutes, such as an endurance activity like a 5K run. All of these systems can be enhanced using strongman training techniques, especially the Immediate and Anaerobic Glycolysis systems, which are most important in football.

Strongman, as a competitive sport, requires absolute strength, dynamic strength, lactate threshold, flexibility, core strength, powerful hip extensors and a strong posterior chain. Powerlifting is generalized as purely absolute strength, the object being to move the most weight possible, regardless of time or any other factor. Olympic lifting is classified as speed strength, meaning the speed of muscle contraction or strength exhibited with speed. Bodybuilding is seen as

muscle hypertrophy, a scientific term for the growth and increase in the size of muscle cells.

Let's explore a hybrid that accomplishes all three safely and effectively! Many people subscribe to the belief that the only way to lift explosively is through Olympic lifting. When performed with sound technique, Olympic lifts are great for building explosive power. Many elite athletes efficiently use Olympic lifts. Louie Simmons, at Westside Barbell, has advocated a speed day using the dynamic method of training with weights 50%-60% of one's max, but still putting maximum force in the bar. Joe Difranco, a top sports trainer, says, "The truth of the matter is that any lift can be explosive! By incorporating the dynamic-effort method with sub-maximal weights into your program, you can turn any lift into an 'explosive' lift." Joe goes on to explain, "By training with weights that represent 50-60% of your 1RM [one rep max] in a given lift, science has proven that the weight is heavy enough to produce adequate force, yet light enough to produce adequate speed. And we should all know that speed X strength = power."

Dr. Fred Hatfield, co-founder of the International Sports Science Association (ISSA) and author of numerous books on training, devised Compensatory Acceleration Training (CAT.) In layman's terms CAT is lifting with maximum force but with a sub maximal load usually 60%-80% of a 1RM. Hatfield held several world records in the squat in the 1980s, including 1014 lbs. at 255 lbs. body weight in the over forty-five years of age division. Rarely would he go over 800 lbs in training, but he would put maximum force into the bar.

All these methods are great ways to lift explosively without directly using any Olympic variations. Many strength coaches will argue that while these are explosive movements - they are not triple extension movements. A triple extension movement is the extension of the ankles, knees, and hips. The extension of these three joints occurs in most athletic movements. Triple extension is obviously important for football, and many strength coaches and trainers believe triple extension can only be worked through snatches, cleans and Olympic variations. Obviously, if performed properly, these are great ways to build explosive power with triple extension movements. How often are these lifts performed properly in a high school group setting or even a college one? Not very often. The risk of injury is

high, and the amount of weight lifted is often a fraction of what the athlete could use in some of the traditional power movements. It takes the best Olympic lifting coaches in the world years and years to make an athlete technically sound. Think about that!

The Jump Squat, assuming the athlete has the strength level, is a simple and effective triple extensions movement and a great warm up for strongman events. Strongman events are great for football. Most college programs are now implementing them in one form or another, but not yet as the core philosophy. Ten years ago this would have been taboo, so the pendulum is swinging in the right direction. If properly implemented, the use of strongman events in a football training protocol is a superior method for an AVERAGE or elite athlete to develop explosive power using triple extension exercises. Olympic lifts can be tedious and take years to execute properly. Eastern block Olympic lifters, routinely the best in the sport, begin training as early as age 5. With technique being a critical component, most high school kids learning to Olympic lift correctly must start off using just the bar or a broomstick, never developing any strength or explosive power. In some cases athletes are prematurely given the green light to go heavy and often get injured in the process. Olympic lifts must be broken down and analyzed microscopically, and therein lies the problem, this teaches athletes to concentrate more on form than on attitude and the amount of weight they can or should be using.

Strongman training encourages athletes to be aggressive, focusing on "kicking butt" rather than perfecting technique, similar to a game situation. Very few high school football players are "fired up" to do Olympic lifts, but most do look forward to and enjoy strongman training. These training techniques allow athletes to focus on being aggressive. But too much aggression in Olympic lifting will destroy technique.

Strongman training has obvious benefits, building explosive power through triple extension being one of them. Here are some examples of triple extension movement exercises: 25 lbs. plate throw, keg throw, keg roll, atlas stone, keg load, and tire flip. Basically, any loading or throwing event will qualify. According to Bob Jodoin, strength coach and ISSA Master Trainer, "In stone lifting you start with your knuckles on the ground and finish at triple extension. The loads and leverages are different, however, and this plays well into the concept of dynamic, real world training. Good stone lifting technique emulates the perfect football tackle." Does a snatch emulate a perfect tackle? Triple extension of the hips, knees and ankles trains a football player to put maximal force into the ground in a shorter period of time. Is the best way to train this triple extension with a barbell, or variously shaped strongman objects? Football opponents move and are all shaped differently, making strongman training more relevant. If done in a team setting strongman training gives athletes a chance to compete and coaches a chance to coach as they would in a game, not having to

break down every small detail.

Technique is important and needs to be coached in strongman training; however, it is much simpler than teaching proper Olympic lifting technique to an average athlete. I know people who have never competed in a strongman contest won their first contest without touching the implement in training. Obviously, it is fairly easy to learn these techniques. To my knowledge this has never occurred in Olympic lifting, or even in powerlifting, its' less technical cousin. "It's like game day every time we do it," says Ken Mannie, MS, MSCC, Head Strength and Conditioning Coach at Michigan State University, speaking about team strongman workouts. "It puts pressure on the players and forces them into truly competitive situations—more than weight room sessions and scripted workouts ever could." Players can compete against each other as individuals or be divided into teams. Relay events in such events as tire flipping are very competitive and are a lot of fun. These team relays can be varied in terms of events, distances, and time. Variety is great and helps prevent athletes from becoming mentally stale.

Mike Golden, CSCS, SCCC, Director of Strength and Conditioning at East Carolina University, believes strongman techniques for football are superior because, "The physical benefits are beyond reason. To me, it's the best way to train for football." Multi joint movements in conventional lifting are great, but how often will an opponent stand still? Will his weight shift? A keg filled with sand shifts nicely!

"Functional training" are buzzwords within the strength and fitness community. What strength training system is more functional for a combative sport, such as football, than being able to move fast with heavy weight? This is true functional training for football. "It's irregular lifting, which makes it closer to football movement than ordinary weight training. It makes the body perform when it's not in a perfect line, so tendons and joints get stronger. And just like in football, a player is forced to use his whole body," argues Mike Golden. Compare the starting position in a tire flip and the starting position in a clean. The tire flip starts with the shoulders on the tire, the feet shoulder width apart, the chest over the tire, and the back arched - similar to a four-point stance. As the athlete lifts the tire up and gets triple extension, he will push the tire downward as hard as possible - like a bench press. This mimics extending an opponent on to his heels and pushing him to the ground. An athlete gets triple extension with a clean, but even if the athlete jerks the weight, it is not nearly as sport specific as the triple extension of pushing over a heavy tire.

I could give other examples of the biomechanical superiority of strongman training, but world-renowned strength Coach Joe DiFranco says it best: "The beauty of strongman training is that there's no one way to perform the exercises. Athletes usually end up improvising to complete the event. The tire doesn't always flip over the same way. The sled doesn't always glide easily over the surface. The awkwardness of these events builds true 'functional' strength

from head to toe. This enables the athlete to strengthen muscles that are nearly impossible to strengthen with traditional training."

Olympic lifting is great for developing competitive Olympic lifters and for some elite athletes. Olympic lifting fails to duplicate the movements in football in any true way and the risk to benefit factor is extremely great. Strongman training is very similar to actual football movements and will build legitimate transference strength. Strongman training develops every type of strength, and in the future I will expand on other strongman training techniques, not just triple extension ones, that will help your football players.

TRIVIA TIME!! Do You Know?

- Who was the only person ever to letter in four sports at UCLA?

- In the four major US professional sports, (Baseball, Basketball, Football, and Hockey) there are only seven teams whose nicknames do not end with an "S." Can you name them?

Answers on page 62



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