

Using “Strongman” Exercises in Training

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SUMMARY

STRONGMAN TYPE EXERCISES HAVE BECOME ALL THE RAGE IN COLLEGIATE TRAINING. WHETHER IT BE THE STRENGTH COACH'S PREFERENCE, FOR USE IN TEAM COMPETITIONS AND TEAM BUILDING, OR SIMPLY TO BREAK UP THE MONOTONY OF TRADITIONAL TRAINING, WHERE DO THEY FIT IN TO THE SCIENTIFIC ASPECTS OF COLLEGIATE STRENGTH AND CONDITIONING?

When I was in the first grade the teacher had me stand in front of the class and hold two erasers with my arms extended at my side for getting in trouble. To this day I remember how painful that was. I realize that this example is a long way from many of the strongman exercises we see today, but it is still a form of unconventional external resistance. That is essentially what strongman exercises are. We forget but several strongman exercises paved the way for many of the pieces of equipment we all have in our gyms now. Some examples are: a Smith machine, the return of

kettle bells, water-filled dumbbells, and pulling sleds. At the University of South Florida we do incorporate “strongman exercises” into our programs.

Two of the guiding principles for our program are overload and progression. We don't care where the resistance comes from but it needs to be enough to create muscular fatigue. Then have the ability to be progressed past that point. Muscles are only capable of responding to stimuli. Only the athlete training knows if he is training with kegs, dumbbells, barbells, etc. When evaluating if a strongman exercise will be included in our program, we ask first if the exercise is safe, then how to set the prescription for overload and progression." Mostly we incorporate strongman exercises to add variety to our standard exercises, or use them as workout finishers and competitions. For example instead of your standard front military press we may use a hollowed out log. Tire flips, pushes, and presses are often team competitions. Ending a workout with a strongman type competition adds to the competitive environment in which we train, which in turn gives the athlete yet another avenue to give his/her best effort.

Strongman exercises are not the base of our training program, nor do I believe it should be the base of any program. There is very little research on training volumes or definitive exercise technique when using strongman exercises. There are special considerations to account for if you choose to use these types of exercises. First, often it is difficult to quantify the resistance used and gains made. Since we do not use strongman type exercises in our

evaluation process, we find it difficult to quantify the resistance of the exercise (it may have a significant variance due to the equipment), and we can not quantify any gains made. It is easy to tell someone that your athletes are getting stronger but if you can't quantify the results it is only hearsay. Second, you may be held liable for untested pieces of equipment. Due to the fact that much of the strongman type of equipment is made in a “mom and pop” type shop, the chances of equipment failure could put the strength coach in a position of liability if the equipment fails. Often when dealing with tires, railroad ties, logs, etc. they had been used for their intended use and may contain wear and tear or foreign objects. For example the oversized tires we use came from a dump site and we had to handpick several nails out. Additionally, storage is often an issue with most strongman exercises. Because strongman type equipment is usually very large and bulky (tractor tires, kegs, sleds) having a place to store these pieces of equipment can become a burden. Several of the implements used can be an eyesore, especially when it comes to recruiting tours.

These exercises are well accepted, and could easily be implemented in a program. Overload and progression should be considered when deciding what types of exercises should be incorporated. We have found the use of strongman exercises to be a great way to incorporate variety into your workouts.■

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When people view our strength and conditioning facility at the U.S. Air Force Academy one of the things I hear very frequently is a question on our “strongman” training. While it is true that we do use certain implements (kegs, tires, logs) that are synonymous with strongman type activities we do not perform any strongman training with our athletes.

What we do perform is performance enhancement training, and we use whatever tools we feel are appropriate to accomplish this task, whether this be in the form of standard barbells and dumbbells or in the form of kegs, logs and tires. We adhere very closely to the concepts of specificity of training, training movements and not muscle groups, and the development of sport specific or movement specific strength and power, and we are willing to use a variety of implements to accomplish these goals.

For example, a large portion of our training is dedicated to the performance of the weightlifting style movements, both with barbells and dumbbells, because of the explosive triple extension that occurs at the ankle, knee, and hip when performing these exercises. However, a similar explosive movement pattern occurs when flipping a large tire.

As a result we view this exercise as a good supplement to our more traditional training methods.

We also place an emphasis on developing functional strength by performing multiple joint exercises such as squats, lunges, and to a lesser degree bench press. These types of exercises can, of course, be performed with barbells and dumbbells, but they can also be performed with water filled kegs and logs, and performing these exercises against the dynamic resistance that a water filled implement provides a unique training challenge.

However, because of our emphasis on training movements and not muscle groups, our feeling is that many strongman types of activities do not transfer effectively into the training programs of athletes. For example, farmer’s walk implements do not train a movement pattern seen in athletics.

As a result we do not use this as a training modality for our athletes. Nor do we have them lift heavy stones or pull jets around in the parking lot.

My point is that while we do use implements in the strength and conditioning programs of our athletes that are traditionally thought of as strongman training tools, we only use those tools that fit into our overall training philosophy and never at the expense of enhancing athletic performance. If a training method is not enhancing athletic performance, and it is not reducing the opportunity for injury, its placement in the training program would have to be highly suspect, and many strongman types of activities fall into this category.■

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Of the many lessons I have learned in strength training over the years, the most important lesson is that when young people work, they get stronger. In terms of different philosophies, when training untrained athletes, everything works, but nothing works forever. As long as young untrained athletes are doing work, they will get stronger. When I was a graduate assistant, we had a huge (6’4” 330 lbs) offensive tackle. During the summer months, he did not invest his time into our summer training regimen; he helped his dad build boat docks on the South Carolina shores. He came back each and every fall stronger than when he left. How could this occur? He was working! He carried all the lumber, creosote poles and did all the heavy lifting for his father while they were building docks. The athlete did enhance his overall strength, but not his performance specific and sport specific movements.

I believe in a principle based program that includes many different styles of training. I like to use principles of powerlifting, weightlifting, plyometrics, and basically any type of exercise that will illicit a training effect. But by the same token, I am always intrigued by

this concept of how manual labor helped get a player stronger. One of my mentors posed this question to me. “Men who work construction get bigger and stronger. They basically do the same thing every day. How do they do the same work every day and get stronger?” Answer: They change body angles. They change the way they lift things, they change the way they push the wheel barrow, they change the load they may lift at one time and use more trips to move it from place to place. Again, I emphasize, this is not performance or movement based training, but it is fundamental strength training.

I believe there is a place for strongman type activities in our training, but I do not believe we can build an entire program or philosophy on these exercises. I like to use them as an addition to what we do in our fundamental program as competition type exercises. In other words instead of doing a seated row, we may do a seated sled pull with a thick rope, and see who can pull it the fastest for 30 yards. We may hold a water filled keg overhead and do traveling lunges for 4 sets of 20 yards after we do our timed box squats. We may use a water filled keg to do bench presses with for maximum reps. We may have our players hold bumper plates with a pinch grip and see who can walk the farthest without dropping them. In other words, we may not use strongman exercise in place of our main types of lifts (power cleans, squats, presses, etc) but we may use them in association with those exercises. We train at 7,220 feet of altitude. Recovery here is a challenge. Therefore, we have to make every rep count. I don’t feel as if we can use those reps to do a significant amount of strongman type work, such as a massive amount of tire flips, dragging of vehicles, and things of that nature. I do like doing some types of strongman types of exercises as an addition to traditional exercises to jazz up some workouts and create competition.■

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