Let's Talk Problems #5:

Strength training versus weight lifting

Bruno Pauletto, C.S.C.S.
Strength and Conditioning Coach
University of Tennessee

Competitive weight lifters have a certain reputation for being very large, muscle-bound men. Most of the athletic community does not see them as athletes, in spite of the amount of training they put into their sport. Indeed, the exposure they receive in television and magazines tends to concentrate on their size and the amount of weight they can lift.

Many coaches, especially in non-contact sports such as baseball, swimming, soccer, etc., see these television competitions or read the magazine articles and are convinced that weight training is certainly not for their athletes. Naturally, the coach does not want his athletes to be too big or muscle-bound. However, they are wrong to omit strength training from their program because, although weight lifting and strength training do have their similarities, their purpose and results are greatly different.

It is up to strength and conditioning coaches to educate coaches in the differences between weight lifting and strength training and how strength training can improve the performance of their team. Granted, competitive weight lifting can give the wrong impression, but once the coach understands the differences, he will be encouraged to add strength training to his program. Soon he will be reaping the benefits of strength training in faster, stronger, more powerful athletes and winning teams.

Strength training is the best way to achieve those results. Furthermore, the coach will be delighted to find his athletes do not look “bulky” or “non-athletic.”

Although weight lifting exercises are used in strength training, the objectives are different. An athlete training for a sport will train differently than a competitive weight lifter.

When training for sports, we are dealing with many different areas of physical improvement, not just weights, to make the athlete perform better on the field, track, pool or court. The most important thing the coach should understand is that the object of strength training is to improve sport performance, not to make competitive weight lifters out of our athletes. Strength training involves more than weight lifting in the improvement of strength and power. How much an athlete is going to lift is sometimes irrelevant to how well he will do in his sport. It is relevant to the fact that the stronger he gets, the better he will be, keeping the other physical factors constant, but the numbers game is not relevant to athletics.

Many athletes, while participating in sports, compete in power lifting, body building or olympic lifting to improve their strength. While they do that, they may be taking the focus away from the sport. For example, the football player who tries to get strong for the upcoming season begins training and competing in power lifting. This can be both good and bad.

Competitions can be very important for motivation, especially for the young athlete who is not very strong. If the athlete does compete and does better, he may be more motivated in his sport. Competing might be helpful, but must be kept within the boundaries of sport training. As coaches, we have to be careful to keep the athlete in that realm.

On the other hand, because of the type of training necessary to be a truly competitive weight lifter, the athlete might lose focus on what he should be doing for his sport. He can get carried away by the competition and do more weight training than he should, at the expense of other physical areas. He might begin limiting his exercises by doing only those that will improve his weight lifting competition performance. He may discontinue flexibility and conditioning exercises. He could easily forget his original goal of getting stronger for his sport.

It is fine if the athlete wants to train and compete at the same time, but he must find the right medium. He must be very careful not to over-emphasize the weight lifting competition. He should always keep in mind his primary interest is his sport. Therefore, he should incorporate specific exercises that will help that
area as well. He should never neglect his conditioning and flexibility exercises. These give him speed, and he cannot afford to lose speed for any sport. If he does not find the right balance he can lose his “athletic ability.” He will not be as good or as well-rounded an athlete as before. Of course he will be much stronger, but the other areas have suffered.

**Power Lifting**

Power lifters use lifting aids such as wraps and super suits that create, what I call, a “false strength.” They do help them to lift more weight, but not necessarily are they stronger as a result. For example, if the knees are wrapped very tight the wrap is doing some of the work. Because it is not getting the work, the knee is not getting any stronger even though the muscle might be. This may be fine for the power lifter who is in a controlled situation, where he will always use the wraps and super suits, but this could be very dangerous for an athlete in any other sport because it leaves the knee weak, unstable and more exposed to injury. An athlete on the field, track or court is not in a controlled situation and does not have benefit of wraps or other aids.

When we talk about strength training an athlete we are talking “total body” strength that includes knees and hips. The use of wraps and super suits could actually be detrimental to the athlete’s well-being by creating the “false strength” and leaving him open for injury.

Power lifting creates “absolute strength,” which is directly related to the resistance. In power lifting the resistance is just the weight, and by lifting the weight you have obtained that goal. In sports, however, you must have “functional strength,” strength you can use in uncontrolled circumstances. “Functional strength” is a result of strength, power, speed and flexibility.

Everything about power lifting is not negative, however. Power lifting has some excellent exercises that increase strength. The bench press, the squat and the dead lift, used in the right way, are great for getting stronger. Power lifters also have a good way of cycling the sets and reps and a good periodization method which leads to greater strength.

**Body Building**

Some principles of body building are very good for athletes because they emphasize total body workouts. Body builders are concerned with how their body looks, therefore, they train all the muscles of the body to be well balanced and strong all over. They do a great variety of exercises, which is also a positive aspect of body building. However, the sets and reps and exercises are all related to the “pump,” not necessarily to power gains. They are not concerned with strength gains or how much weight is used. Their concern is with how symmetrical their muscles are and how much body fat they have. Body builders use a lot of sets and reps with moderate weight. Their goal is to pump and pump and pump until they look good for the contest. They are concerned with how they look, not with exerting force to make a tackle or throw the shot put farther, etc.

We go back to the statement that just lifting weights is not the answer. You must have the proper program with the right sets and reps and the right exercises. Many times, if you direct yourself to body building, you will not be doing sets and reps needed to improve strength and power. In this respect, power lifting is much better.

**Olympic Lifting**

Olympic lifting is great because it uses so many explosive total body movements: the power clean, the jerk, the snatch. The exercises are good for athletics, but again they cannot be abused or overdone. For example, an olympic lifter would do very little bench press because it is not related to his competition. But to a shot putter or offensive lineman, the bench press is very important.

Like power lifters, their main concern is doing exercises that are done in the competition. They are not as concerned with total body strength.

**Machines**

The drawback to most machines is that they are single joint exercises. The athlete moves in multi-joints; therefore, he should be trained in multi-joint exercises to add to performance. Further, the machines do not work stabilizing muscles as much because the weight is supported. The athlete does not have to control the weight, so the stability of the joint is not as good as it could be using free weights. Machines work on isolated muscle groups. Usually we would like to do exercises where many muscle groups are involved so that all that area is of proportional strength.

Of course, there are some people, who, for so-called “safety reasons” or personal philosophies, train entirely on machines. Again, when it is overdone, I do not think it is beneficial to sports.

On the other hand, in some aspects machines are very good because certain muscles are better trained in machines. For example, leg exercises on a machine would do very well. Also, leg curls can be done on machines to emphasize hamstrings, even though the hamstring can be worked very well by doing squats or lunges. Also, with a machine you can isolate a particular area. This is very important if there is a weakness or rehabilitation that needs to be done because of a previous injury. Machines do a good job focusing on particular muscle areas.

Machines are very useful and they should be included in all programs. For example, if during the season a football player comes off the field with a bruised hand and cannot use the conventional bar, he can use machines where he does not have to use his grip. Therefore, machines should supplement the
program and be available when the athlete cannot do the main exercises.

**The Bench Press Syndrome**

This syndrome applies to the person who does not compete in weightlifting per se, but their main goal is getting better on the bench press. Their first concern when they go into the weight room is how much they can bench press. They have a false understanding that if the bench press gets better and higher they are becoming stronger, better athletes. In fact, the bench press is only a small indication or measure of their total body strength. It does not tell you how strong the lower body or back is or how fast you can move or how explosive you are. Many athletes think bigger arms and chest and a strong bench press will make them better in their sport.

Like the competitive lifters, athletes can get carried away by their obsession with the bench press and start eliminating exercises specific to their sports. They start playing a numbers game which is going to turn around and bite them. Their performance in their sport is surely going to decrease.

When this kind of attitude reigns in the weight room, the entire team can suffer. Besides the obvious, often the better athletes who may not be able to compete with the bench press numbers start to get discouraged and lose interest in strength training. An athlete who feels weak or inferior is not going to live up to his potential on the field.

Further, over-emphasis on the bench press creates serious muscular imbalances. You will see the shoulders moving in because the pectoralis muscles are stronger than the muscles in the upper back. As was previously mentioned, muscular imbalances can increase the chance for injury as well as lower performance.

**Intensity**

When athletes are competing in weight lifting, their only concentration is in lifting weights. They do not have all the other aspects (running, plyometrics, sport techniques, etc.); therefore, they can keep a very high intensity of weight training. For example, Monday they train really hard on the total body and because they will be sore and tight from Monday’s workout, Tuesday they recuperate. Again, Wednesday they will be back at it really hard.

In strength training, we cannot afford to take those days off. On those days we may have to do our running, our conditioning, even practice the sport. Therefore, the intensity on that Monday workout has to be different. The intensity is “high,” but it is “high” for the sport. The intensity is not so high that the athlete cannot go out the next day and effectively perform in the other variables of his sport. An intensity that is too high will negatively affect the practice, the flexibility, and ultimately the sport. The athlete and the coach must be aware of this fact. They should work hard in the weight room, but remember that the next day the athlete has to do other training. Everything they do must incorporate into one strategy to be at optimal performance.

**Max Attempts**

Much in the same way as the athlete who is obsessed with the bench press, there are athletes who are obsessed with max attempts. They are under the misinterpretation that how much a person can lift for one repetition is an indication of how strong he is, and that by “maxing out” he is training.

The fact is, the amount a person lifts for one repetition does not necessarily indicate how well he can train. First, the use of a good pyramid system and a good progression system are what brings the athlete to this point. Doing “singles” is not training, and it does not indicate athletic ability. It will, however, tell you how strong he is. At times, you should go for a personal best for testing reasons so the coach can cycle a new workout based on the athlete’s recent personal best.

The athlete who continues to go into the weight room to do singles and associates strength with singles or associates being a better athlete to singles is completely wrong. Doing the workout with the proper intensity, with the proper sets and reps, proper progressive resistance, and following the principles of overload is what actually makes you stronger.

**Conclusion**

If the athlete wishes to compete in weightlifting, it should be done in the off-season and pre-season only. It should be done with the goal of getting better in his chosen sport.

If the athlete does compete in the off- or pre-season, he should continue to do exercises specific to his sport and continue to do his flexibility and conditioning exercises that the sport requires. He should understand that his weight lifting competition may suffer a little, but he will be better prepared for his sport. He should continue a variety of auxiliary exercises with not too much emphasis in one area causing the other areas to be weaker or imbalanced.

In strength training for sport, we should take the best from all three competitive weight lifting areas and machines and look at what they can do when related to sports. We might take something out of olympic lifting like the power clean, because the explosive movements do help to generate power. We might take the squat and the bench press out of power lifting, which are basic strength exercises that add mass and bulk. We also should look at things about body building in our auxiliary work that strengthens the antagonistic muscles. Machine work should be included for variety and to work specific areas.

We should take a variety of exercises and concepts from all the different areas and make workouts specifically for the athlete to improve his performance in his sport.
HEXAGONAL DUMBBELL RACK

Length 90 inches  
Height 39 inches  
Width 24½ inches  
Weight 200 pounds  
Finish Black paint

$189.00  
plus freight

★ Fits hexagonal dumbbells 15 pounds and above  
★ Tilted trays for easy use  
★ Rugged heavy duty construction  
★ Holds 10 or more pairs of hexagonal dumbbells  
★ Optional lockdown device prevents unsupervised use  
★ It’s so easy to use – They’ll use it!

Strength Tech, Inc.  
Box 1381  
Stillwater, OK 74076  
1-800-443-6543  
Oklahoman’s call 405-377-7100