

Starting Strength

Keeping Strength in the Strength Program

by
Bill Starr

Strength is a much sought after attribute in the athletic community and for good reason. Greater strength gives every athlete a definite edge in any sport, if for no other reason than it allows him to practice the skills necessary for success longer and with more precision. Being strong also helps athletes to avoid serious injury. Sure, they're still going to get hurt because there's no possible way to avoid bone-jarring collisions in high-impact sports like football, hockey, lacrosse, soccer, and even baseball. But if the athletes involved in such situations are extremely strong, they can walk away rather than being carried off the field.

In their book, *Kinesiology and Applied Anatomy*, Drs. Rasch and Burke state: "Muscular strength is perhaps the most important of all factors in athletic performance." Increase an athlete's strength by 40% while keeping all the other attributes constant and he will be able to perform at a much higher level. Even if his technique has not improved to any great extent, he will become more proficient in his chosen sport. I've seen this happen countless times in Olympic and powerlifting. As the athlete gains strength, his numbers climb, yet his form stays constant. Strength is the difference.

Why did all those baseball players who took steroids suddenly start hitting 20 or 30 more home runs a season? Their swings were the same. It was simply that they were a great deal stronger due to the 'roids and nothing else.

I've had people argue that just getting stronger wouldn't help at all in some sports, such as golf where the swing is so technical that more strength would alter it. Of course, it would help. The new strength is not gained overnight. It is a gradual process and the swing will remain the same. That is, if it is being practiced. Most assuredly more strength would be useful to a golfer. Wouldn't driving a ball an extra 30 or 40 yards be an advantage? I have no doubt that many on the PGA Tour are using some strength enhancing product. It may not be a pharmaceutical. More like HGH or some such boosting aid. However, we may never know because there will never be any testing done on this group of athletes. It would be far too damaging to the image of the country club, high-dollar crowd. They're already going to have their hands full dealing with their tainted image due to the exploits of the Lothario of the Links, Tiger Woods.

Whenever someone tries to convince me that strength doesn't play that much of a role in his particular sport since the technique involved is so complicated, I point out that doing a full snatch is perhaps the most complicated physical feat in all of sports, and as a person improves his strength, so does he handle more weight in this high-skill movement.

Please note, I am not advocating the use of any performance enhancing product or drug in order to get stronger, because in the long run the risks far outweigh the rewards. Those trophies don't

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look so great when you're hooked up to the kidney machine. My point is that it's well worth the time spent in the weight room striving to get stronger because it will help anyone become a better athlete.

My first experience with learning that increasing strength was a huge asset to performance in a sport was in softball. I played for the medical squadron team at West Palm Beach AFB. I had just started weight training on a consistent basis, and being eighteen, eating and resting well, I was making regular improvement on all of my exercises. When I first joined the team, a base hit was driving a ball past infielders or just over their heads. Then, as I got stronger, the ball started traveling further and further. It was a great feeling and in a short span of time, I was batting cleanup. The only factor that was different from when I started playing in the spring and two months later was I had gotten stronger.

By improving their overall strength, thousands of athletes who were not gifted genetically went from warming a bench to becoming stars in their chosen sports. I tell parents that one of the best things they can do for their sons and daughters playing scholastic sports is to get them on a strength program. Not only will they reduce the number and extent of injuries they might sustain, but they will raise their stock considerably in terms of gaining a scholarship. Which translates to mucho dollaro.

One of the positive things that those in the field often overlook about strength training is when properly administered, it enhances other physical attributes as well. Professor Gene Logan, author of *Adaptations of Muscular Activity*, wrote "Strength undergirds all other factors when one considers the total functioning of the body movements. Without sufficient strength, factors such as endurance, flexibility, and skill cannot be used effectively." And the logical extension to that idea is when an athlete improves his strength, he in turn enhances those attributes. As an athlete gets stronger, he also gets faster and is able to jump higher, and so on and so forth.

This is not to say that trying to improve balance, coordination, timing, flexibility and endurance should not be done in other fashions besides the weight work, but the primary focus of a strength program should be on getting stronger. The rest will follow when that is done correctly. And any good strength program includes at least one exercise that will assist in developing those useful attributes.

The best example of this is having the power clean as part of the routine. In order for the athlete to handle a heavy weight, relatively speaking, he must utilize at least good form. The necessary form requires that he incorporate a high degree of coordination, timing, balance, and speed during the execution of the lift. As the weights go up, so do all the other attributes and they become ingrained in the athlete's mind. Then they can easily be put to use in any other athletic endeavor.

Of course, this knowledge has been around for some time and coaches and athletes in every sport imaginable are fully aware of it. Or should be. And there's certainly no shortage of training programs for anyone interested in a certain sport. That's not the problem. What is questionable is if these programs are really effective or whether they're actually designed to enhance pure strength or physical fitness. Many of the routines that proclaim they're strength programs are fitness programs. Don't misunderstand me. I applaud anyone who takes part in any type of exercise regime that will help him improve his overall health. Heaven knows, this country is in dire need of more people getting off their fat asses and doing something physical. Bowling, hiking, playing a round of golf is certainly better than flopping on the couch and stuffing another few hundred calories down their guts while watching the idiot box.

The changes have come apart gradually. When strength training for athletes burst on the scene in the early seventies, all that was done in a weight room was lift weights. Now, as much, or sometimes more, time is spent doing plyometrics, foot drills, agility drills, and working on a wide array of gadgets

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such as power jumpers and pulling on ropes and tubing. Strength training has evolved into total conditioning training. Coaches love this notion because it sounds right. But the truth of the matter is it is not as effective.

I once had a female sports coach tell me she was having someone else come in to handle the off-season program because I emphasized strength too much. Guilty as charged. So her team switched from doing a very tough routine which included the same exercises done by the men, and began doing a watered-down weight session where nothing was demanding, plus 45-minutes of agility and speed drills. The athletes loved it. Why shouldn't they? No more squats to max, power cleans, or those dreaded goodmornings. The workouts were fun. However, they were not productive. That team had a shitty season and sustained more injuries than ever before. I only know of a few truisms, one being if your parents didn't have children, you won't have children. Another is, whenever you make a strength program easier, you will get weaker.

The greatest shift in this regard came about with the introduction of all those highly-engineered exercise machines. Nautilus was the first to make an impact. The inventor, Arthur Jones, was a genius, there's no doubt about that, but he preached a false doctrine. What made his machines so inviting was that he married a program with them, something no one else had ever done. While Universal Machines came with a list of recommended exercises, it was not the same as precise programming. Nautilus Clubs sprouted up like mushrooms in a rain-drenched forest, and pro and collegiate weight rooms were suddenly filled with row after row of impressive blue machines, each designed to do just one exercise. Two sets to exhaustion for a series of exercises and that was it. Club owners, of course, loved the concept as did coaches of various sports: in and out of the club or weight room in a half an hour. Then there was the selling point of safety, which was the primary factor for most college athletic directors. Getting strong suddenly became a walk in the park.

The fly in the ointment, however, was that no one was really getting stronger. More fit, absolutely, but stronger, no. One of Arthur's greatest marketing schemes revolved around the amazing progress that Casey Viator had made in just a month while using Nautilus machines exclusively. It was called the "Colorado Experiment" and helped Jones move a lot of equipment. What the public didn't know was that Casey was taking steroids the whole time without telling Arthur and he was also sneaking out to a local YMCA to train with some real weights. I know this because Casey told me so.

Eventually, those who were sincerely interested in getting stronger discovered that Nautilus was a hoax and switched back to free weights. The main reason that working on the machines didn't help the athletes gain any appreciable amount of strength was because a machine doesn't involve the attachments, tendons and ligaments, to any great extent and the attachments must get stronger in order for the body to get stronger.

Nautilus stuck around a lot longer than it should have, and that was due to Arthur's marketing expertise more so than the actual value of the machines. Then, almost overnight Nautilus became passé, as coaches realized that their players were not getting stronger using the two-sets-to-exhaustion system and individual athletes discovered the same thing. So machines were out and free weights were back.

Yet strength training trends, like those in nutrition, follow cycles, and a decade after Nautilus fell out of favor several more companies began promoting their line of machines that were more efficient and produced greater results than the out-dated Nautilus. Soon, collegiate and professional weight rooms were once again cluttered with bays of machines that promised to produce bigger and stronger athletes for all sports. Alas, nothing had really changed. No matter how awesome a machine

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appeared it still did not work the attachments nearly as well as the same exercise done with free weights. Which meant that regardless of how hard an athlete trained on a machine, he still was not getting that much stronger. This meant that the strength training wasn't having much of a positive effect on performance and also left the joints more susceptible to being injured.

The latest trend hasn't been another line of machines, but a flashback to the beginning of strength training: the use of kettlebells. They were heralded as an inventive new form of exercising that would far exceed anything that could be done with a barbell, or any machine. Those who have been around the field of physical culture for a long while knew that this was not a new concept by any stretch of the imagination. Kettlebells were used by strongmen back in the 1800s. The reason they fell out of favor during the thirties was because the barbell was more attainable and much more beneficial in building strength. Whenever someone starts telling me how great kettlebells are for strength training, I ask him if that were true, why did they disappear from gyms and weight rooms by the end of the thirties? If they were indeed more useful than barbells, then barbells would have been put in storage or in the far reaches of the YMCAs and weight training facilities. For those who want to gain a lot of functional strength, the kettlebell will become history once again, and very soon.

When Tommy Suggs and I were editing *Strength & Health* magazine at York in the sixties, we took it on ourselves to develop a strength program that could be used in junior and senior high schools and colleges with very little equipment. When we visited schools and went to coaches conventions we learned what was currently being done, and we found that the biggest shortcoming in nearly every program was that it contained too many exercises. When we visited the Naval Academy, the list the strength coach gave us contained sixteen exercises; many other schools had even more.

The rationale behind such a program was that in order to get the body strong, every muscle group needed to be given direct attention. But in reality, what happened was the available energy was being spread around so thinly that no groups were getting enough work to make any significant difference. The program we laid out had only three exercises: power clean, flat bench, and back squat. The majority of the coaches were skeptical. Until they tried it; then they were believers.

Other exercises could have been selected, although nothing would replace the value of the back squat, but the point was to concentrate all the energy into three movements. Work them diligently and results would be achieved.

In recent years, I have noticed that more and more strength programs have slipped back into that same situation. Coaches and athletes keep adding in more and more exercises to make sure all the bases are covered and end up getting less favorable results. Most in the profession are of the mind-set that the more complicated the program is, the more productive it will be. Just the opposite is true. The more simple a program, the more it will achieve the desired results, which is greater functional strength.

Just so the exercises chosen are specific for one of the three major muscle groups: shoulder girdle or upper body, back, and hips/legs. One primary exercise for each of these groups plus no more than two auxiliary movements for the smaller muscles like the calves, deltoids, triceps, and biceps, and that program will yield results. *If*, and this is a big if, you work your ass off.

Which brings me to another aspect of strength training that is very prevalent currently, shunning the difficult exercises and pushing to the limit. A good bit of this attitude has come about with the emergence of so many people making lots of money doing personal training. I never saw a personal trainer (and I observed a shitload of them in California) make one of his clients extend themselves on any exercise. Few ever did enough to break into a sweat. I was training at John Gourgott's gym in

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Marin County one time and watched a personal trainer put an extremely healthy female track athlete through a workout. He assisted her on every movement, even going so far as helping her move a weight the last few inches on inclines and leg curls. He got more of a workout than she did.

But the real purpose in that field of endeavor is to make money, pure and simple. The last thing most personal trainers want is to push their clients so hard that they sustain a ding. Or, Buddha forbid, they get sore. After being around a number of these trainers, I came to the conclusion that they're getting paid to be confidants or amateur psychologists to their clients and getting in shape is merely an excuse for being in a gym.

This attitude of taking it easy and not pushing to the limit in the weight room is also taking place in many colleges, and particularly on the professional level. Why is that? Job security. Strength coaches are now making hefty salaries and do not want to risk losing their positions. Many are told if they hurt anyone in the weight training workouts they will lose their jobs. In other cases, this threat is implied. So they avoid the demanding exercises and replace them with safer ones. Most of those participating in team sports have the herd instinct. They follow instructions and don't bother to think about what they're doing with regards to their futures. So if the strength coach wants them to do an easier workout, that's fine and dandy with them.

But the athletes are being cheated in two ways. Because they're not being pushed they aren't getting as strong, which means they're not able to perform as well on the playing field and they're also leaving themselves more open to being injured. Look at how many serious injuries are occurring in professional football in the last few years. Of course, many happen because it's a violent game and there is no way to avoid head-on collisions at full speed. Yet many could have been avoided had they been stronger.

A friend of mine who trains several dozen high school football players in his neighborhood went to visit a pro football team's weight room to see if he could pick up some tips to use on his athletes. He looked over the weight room and asked the strength coach, "Why don't you have any platforms? Don't you do any power cleans, high-pulls, or deadlifts?"

Indignantly, the coach responded, "Hell no! They take enough punishment at practice and in the games. I'm not going to have them beat themselves up in here doing any of those types of exercises."

Hello! What I think a strength program should do is get the players so strong from working like demons in the weight room that the practice sessions and games are easy by comparison. To get so strong that they can withstand the shock of being blindsided or sandwiched. The weight work ought to prepare them for war, not a picnic, but that is not happening because those in charge can't take the risk of being reprimanded if someone gets hurt in the weight room. One more thought in this regard: when the exercises are taught so that the athletes do them correctly and the workload is increased gradually, no one is going to get injured. Sure, small dings and sore spots, but that's nothing in comparison to a blown knee or shoulder.

Another sport where the prevailing philosophy is "less better than more" is in Olympic weightlifting. With all the advances in nutrition, methods of strength training, and the opportunities available to those who are in the top tier of the sport, one would think that the U.S. would be, if not dominating on the world scene, at least represented in the top level. Not even close. Small, dirt-poor African nations are whipping us soundly.

Why? No longer is the emphasis on strength, but on technique. Hour upon hour is spent honing the finer points on the snatch and clean and jerk, with a small portion of the workouts set

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aside for pure strength work. Even then, the lifts are not pushed to the absolute limit and beyond. Work is done in the comfortable range. The reason for this absurd behavior is that those in positions of power in the sport want to cover their asses, not make any ripples so no one will notice that they're incompetent. Then they can continue to make trips to foreign countries, make very good money and live a pleasant lifestyle. Turning out a world or Olympic champion is the furthest thing from their minds, mostly because they really have no clue just how to do this.

The answer is so simple everyone seems to miss it: get the American lifters stronger than their competitors. This can only be accomplished by working harder than everyone else. Sure, technique is important, but only up to a point and it's not as important in the end as strength. That's what the sport is all about. Anyone who has followed the sport will agree that David Rigert was one of the greatest of all time. Yet his form was absolutely atrocious. I've seen better technique displayed by novices in their first meet. On his snatches and clean and jerks, it was easy to spot three or four form mistakes, yet he made the lifts because he was so overwhelmingly strong that he simply overpowered the weights.

Once form is established, it never varies much for the rest of that lifter's career. I lifted with Chuck Nootens all through the sixties, and twenty years later I saw him compete in the National Masters in Houston. I marveled at the fact that his form was precisely the same even though two decades had passed. Teach good technique from the onset, then lean on strength work. There's no magic to getting stronger, only a great deal of extremely hard work, and that is exactly why most people never achieve that goal.

Soon after I took the job as strength coach at the University of Hawaii, I attended an Olympic Meet at the downtown Y in Honolulu. Mostly I went to see Tommy Kono, Harold Sakata, Dr. Pete George, and Richard Tom, all legends in the sport. One of the competitors was a transplanted Pennsylvanian, Steve Dussia. I paid close attention to him since he was the only *haole* in the contest and also the only one using the split style on the snatch. As a 181er, he did a 225 snatch and 275 clean and jerk. After the meet, he approached me and asked if he could train at UH and would I help him with his form on the snatch. He knew I used the split as well. Olympic lifters were always welcome at the colleges where I was in charge of the weight room, so I trained him. Hard. I found out right away that he could handle a tremendous amount of work and still recover for the next session. At the next contest on the island, which was three months after the one where we met, he did: 275 and 325 in the same weight class.

Everyone in attendance believed that I had put him on steroids. It wasn't true. Steroids had not yet made it to Oahu. He made the gains through his own efforts. His technique was essentially the same. He just got stronger.

There's a good deal more on this subject and it will be covered in future segments along with suggestions on how to improve strength for specific exercises and competitive lifts. The main point that I'm hoping to get across in this piece is if you're sincerely dedicated to getting a great deal stronger, you must first make up your mind whether you're willing to do the work that is required to achieve that goal. It's one thing to say, "Sure, I can do that," and another thing altogether to put in the hours in a weight room. Keep this in mind: if getting super strong were easy, everyone would be squatting 600 and deadlifting half a ton.

Whatever type of program you're currently using, be sure to make strength your primary objective. George Jowett was one of the pioneers in the field of strength training. Bob Hoffman started out using his courses, as did almost everyone else in the twenties and thirties. Even I used

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his instructional manuals as my first guides in strength training. The two things he impressed on his students were that in order to gain strength, heavy weights have to be handled, and when strength is given priority, development will follow. Those precepts are as valid today as they were almost a hundred years ago.

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