

The *Evolution* of the Hex Bar

The story of how a great piece of gym equipment got even better

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(PHOTO BY DAN BRYANT)

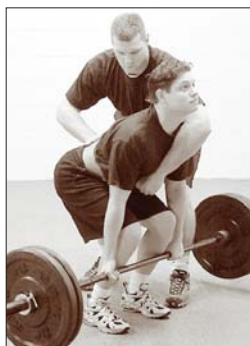
The hexagonal shape of the Hex bar allows the lifter to perform exercises from inside the encompassing bar. Josh Bryant performed an 840-pound Hex bar deadlift in a recent strongman competition, which is the heaviest weight we've ever heard of anyone lifting in this exercise.

There is no doubt that the straight-bar deadlift is a great core exercise, providing tremendous focus on the powerful muscles of the glutes, hamstrings and lower back. In fact, when the BFS program was developed almost 30 years ago it was one of the core exercises, performed on the same day as the power clean. But the great benefits of the deadlift have been overshadowed for years by fear of injury, and we found many coaches were reluctant to prescribe it to their athletes. And the truth is, we couldn't blame them.

Although it is a seemingly simple exercise from a technical standpoint – certainly it's not as complex as a snatch or power clean – the deadlift must be performed with the lower back “locked in” to protect the spine. When record poundages are used, there is a tendency for the athlete to round the lower back, thereby diverting some of the load from the muscles onto the connective tissues and disks. A belt helps, providing postural feedback to the lifter that he or she is breaking form, but even that precaution isn't enough.

To ensure safety, we decided many years ago that the best way to include the deadlift in workout programs would be to recommend that heavy deadlifts always be “spotted.” Spotting ensures that the torso is properly positioned and the weight is kept on the heels, as lifting with the weight centered on the toes or balls of the feet tends to cause the back to round and thereby increase the risk of injury.

To spot the deadlift, the spotter presses with one hand on the lower back and hooks the other around the lifter's shoulder and chest. The spotter secures the crook of the elbow against the shoulder and places the fist or hand firmly in the middle of the chest. As the lift begins, the spotter pulls up and back while pushing in on the lower back.



The safest way to perform the straight-bar deadlift is with a spotter, whose primary purpose is to ensure correct alignment of the torso and to keep the athlete's weight on the heels.

We've used the spotted deadlift as a motivational tool in our clinics. Unlike the results in the squat, where performances can be suspect because there is a minimal depth that must be achieved, the deadlift is truer measure of maximal strength. Having athletes max out on the lift at the end of the clinic and break personal records is a great way to jump-start an off-season program. How safe is this technique? Well, in over 20 years of performing spotted deadlifts, we've never had an injury at a clinic. But for years we wondered if there was a better way to perform it and thereby resur-

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rect this valuable exercise in lifting programs. There was.

Enter the Hex bar

About 10 years ago we heard about a device called a Hex bar, a hexagonal-shaped barbell with handgrips placed on the two sides of the bar. The hexagonal shape allows the lifter to perform exercises from inside the encompassing bar. A similar device, called a Trap bar, had a triangular shape; but we found that the Hex bar was easier to balance and that there was more room for larger athletes when they stepped inside the hexagonal shape to perform deadlifts. We also found that the Hex bar is safer than a straight bar in that it enables the weight on the bar to be in perfect alignment with the power line at all times.

The power line is an imaginary line that runs straight up through the lifter's center mass. Executing the deadlift movement through the power line enables the athlete to develop maximum



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power and reduces the risk of injury. The farther away the weight gets from the power line, the more the lifter's power is lost. For example, how long can you hold a 45-pound bar with your arms straight down and the bar resting against your thighs? Probably for a long time. Now try holding that bar out about a foot from your thighs. It's a lot harder. The farther away the bar gets from center mass, the harder it is to hold and the more power is lost. In addition, because the Hex bar makes correct technique so easy, there is no need for a spotter.

To perform the deadlift with the Hex bar, the lifter steps into the center of the hexagon and assumes the BFS jump stance. The lifter then squats down and grabs the handgrips on both sides of the bar. Make sure the hands are placed squarely in the middle of the handles for balance. The lifter should lower the hips, spread the chest, lock the lower back in place, keep the head up with eyes forward, and position the knees directly over the feet. Now the lifter lifts the bar straight up through the power line using the legs.

Because of the unique design of the Hex bar, the weight can be kept aligned with the power line throughout the entire lift. Once the lifter has stood up completely, the first repetition is complete and the lifter is ready for the next

rep. The lifter should now proceed to squat back down, again keeping the lower back locked in, chest spread, and eyes forward. To keep back strain to a minimum, the athlete should bounce the weights slightly off the floor when doing repetitions. Do not pause or relax your lower back muscles in the down position between reps, and the head should be up and chin stretched away from the chest. If the chin touches the chest, the whole body will come dangerously out of position.

Because the athlete performs the exercise with the torso more upright than in a regular deadlift, there are fewer compression forces on the spine and less stress on the lower back. This difference makes it possible for the exercise to be worked hard every week, whereas such frequency of training with the regular deadlift often causes overtraining. Josh Bryant, who recently did 840 pounds in this exercise in a strongman competition, says that he can train the deadlift more frequently by using a Hex bar instead of a straight bar.

Bryant, who has squatted 900 pounds in competition with only a single-ply lifting suit and has performed a 700-pound box squat on a 9-inch box, says the Hex bar deadlift has much the same effect as a box squat in that it trains the athlete to explode from a static position. Thus, it is a perfect comple-

ment to the squat. The Hex bar also lends itself to doing shrugs in a superior way because there is no bar contact with the thighs. In fact, Canadian strength coach Paul Gagné has come up with many variations for the Hex bar, which were described in our September/October 2004 issue.

One interesting phenomenon we've found, and Bryant agrees with us, is that with stronger athletes there is less of a difference between the Hex bar deadlift and the straight bar deadlift. So if an athlete can straight bar deadlift 200 pounds, they may be able to Hex bar deadlift 300 pounds. However, if an athlete straight bar deadlifts 600 pounds, they may be able to manage only 650 on the Hex bar. Also, Bryant believes that those athletes who tend to use the legs more in the straight bar deadlift, such as those powerlifters who are more proficient in the sumo (wide stance) style, tend to be relatively better in the Hex bar deadlift, as it uses a relatively higher degree of leg strength.

The standard Hex bar is also a space saver. It is only 56 inches long, compared to the 86 inches of space that regular Olympic bars occupy. This allows for many Hex bar stations in a very small area. Also, the shorter length of the bar decreases the distance of the weight from the lifter. This gives the lifter more control and balance for a



Shown are the Hex bar (left), the High Hex bar (middle), which is designed for taller athletes, and the Mega Hex bar (right). The Mega Hex bar, which Josh Bryant trains with, weighs 55 pounds and is built for the strongest athletes.



The Combo Hex allows the exercise to be changed from a regular Hex to a High Hex by simply flipping the bar over.

more efficient, higher-intensity workout.

Hex bar workouts are also fast. Says BFS Founder/CEO Dr. Greg Shepard, “On one of my first workouts with the Hex bar, I did 5 sets of 8 reps, going up to 375 pounds. It took much less time than a squat or deadlift workout: only 8 minutes. I was really sore the next day in my glutes, hamstrings and traps. I could hardly walk. It was just like a heavy parallel squat workout when you haven’t squatted for a while, but my lower back felt great. I was impressed.”

As with all BFS core lifts, it’s important to keep records and set goals. For male athletes, the BFS Varsity Standard for the Hex bar deadlift is 400 pounds, the All-State Standard is 500 pounds, and the All-American Standard is 600 pounds. Female athletes have a Varsity Standard of 235, an All-State Standard of 325, and an All-American Standard of 415.

Morphing the Hex Bar

A great variation of the Hex bar is the High Hex bar. They are identical except the High Hex bar has elevated handgrips. The higher starting position allowed by the High Hex bar makes executing exercises easier for tall athletes because they won’t need to bend their knees as much as with a regular Hex bar.

Although some programs have no problem with having both regular and High Hex bars, for those with limited space we offer the Combo Hex bar. By simply flipping the bar over, you can perform either the regular Hex or the High Hex. If you have a large weight-room with numerous Hex bar stations and want to save a few bucks, a combination of regular Hex bars and High Hex bars may be the way to go. If you have a smaller facility, the Combo Hex is a more logical choice.

Because the Hex bar has become so popular, we found that heavier weights were being used. In fact, Bryant did 840 (which he says was easy) after only a few months of training. For this reason we now offer the Mega Hex, which allows much heavier weights to be used (due to the longer sleeves) and is even more heavy-duty than our other Hex bars. But the Hex bar story doesn’t end with the Mega Hex.

Recently we’ve recently introduced the Youth Hex bar. Slightly smaller in diameter with shorter sleeves, this bar

weighs only 15 pounds. The lighter weight enables young athletes in the Readiness stage of the BFS program, or just graduating from this program, to be able to use it.

One reason we felt the need to introduce the Youth Hex bar was that in addition to other benefits, the Hex bar teaches athletes to lock-in the lower back, which is important for squats and cleans. However, with the weight of a regular Hex bar and Olympic-size metal or bumper plates, the weights could be too heavy to perform repetitions with. Repetitions are a key to good technique, which is one of the goals of the BFS Readiness Program. We also found that the light weight enables the bar to be used for many other exercises, especially the upper-body exercises Gagné developed.

Although the straight-bar deadlift can be a valuable exercise, we at BFS believe that the Hex bar is a superior exercise and should be a part of any athlete’s program. It’s heavy-duty basic training at its best! **BFS**



The Youth Hex bar weighs only 15 pounds and is perfect for beginners and upper-body exercises. Team BFS member Gina Smith poses with the first prototype of the Youth Hex bar.