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POSITION PAPER • Box Squat

The BFS perspective on this valuable lower body exercise



BFS clinician Roger Freeborn (red shirt) and Erich Mach (back spotter) teaching proper box squat form at a BFS clinic.

The box squat is the most controversial lift in the BFS program and, for that matter, in weight training. The lift has experienced a roller-coaster ride within the weight training community, with coaches either loving it or hating it. Some coaches believe the lift gives their athletes confidence and helps them stay strong throughout the season. Other coaches believe it creates excessive compression forces on the spine. This paper will help you make an informed decision about the box squat.

BFS has been promoting the box squat as a core lift for over 30 years. We believe it is one of the most effective exercises for developing overall strength and lower body explosiveness. However, during the first two decades after the BFS program was developed, we experienced our share of critics who failed to see the value of the exercise and thought it was dangerous.

First it should be made clear that the box squat is NOT a mandatory exercise in the BFS program. The box squat is considered a "squat variation" and can be performed as the first exercise on Monday in the BFS

off-season program or as the first exercise on Thursday in the in-season workout. We understand that there are coaches who simply refuse even to attempt this exercise, just as there are coaches who refuse to perform power snatches or full Olympic lifts because

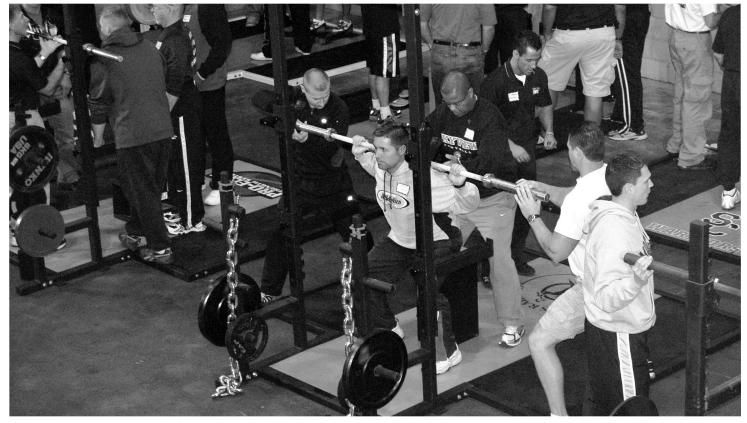
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they believe they are too dangerous. And that's fine. The BFS program is flexible, and if for whatever reason your coach simply refuses to use the box squat in your program, there are alternatives. Use another core lift

instead, such as the front squat – or even the hip sled.

We believe the box squat is unparalleled for overcoming plateaus, building hip strength and hip tendon strength, improving lower body explosiveness, and developing the confidence to handle heavier weights and thereby continuously break personal records. One of the reasons an athlete can use more weight in the box squat compared to regular squatting is that touching the box dissipates the kinetic energy created during the descent, energy that the athlete must normally overcome to change directions and begin the accent. But one of the main reasons we like the exercise is it is useful for helping to maintain strength in-season.

Although you use more weight in a box squat than in a regular squat, the reduced range of motion of the box squat allows you to recover quickly from the exercise. Just how quickly? Based upon the feedback of the coaches who have won countless championships using the BFS program, an athlete can box squat heavy the day before an athletic





The 3-in-1 Squat Box is perfect for box squats because it's heavy-duty and adjustable. It also can be used for straight-leg deadlifts and the sit-and-reach flexibility test.

At the BFS National Certification in January, coaches had to show that they can not only spot the box squat properly but also be able to demonstrate the lift.

competition without a decrease in performance. In fact, we've found that athletes usually perform better!

Answering the Critics

Regarding those who claim the box squat is dangerous, you should have no concerns about safety or liability if you follow our recommendations, which include focusing on perfect technique (rather than on using the heaviest weights possible) and using three attentive spotters. Further, if an athlete is able to use more than 100 pounds in a box squat compared to a parallel squat, that athlete needs to use a lower box. When an athlete uses more than 100 pounds over their best parallel squat, then it is possible they are using a weight that their trunk muscles cannot safely handle to protect the spine.

One medical expert who has learned that a properly performed box squat is a safe exercise is Dr. Greg Motley, an orthopedic surgeon who specializes in arthroscopy, sports medicine and joint replacement at Southeastern Sports Medicine in Asheville, North Carolina. As a three-year starter at strong safety when he attended the University of Kentucky, he squatted 455 for three reps. With those qualifications, Dr. Motley is definitely one doctor who knows what serious athletic conditioning is all about.

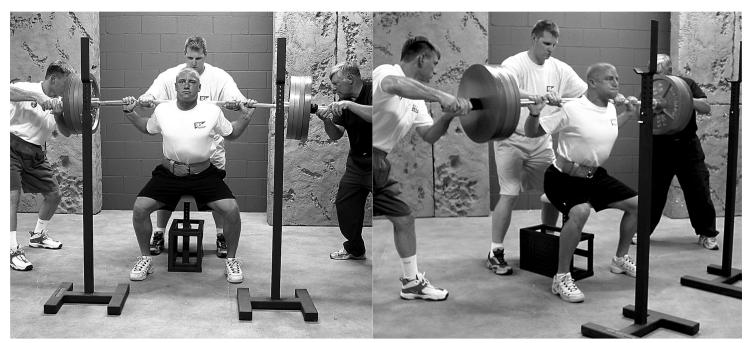
When BFS clinician Bobby Poss first

discussed the box squat with Dr. Motley, the doctor said he had never seen it performed and he was curious to know if the box squat might produce harmful compressive forces on the lower back. After reading all the literature Coach Poss gave him, Dr. Motley said, "Let's go down to the gym and give it a try."

If anyone would know if an exercise had a high risk of injury, it would be Dr. Motley. His athletic career caused him to undergo six surgeries from all the banging around that comes from being a strong safety in Division I football. He also has two degenerated disks. "So I would know if there were increased pressure on the lumbar spine," he says.

Not only did Dr. Motley perform the exercise with no pain, he ended up endorsing the exercise. "I went up pretty heavy that day, a lot heavier than I thought I could go – and I hadn't squatted in 10 or 12 years. "I think it's critical with the box squat – with all squats – that you have good technique and alert spotters. That being said, I think the box squat is a very, very good exercise."

Powerlifters have embraced the box squat as part of their training, but many use a method that involves an excessively wide foot stance and a technique of sitting back so the shins are parallel to the floor. This is not a natural position, because for the body



Because so much weight can be used on the box squat, we prefer that three spotters be used on this exercise and that the hands of all spotters be lightly placed on the bar during the lift.

to move forward, the shins must incline forward. For the sport of powerlifting this technique may have merit, but for an athlete it appears to be in conflict with the law of specificity. This law says that the best exercises for a sport are those that most closely approximate the movements that occur in that specific sport.

It needs to be emphasized that the box squat does not replace the parallel squat. Because of the reduced range of motion of the exercise, performing box squats exclusively would cause chronic tightness in a gluteal muscle called the piriformis. Tightness in this muscle can affect an athlete's ability to move laterally.

BFS has persisted in recommending the box squat as an important squat variation in our total workout program. We have done so not to be different from all the other workout systems out there but because we know the box squat works!