



Marilou Dozois-Prevost, a 2008 Olympian from Canada, shows exceptional strength, balance and flexibility.

A Closer Look at Power Balance Drills

Unique exercises that develop dynamic flexibility

We admire Olympic lifters for their exceptional strength and speed, for sure, but also for their flexibility. Most people have difficulty getting into a snatch position holding only a broomstick overhead, much less catching and balancing hundreds of pounds in this position. But the beauty of this sport is that the very exercises that require great dynamic flexibility also develop it. One series of exercises that fall into this category is what BFS calls *power balance drills*.

When balance comes into play during exercise, the body uses many different muscles. This factor is one of the primary reasons that athletes choose free weights over machines. For example, the prime movers in a standing-curl exercise are the biceps, but were it not for the stabilizing muscles in the back and hips, the lifter would fall over. With lunges, in the BFS program athletes should strive to step out to get a full stretch, thereby learning to balance themselves powerfully in an awkward position. When an

exercise uses the stabilizing muscles as much as the prime movers, we call this type of exercise *power balance*.

Tom Cross, who has been a strength coach at Mid-American Nazarene College, introduced BFS Founder/CEO Dr. Greg Shepard to the idea of including power balance lifts in the BFS program many years ago. As a result, BFS began including three of these lifts during our auxiliary lift presentations at BFS clinics.

Power balance drills are basically variations of the overhead squat, which simulates the position achieved in a full snatch. Holding a barbell overhead in a low squat with the trunk upright and heels flat on the floor requires considerable flexibility, and power balance drills develop this type of flexibility. In fact, the exercise is often used as a form of postural assessment in many physical education protocols – you’ll hear terms such as *functional strength*, *dynamic flexibility* and even *neuromuscular efficiency* to describe the qualities assessed during the overhead squat test.

In the field of corrective exercise,

a postural assessment will look at how the body positions itself during movement. Any unnatural movement will be associated with a tightness or weakness in a muscle or group of muscles. Also, there may be an issue with the feet, and an individual who has excess pronation will create unnatural movement patterns during the exercise – in fact, if the positions improve dramatically when weightlifting shoes are worn, this may indicate that there is a structural problem with the foot.

For the overhead squat, if the knees buckle inward, this could be a result of tight adductors (inner thigh muscles) or weakness in the gluteus medius. If the individual cannot position their arms overhead properly, this could indicate tightness in the latissimus dorsi or a weakness in the muscles that help stabilize the shoulder blades, such as the rhomboids. From here, a specific corrective exercise program could be designed to strengthen the muscles that are weak and to stretch the muscles that are tight.

With this background, let’s look



Personal trainers such as John Connor (left) from Dublin, Ireland, use the overhead squat, also known as Power Balance Drill #1, in assessing structural balance. Strength coach Paul Dick uses the same exercise with his 4th graders, such as Stephanie Longfellow shown here.

at the three BFS power balance drills, discussed in order of difficulty.

Power Balance Drill #1

Perform a power snatch and stand erect in an athletic stance. Now squat all the way down while maintaining

great balance and technique. Hold the low position for three seconds and then stand erect again.

Power Balance Drill #2

Place the bar on your shoulders as if you are going to do a back squat

while using a snatch grip. Again, squat all the way down and balance yourself. Then see if you can press the weight all the way up. The challenge is to see if you can press the bar up from your shoulders while maintaining perfect balance.



The power balance drills can be used to determine structural imbalances that can increase the risk of injury and affect athletic performance. The top photos show optimal positions; the bottom photos show imbalances.

Power Balance Drill #3

Do power balance drill #2, but this time see if you can press the weight up, hold it for three seconds, and then stand erect.

During all three drills, apply all the BFS Six Absolutes to help achieve ideal positions and develop what Coach Shepard refers to as a “kinesthetic feel” for the exercise. These are the BFS Six Absolutes:

1. Use an athletic or jump stance
2. Be tall
3. Spread the chest (lock-in the lower back)
4. Align the toes
5. Align the knees (knees over toes)
6. Eyes on target

Canadian strength coach and Posturologist Paul Gagné also offers a tip in performing these drills: “Athletes must understand that the weight should be back, towards the heels. I also tell athletes they should focus on keeping the weight more on the outside toes to help keep their knees in line with their feet.”

For those with extreme flexibility problems, or for someone recovering from an injury, Gagné also suggests squatting to a high box, as this increases their body awareness. As the athlete improves, a lower box is used (using a BFS 3-in-1 Squat Box is ideal because it's adjustable). This technique can also be used for regular squats.

Several years ago, when BFS Editor in Chief Kim Goss owned a private gym in Dallas, he started working with Robert Petitt III, Jr., a 14-year-old who had torn his ACL and MCL. Even with a special knee brace, Petitt could not bend his knees more than 10 degrees without his injured knee buckling. Says Goss, "I started having him perform high box squats so that he kept his knees in



Using a 3-in-1 box will help with teaching power balance drills, and using lifting chains will make the drills considerably more difficult.

alignment. When he could perform a perfect squat to this depth consistently, I used a lower box. Although Robert had very little weight training experience prior to working with me, in just a few months he was able to perform a rock-bottom squat with 355 pounds!" Later, Goss used these boxes with a high school girls weight training class he worked with

at Hunter High School in Salt Lake City. This class, which was featured in the January/February 2010 issue of *BFS* magazine, had 12 girls who could power clean 135 pounds.

To make power balance drills even more challenging, Gagné often has his athletes use dumbbells or chains. He will start by having his athletes perform these exercises while squatting to a box. One progression he uses is to squat without any apparatus, then with a barbell, then with dumbbells, and finally with chains attached to the barbell.

Your athletes may never step onto a lifting platform and compete in a weightlifting competition, but all athletes can benefit from unique weightlifting exercises such as the power balance drills. **BFS**

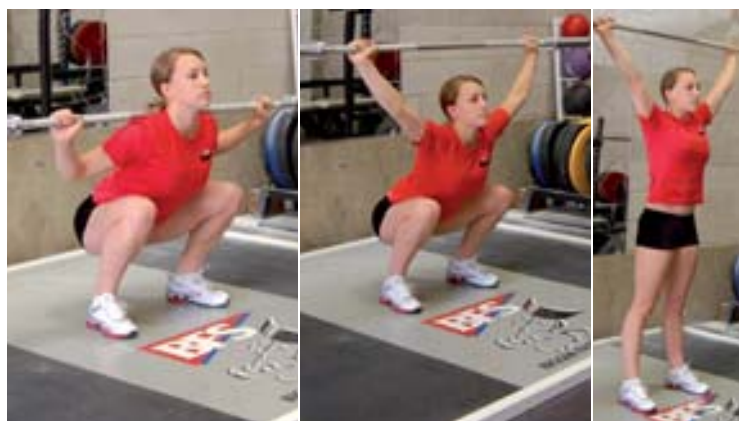
Power Balance Drill #1



Power Balance Drill #2



Power Balance Drill #3



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MEN'S STANDARDS
Jumping & Speed

Event	Weight	Time	Score
200m	100	1:10	100
	200	2:20	200
	300	3:30	300
	400	4:40	400
400m	100	1:10	100
	200	2:20	200
	300	3:30	300
	400	4:40	400
600m	100	1:10	100
	200	2:20	200
	300	3:30	300
	400	4:40	400
800m	100	1:10	100
	200	2:20	200
	300	3:30	300
	400	4:40	400
1000m	100	1:10	100
	200	2:20	200
	300	3:30	300
	400	4:40	400

BENCH RECORD CHART

BFS DOT DRILL

Weight	Time	Score
100	1:10	100
200	2:20	200
300	3:30	300
400	4:40	400

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