

about the
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Develop Power and Core Strength with Kettlebell Exercises

To be successful in a sport, an athlete must possess the ability to generate explosive power (2). But what is power? Basically, it is the ability to perform a lift in as little time as possible. How is power different from strength? An individual may be able to demonstrate that he or she is very strong (based on the amount of weight they lift); however, when they perform a lift, they do it slowly. To develop power, an athlete must perform exercises in a short period of time. The traditional power/weightlifting lifts (e.g., cleans, snatch, jerk) help facilitate an athlete's ability to generate force quickly (2, 4).

What if an athlete is unable to perform these exercises with the traditional barbell and plate equipment? Not all athletes are of the elite collegiate and professional ranks. An athlete may be a 34-year old woman who is returning to running eight weeks after delivering her first child. Or an athlete may be a 75-year old male who is swimming at the master's level. Since athletes come in all shapes and sizes, their training programs should account for their fitness level and be tailored to meet their individual goals. The use of kettlebells in one's training program will help to enhance core strength and facilitate power development in non-elite athletes.

If you are not familiar with a kettlebell, it is a cast-iron weight shaped like a ball with a handle (Figure 1). Kettlebells range in size from 5lbs to 50lbs, or greater. Although considered a relatively new piece of equipment, the use of kettlebells dates back to Russia in the early 1700s (1, 3). Recently, kettlebell training has emerged as a popular piece of training equipment (3). The unique shape of the kettlebell allows one to perform traditional exercises to enhance core strength (Table 1) as well as the swings to improve functional power (Table 2).



Figure 1. 20lbs Kettlebell

The Swings

The shape of the kettlebell allows for the ability to perform swinging motions. By grasping the kettlebell handle with one or both hands, an individual is able to swing the kettlebell through a large arc of motion. Performing a one-handed (Figure 4) or two-handed kettlebell swings (Figure 5 and 6) activates muscles throughout the body.

Conclusion

These simple exercises (and basic modifications) can be used to increase core strength and develop functional power. Not all individuals are alike and as such their training programs should be tailored to their skills and abilities. The use of kettlebells offers a safe alternative to the traditional Olympic weightlifting lifts if performed properly. ■

References

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Figure 2. Squat with 1 Kettlebell



Figure 3. Lunge with Kettlebell Overhead



Figure 4. One-Arm Swing Starting Position



Figure 5. One-Arm Swing Terminal Position



Figure 6. Two-Arm Swing Starting Position



Figure 7. Two-Arm Swing Terminal Position

Table 1. Kettlebell Exercises to Improve Core Strength

Exercise	Starting Position	Movement
Squats		
Squat with 1 Kettlebell	Grasp a kettlebell handle with both hands	Perform the squat with the kettlebell hanging between the legs (Figure 2).
Squat with 2 Kettlebells	Hold a kettlebell in each hand with the weights positioned by the shoulders	The squat should be performed with the kettlebells held near each shoulder.
Lunges		
Lunges Holding Kettlebells	Hold a kettlebell in each hand	Perform a traditional lunge exercise. Variation: Hold one kettlebell only with the arm extended overhead (Figure 3).
Lunge with Kettlebell Pass Between the Lead Leg	Hold a kettlebell in one hand	Perform the lunge, and pass the kettlebell from the one hand under the lead leg to the other hand. Repeat the passing motion on each side.

Table 2. The Swings: Exercise Description

Exercise	Starting Position	Movement
One-Arm Kettlebell Swing	Get in a squat position with one arm holding a kettlebell (overhand grip) between the legs	Grasp the kettlebell with one hand and forcefully swing it to shoulder height. Next, allow the kettlebell to lower in the same arc of motion between the legs, just posterior to the body. Repeat the swing, quickly reversing the direction creating the power for the movement from the hips and legs.
Two-Arm Kettlebell Swing	Grasp a kettlebell with both hands	Performed the same way as the one-arm kettlebell swing except that both hands are holding the kettlebell.
Clean with 1 or 2 Kettlebells	Assume a deep squat grabbing a kettlebell with one or both hands. The kettlebell (or kettlebells) should be situated between one's feet.	Raise the kettlebell(s) up to the shoulder(s), generating power for the movement from the hips.