Rugby and the Rotational Kettlebell Swing

Nicolas Rithner offers a twist on the traditional kettlebell swing with the goal of increasing explosiveness and torque in athletes playing contact sports.

Nicolas Rithner



Kettlebell lifting is a great way to develop strength endurance, but it also has the advantage of allowing multi-planar loading. At Glendale Rugby in Colorado, we use kettlebells for conditioning in addition to barbell training.

We use the rotational swing often because it's a challenging, non-stop movement that targets the whole body—armpits down—and replicates the unilateral hip-knee extension seen in tackling. In addition, it's a "two-speed exercise" that requires explosiveness and complexity.

The rotational swing offers great benefits for sports involving unilateral hip explosiveness and torque, such as hockey, lacrosse and tackling sports such as rugby or football. Mixed-martial-arts athletes can benefit from this exercise to prepare for takedowns and general handling of opponents.

Once "off the leash," there isn't a stopping point until you put the bell down. This makes the rotational swing very challenging, and the lifter's heart rate will spike in no time. A great way to implement this exercise is as part of a circuit or in short, intense intervals such as Tabata sets.

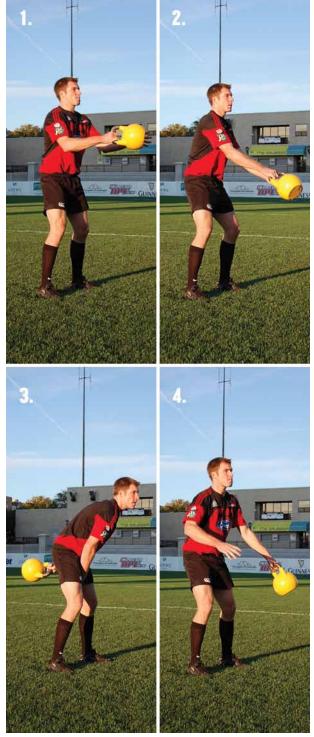
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This is an advanced exercise that must only be approached after the one-hand swing has been mastered to the point that there is no lower-back soreness after training, even when working with a challenging weight. A similar exercise, the figure-eight-to-hold, can be used as a modification for those still learning the swing. The figure-eight offers its own sets of challenges when done at a fast pace or with a heavy kettlebell.

The Rotational Swing: The Finer Points

Choose a kettlebell that's heavy enough to make the exercise challenging yet light enough to allow you to keep going through the set without stopping, and make sure you have enough space to swing it around at arm's length. Be sure you account for missteps or potential losses of balance.

Stand with the kettlebell on your right side and grip the handle on the corner opposite the one you normally grab during one-arm swings. For the standard one-arm swing, we hold the handle on the "inside corner" to facilitate a good rack position or lockout. We don't see those positions in the rotational swing, and we will be exchanging hands in the back portion of the swing. Therefore, you grip the kettlebell near the corner furthest away from you when it's sitting on your left or right side.



The rotational kettlebell swing is characterized by a soft knee bend and a flat back. The load should be felt in the glutes and hamstrings, not the lower back.



Start with a swinging motion, letting the kettlebell go as far back between your legs as possible while keeping the back flat and loading the hamstrings. For this to happen, your torso will rotate. As the bell moves back, the free hand (the left hand in our example), will reach outside the left leg to grab the bell at the open end of the handle and initiate an outward swing toward the left.

At this point the hips and left knee must extend explosively. The bell is forcefully moved forward at arm's length until it reaches the medial line at chest level (height can be varied). As a checkpoint, the opposite hand moves up to meet the body of the kettlebell in the center, but no exchange takes place.

After that we move into a swing between the legs again, but this time the downward path of the kettlebell is toward the inside of the right knee. The exchange to the right side is produced once the kettlebell passes behind the lifter's legs. This pattern is then repeated on the other side, and so on.

Key Components

Several important points should be emphasized:

- The kettlebell must move away from the body to maintain the loading.
- After the bell touches the free hand at the midline, make sure there is no unnecessary tension in arm or grip. Imagine the arm as a steel cable that serves only to transfer forces and link the kettlebell with the rest of the body.
- Engage explosively after exchanging hands and imagine you are trying to slam the kettlebell upward and against the other hand.
- Find your groove. Timing is a key component, and once it's achieved it's easily maintained.
- Start light until the coordination is there and you have no problem exchanging.
- The back must be kept flat in a neutral position without arching or bending. The key point here is folding at the hips to load the hamstrings rather than bending forward and stressing the lower back. At its maximum inclination, the torso should be at about a 45-degree angle, with the knees slightly bent. You should feel the effort in your glutes and hamstrings—not the lower back.
- If you feel you are using your lower back, review your swing technique.
- Breathe naturally without holding your breath. Because there is so much movement involved, it is impractical to do the Valsalva maneuver or tense up. Keep the weight relatively light with respect to your capacity.





Explosive hip extension drives the kettlebell up, and the lack of a rack position at the top makes the movement a continuous challenge.

The Figure-Eight-to-Hold Modification

A modification is also available: the figure-eight-to-hold. This exercise has been around for a long time and can be used by people who have trouble and load their backs with the swing.

The form is the same as for the rotational swing, but instead of swinging the kettlebell back, do a figure-eight pass between and around your legs. The figure-eight is characterized by a squatting movement versus the soft knee bend seen in the swing. Start with the bell in your left hand. Once the exchange from left hand to right hand takes place, continue the figure-eight pattern around the outside of your right leg but snap your hips open to move the bell upward and catch it by your left shoulder with the other hand.

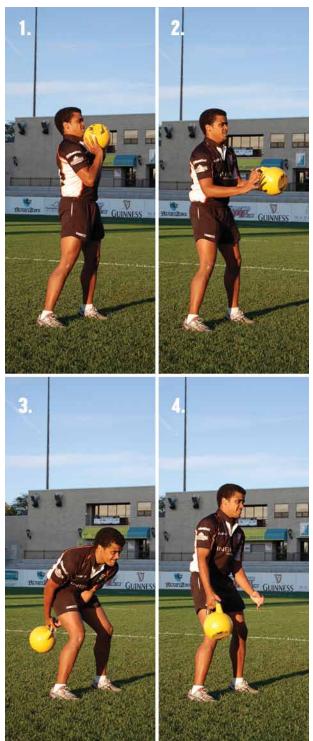
At this point you are standing holding the kettlebell with both hands at chest level on your left side. The right hand is on the handle and the left hand supports the body of the bell. Initiate a new figure-eight with the right hand by hinging at the elbow and dropping the kettlebell through your legs under the left side of your body. Exchange hands, snap your hips and glutes and bring the kettlebell up to your right shoulder and repeat.

Pointers

- Squat up and down with the movement, but only partially. The squat height is well above parallel, which helps keep the flow. This is not a squat exercise, per se. We use the movement to lower and lift the upper body safely.
- Keep the torso upright throughout the exercise. This is the major difference from the rotational swing. The figureeight-to-hold is a more controlled movement and puts less torque on your core.
- Take the kettlebell up with the rotational forces generated at the hip. The elbow will bend, but don't biceps-curl the bell to take it to chest level. It is a fast, crisp movement that's only interrupted when the bell reaches the chest.
- Breathe naturally.

The main differences are:

- There is no "swing" away from the body. The bell travels in a figure-eight around and through the legs. This is accomplished in a squatted position with the kettlebell close to the body.
- The levers are shorter. The bell doesn't separate much from the body and the arm bends at the elbow on top.
- The catch at the top allows for a resting point. If the lifter touches the kettlebell briefly at the top and continues, the intensity will be increased.



The figure-eight-to-hold is a modification that still involves fast hip extension. Fight to keep the torso upright throughout the movement, using an above-parallel squat to facilitate the exchange.

The Results

In our experience, the rotational swing has worked as an intermediate-level movement because the standard swing must be practiced to the point that the right muscles are being worked in the rotational version. The benefits we see from the movements are explosiveness, coordination and endurance. The rotational swing is continuous and can be anaerobic when done at the right pace with a weight that is challenging but not too heavy.

I'd like to emphasize that this movement is best for short, intense sets and should not be performed to failure due to its complexity. Once fatigue sets in, technique becomes faulty.

How much weight is used will depend on each person's ability. Starting very light and going up in small increments is what I recommend. How far up? That depends on the core and grip strength of the athlete. You should start as low as possible. The priority is constant movement with good technique.

I hope you enjoy practicing this new movement, and I believe it will help you improve unilateral explosiveness and strength. We consider it an important core exercise. Adding it to your routine will help you increase torque, resulting in improved performance on the field.







About the Author

Coach Nicolas (Nico) Rithner is the strength and conditioning coach for the Glendale Raptors. He has done several kettlebell clinics for the USA Eagles men's sevens men team and coaches individuals on daily basis. Rithner has presented for the National Strength and Conditioning Association and the U.S. Army, among others. He is a certification instructor under the International Kettlebell and Fitness Federation and judges at American Kettlebell Club sport competitions. Rithner is founder of the Association of Tactical Strength and Conditioning Instructors (ATSCI) and the Colorado Kettlebell Club. He lists Steve Cotter and Valery Fedorenko as the greatest influences on his kettlebell training methods. Rithner is also a Level 1 certified CrossFit trainer.

The figure-eight-to-hold involves a catch at the top of the movement, which will give athletes a chance to reset and concentrate on good mechanics before moving on to the rotational swing.

