

Principles of a Rehab Specialist: Kettlebells 101

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There is a lot of excitement and "buzz" about kettlebells in the weight room and the rehab setting these days, so I want to make sure everyone is familiar with this valuable piece of fitness equipment. A "kettlebell" or *girya* is a traditional Russian cast-iron weight that looks like a cannonball or bowling ball with a handle. The kettlebell goes way back: The term first appeared in a Russian dictionary in 1704. So popular were kettlebells in Tsarist Russia that any strongman or weight-lifter was referred to as a *girevik* or "kettlebell man."

Kettlebells come in several sizes/weights, from 5 lbs all the way up to 105 lbs. You can do standard weight-training exercises with kettlebells, including bench presses, overhead presses, curls, squats and rows. However, the unique value of kettlebells is derived from ballistic (fast exercise) work such as snatches, swings, cleans and jerks.

For those of you who don't know me, I really do prescribe exercise in my practice. Exercise is a natural drug. We need to deliver the right drug, at the right dose, at the right frequency to get the right result. Learning to make good exercise selections is purposeful and designed to decrease pain, prevent injury, decrease body fat, and increase lean muscle mass, strength, endurance, flexibility and overall athletic performance. Currently, I am using kettlebells in my small-group exercise classes to achieve the above goals.

I became intrigued by the claims of the advantages of kettlebells, so I decided I wanted to learn how to use them. I met a well-known kettlebell expert and took workshops from him. I also met with [Pavel Tsatsouline](#), the person responsible for popularizing kettlebells in the U.S. He taught me some of his stretching routines. Once I learned about kettlebells, I immediately realized the benefits to my rehab practice.

The All-in-One Workout Tool

Kettlebells develop all-round fitness and teach kinetic linking. For example, the kettlebell "swings" makes the deadlift functional. It gets you connected to the ground, draws energy from the ground and transfers energy through the shoulder. Kettlebells enhance awareness of posture, position, breath and grip.

Here is a short list of workout equipment the kettlebell replaces: barbells, dumbbells, belts for weighted pull-ups and dips, thick bars, lever bars, medicine balls, grip devices and cardio equipment. The good news is you don't need to spend thousands of dollars on expensive equipment. For most of your clients, all you need are two or three kettlebells of varying weights. They do not take up much space, so you can train in a small area. In the office, you can get a great workout in a limited space while improving strength, agility and stamina.

I especially like the cardio benefits clients can get from kettlebells. It's easy to use interval training principles (go slow, go fast, repeat). I have been teaching a twice-weekly exercise class for the past four years. When I first started the class, we used body-weight exercises, balance balls and bands. Each year since starting the class, I've introduced a more challenging tool or device. Last year I

added telescopic stick/band training to the class, which provided great variety and core work with bands. In January 2008, I started using kettlebells. The participants in my class are noticing more dramatic changes in body composition from kettlebell training than from anything else we've done in the past. Kettlebells develop shoulders, back muscles, arms, forearms, a cut-up midsection and strong legs.

Ballistic Drills

Ballistic kettlebell drills involve a snapping action of the hips, and I have found this movement targets the gluteals better than bridges and are as good as squats. Once my clients can perform 50 consecutive bridges in a variety of poses, they are ready for the kettlebell swings. Whatever rehab techniques you use in your office, I always teach and recommend that you start and concentrate on functional asymmetries (right/left differences). Accumulation of asymmetries over time can lead to significant injury.

Most of us have learned something from the Janda method of movement pattern analysis. Kettlebell exercises are movement-based, not just lifting-based. You're getting movement training with weight instead of weight training with single-plane movement. We're not just trying to hypertrophy muscles like a bodybuilder; we're trying to groove movement patterns throughout the body that are both strong and stable.

For sports, you need explosive hips, stable joints and quick hands. Kettlebell training develops those attributes. Most of the moves are done standing (bilateral or single-leg stance), and many moves are done lying supine. Multi-joint movements comprise most of the drills. Kettlebells complement core stabilization, body-weight exercises and telescopic stick/band exercises. Many are characteristic of work, sports, and activities of daily living. With kettlebells, we don't need machines, so we have more room in our workout areas!

Building Muscle, Losing Fat

With kettlebells, your clients will build muscular endurance when performing high repetitions, and with proper nutrition they will lose fat. Ballistic exercises are not the only exercises to help accomplish this; the Turkish get-up, press and windmill will develop hard midsections and increase shoulder flexibility and stability. Some of my favorite kettlebell exercises include the clean and press, front squat, renegade row, swings and the double clean (holding a kettlebell in each hand).

I love free weights and try to get most of my clients on a free-weight program, but you really can't do the above exercises with dumbbells. I think kettlebells are actually more challenging than dumbbells. Kettlebell handles are much thicker and will give you a vice grip in no time. Also, the off-centered weight of a kettlebell will force you to use more stabilizer muscles and work the targeted muscles through a longer range of motion.

Progressive, Whole-Body Training

Kettlebell rehab exercise progressions are the same as with other exercise programs. Progress from slow to fast - start a skill at a speed that allows success. Slow down to gain control, and then once it can be mastered, progress to explosive speed. Progress from simple to complex. Finally, build from stable to unstable: a client does not belong in single-leg stance, on a ball or on any unstable surface if they cannot stabilize on the ground with both feet first. Only progress to a less stable environment when the initial exercise is completely mastered and no longer provides a training effect.

I want my clients to get out of pain as quickly as possible so I can begin to train them for fitness.

Being fit is a means toward an end, not an end in itself. I use kettlebells to develop complementary motor skills and abilities, and couple effort with execution. Power, flexibility, agility, speed and endurance are the elements of athleticism. Each is trainable, but they must be trained collectively because they are parts of a larger whole. None is a separate entity or more important than another. Sometimes we need to train isolated muscles, but most of the time we train movement patterns, not individual muscles. Kettlebells help achieve this.

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