

# ROLL With It



Self-myofascial release is a simple (no machines!), easy way to decrease tension and pain, plus it may help you get more out of your Pilates practice.

by Jeanine Detz

**BOOK A SESSION WITH KATHLEEN KELLER, OWNER OF KELLER METHOD PILATES & REHABILITATION IN CALGARY, ALBERTA, CANADA,** and you might spend as much time rolling on small rubber balls as you do on a Reformer. Keller, who has multiple Pilates certifications, including STOTT® Pilates, Polestar and The Method Center (Rehab Pilates), believes that self-myofascial release—applying pressure to the tissues that surround, support and connect muscles—is an ideal companion to Pilates. She’s been practicing what she preaches for more than two decades, since she first took a body-rolling certification program led by Yamuna Zake.

“The techniques were profound and I knew that teaching this to my clients would be a real game changer,” says Keller. “I practiced on myself religiously and when I could feel real improvements, I began to teach my clients.” Now a rehabilitative Pilates practitioner, Keller has improved upon and built on her self-myofascial release methods over the years, and now customizes the moves based on each client’s needs.

Since Keller took that Yamuna certification class 20 years ago, the popularity of self-myofascial release has soared. It’s now a mainstay in athletic training plans and physical therapy, and has spawned many successful brands such as Yamuna USA and Yoga Tune Up. And with good reason: Self-myofascial release is accessible, requires very little gear and has many proven benefits.

### SCIENCE LESSON

Self-myofascial release (SMR) is like a deep-tissue massage you perform on yourself using tools like balls and rollers. “Fascia” refers to all the connective tissue beneath the skin that attaches, surrounds and separates muscles and organs. “Myofascia” refers to muscles (like the pecs) and their surrounding fascia. So SMR by definition is a technique that helps loosen up muscles and its connecting fibers.

Muscles have two kinds of receptors: a Golgi tendon organ and a muscle spindle. The first tells the muscle to relax, and the second signals the muscle to contract. When you apply pressure to the tissues surrounding a muscle, it fires up the Golgi tendon organ, messaging the tissue to (you guessed it) relax.

### PRESSURE PERKS

SMR has many proven benefits. When performed regularly, research shows it increases short-term

range of motion and decreases delayed-onset muscle soreness (the dull pain you feel a day or so after a challenging workout). Studies show it’s also very effective for pain management. “SMR can alleviate chronic pain by reducing stiffness, fatigue and widespread pain intensity while increasing range of motion,” says Jill Miller, author of *The Roll Model* and co-founder of Yoga Tune Up Fitness.

Plus, when your body feels better, your mind usually follows—so it’s not surprising that SMR may give you a mental boost too. “Using SMR can help stimulate the sensory cortex in the brain,” says Keller. “This creates a waterfall effect of feel-good hormones, better lymphatic drainage, and more relaxed muscle tone throughout the body, by decreasing perceived threats in the brain.”

### A MAGICAL MATCH

While Pilates has long been the gold standard for correcting muscle imbalances, SMR is an ideal partner in the fix, since it breaks up fascial adhesions and restrictions. “I use SMR for release and Pilates for strength—the two go hand-in-hand,” says Keller. For example, take the forward head and rounded shoulders posture: “To help correct this, open the front of the body with SMR,” says Keller. “And do specific Pilates exercises to strengthen the spine muscles and shoulder girdle stabilizers.”

The partner power goes beyond posture, though. Studies prove that SMR provides a short-term bendy boost, which might help you reach a few inches farther in Saw or finally perform a Single Straight-Leg Stretch without wincing. “The increase in my clients’ flexibility levels makes many Pilates movements much more accessible to them,” says Keller. “Plus, [SMR] techniques hone good body awareness, coordination and balance skills, which are essential in Pilates.”

### GET IN GEAR

Ready to try SMR? You’ll need some simple tools, like balls or rollers. But ditch the instinct to use anything super-firm, like a lacrosse ball or PVC pipe. “Your goal is to soothe your tissues, encouraging them to return to a restful tone that’s relaxed and balanced, yet ready for action,” says Miller. “Harder tools can cause muscles to brace, increasing inflammation and stress hormones and possibly even causing injury.” One Korean study found that gear that provides gentle pressure—like rubber balls—reduces tension more than firm items do.

BELOW: METHOD TEACHER KATHLEEN KELLER HAS INCORPORATED SELF-MYO-FASCIAL RELEASE INTO HER PILATES SESSIONS.

MAN FOAM ROLLER PHOTO BY BIGSTOCK; KATHLEEN PHOTO COURTESY OF KATHLEEN KELLER



Miller's rolling mantra is "it doesn't have to **work to hurt**," so she relies on an SMR toolkit that includes a variety of solid and hollow rubber balls (see "Tools of the Trade," below.). Keller also swears by a softer approach: "I have a definite bias toward inflatable balls, where you can control how much air is in them," she says. "They have more grip, so they can really grab your soft tissue."

So are firm foam rollers a total no-no? Not necessarily. "They can break up some myofascial adhesions and generate blood flow, but they can't find their way into the little nooks and crannies of your myofascia," says Keller. Still, she uses a roller as a surface to support an area while working on a different body part or to provide sustained compression on a larger body part.

Bottom line: Variety is key. You'll likely want tools of different sizes and densities to target smaller and bigger areas; and different tools will mix up the sensation (just like when a massage therapist uses her thumb as opposed to her forearm).

### TARGET TRAINING

Want to dig deeper? Check out the instructional videos at [yogatuneup.com](http://yogatuneup.com) and downloadable tutorials at [yamunausa.com](http://yamunausa.com). You can perform SMR as a warm-up to Pilates (to take advantage of those flexibility benefits) or on its own. Before a Pilates session, include moves that target the largest muscles of your body, like the glutes and hamstrings, your core, as well those opposite the muscles you're strengthening.

Performing SMR to help alleviate discomfort? Don't necessarily focus only on the area causing the ouch. "It's important to look at the peripheries of where you're feeling pain," says Miller. "Often the muscles that are being stretched are the ones that send signals to the brain, but it's the hyper-contracted ones that need to be manipulated and restored to an appropriate length." For example, performing SMR on the neck and chest muscles

may alleviate upper-back pain; and rolling out your calves can decrease knee pain.

Don't be afraid to move beyond major muscles either. Keller has found that performing SMR on the serratus anterior (chest muscles) and obliques, followed by the diaphragm, improves breathing. "It helps relax the startle response in the viscera (organs), which allows the diaphragm to move more freely," she explains. "Since Pilates is a breath-focused practice, this is paramount."

Once you've zeroed in on a target area, place either a ball or roller between the muscle group and a hard surface, and apply pressure. You can hold still, applying constant pressure; slowly move, so the tool slides around; or move the tool with your hand, so it grabs the fascia. By varying how hard you press and/or the direction you move, you can work tissue close to the skin's surface as well as deeper in the body.

When you're performing SMR, keep these two rules in mind: Don't apply pressure to bones and stop if it hurts. (You're trying to calm your muscles, not fire them up!) The National Academy of Sports Medicine recommends focusing on a targeted area for 30 to 90 seconds, but there's no rulebook—you may find it takes a bit more to get some muscles to loosen up. And that's where the last part of SMR comes in: patience.

Aim to do it at least twice a week, and know that it may take time to notice a payoff. "It took me several months of consistent practice to achieve long-lasting change and results," says Keller. "You're slowly hydrating your myofascia and creating a new matrix of healthier myofascial cells—for cellular level myofascial change to truly happen, it takes time, practice and commitment." But like all positive changes, it's worth the wait!

Interested in teaching clients how to perform SMR? Take a workshop, such as the Fascial Movement Foundation Course offered by Merrithew™ ([merrithew.com](http://merrithew.com)). **PS**

## 3 Moves to Try

Pros like Jill Miller swear by self-myofascial release that homes in on specific—and often overlooked—areas. Here, a few of her go-to moves.

### HIP RELEASE

The hips are one of the most overworked areas of the body. Zero in on recovery with this move.

Lie faceup with your knees bent and feet on the floor. Rotate your pelvis slightly to the left and place two balls under your left outer hip (you should feel soft tissue, not bone); lower your left knee toward the floor. Inhale and contract your glutes; exhale and release. Repeat three times. Next, move the balls a quarter-of-an-inch higher, toward your sacrum. Repeat the inhale-exhale sequence three times. Move the balls a quarter-of-an-inch higher again and repeat the inhale-exhale sequence three more times. Then, switch sides and perform the entire series on your right hip.

### VISCERAL BREATH WITH BALL

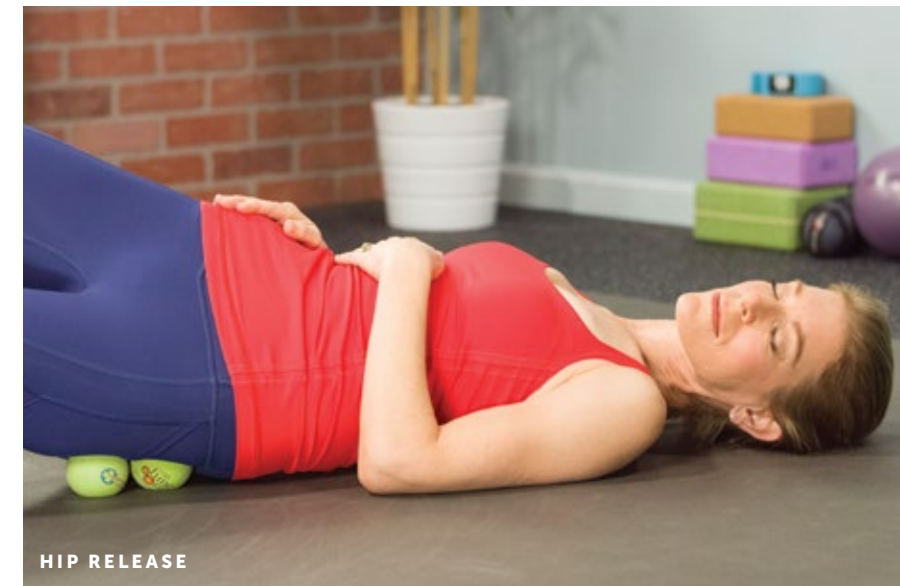
During this release, the ball helps massage the obliques, lats and quadratus lumborum; it also lifts and cradles your visceral organs.

Lie on your right side with your knees bent and stacked and place a small inflatable ball under the right side of your waist. Rest your head on your right arm and extend your left arm at your side. Inhale for four counts, then hold your breath for four counts as you contract your abdominal muscles; slowly exhale for eight counts. Repeat for two minutes, then perform the entire sequence on your left side.

### BIG TOE ON THE GO

To relax your foot muscles, roll a ball under one foot at a time while standing, then perform this release.

Stand with your right foot on a ball and roll your foot back until only the base of your big toe is on it, pointing up. Place your left foot in front of right, about a foot apart. Shift your weight to your forefoot, raising your heel as if you're about to take a step forward. Return to the starting position and repeat twice more. Then repeat on the opposite side.



HIP RELEASE



VISCERAL BREATH WITH BALL



BIG TOE ON THE GO

## TOOLS of the Trade

The only thing you really need for SMR: something to provide the pressure. Here, pro picks to consider.



### ROLE MODEL STARTER KIT

With six balls of various sizes and firmness—including a 7-inch inflatable orb—this collection is ideal for working on your entire body (\$55; [tuneupfitness.com](http://tuneupfitness.com)).



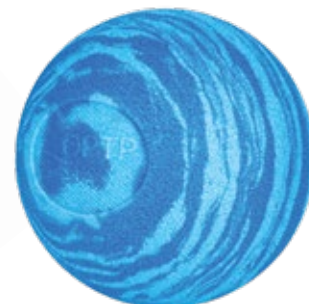
### SPRI SPONGE BALL

This 9-inch ball is an optimal size for SMR on the core, plus it can do double-duty in Pilates sessions, too. Also try it between the knees or under the tailbone during supine moves (\$11; [spri.com](http://spri.com)).



### GAIAM RESTORE COMPACT FOAM ROLLER

The small size of this cylinder makes it perfect for supporting or homing in on one arm or leg; and the scaled pattern prevents slipping (\$20; [gaiam.com](http://gaiam.com)).



### OPTP PRO SOFT RELEASE BALL

This 5-inch massage ball is large enough to roll out big muscle groups, but petite enough to target smaller areas. Its soft compression allows for gentle rolling and stretching (\$11.95; [optp.com](http://optp.com)).