

The Root of All Action

Tone your pelvic floor for a solid foundation,
a supple core, and a growing practice

by Suzanne Ausnit and Joe Miller

Most yoga practitioners have heard of the pelvic floor, but beyond having a vague sense of its location, its geography is terra incognita.

Instructions about mula bandha or tucking the tailbone often confuse rather than demystify the issue. But with a simple road map, you can learn your way around the pelvic floor and create a strong foundation and supple core, with benefits both on and off the mat.

The pelvic floor, which is the muscular base of your abdominal cavity, helps support your organs. It plays a role in breathing, as it works in coordination with the respiratory diaphragm and the belly muscles, which form the abdominal walls. In conjunction with these belly muscles, your pelvic floor contributes to spinal support and posture and is functionally, and in some cases fascially, connected to several hip muscles. So, the way we use our legs also plays a part in its function.

Tour of the floor

We'll start our pelvic tour with the external geography: Picture the area framed by the two sit bones (the bones you sit on, called the ischial tuberosity), the pubic bone (pubis), and the tailbone (coccyx). This is the area of the perineum. Not far beneath the skin here, several superficial muscles, including those around the sexual organs and the anal and urinary sphincters, contribute to pelvic support in a way that's similar to the facade of the building—the real support structure lies deeper.

These deeper muscles form the true pelvic floor, or pelvic diaphragm. The levator ani muscles (the name

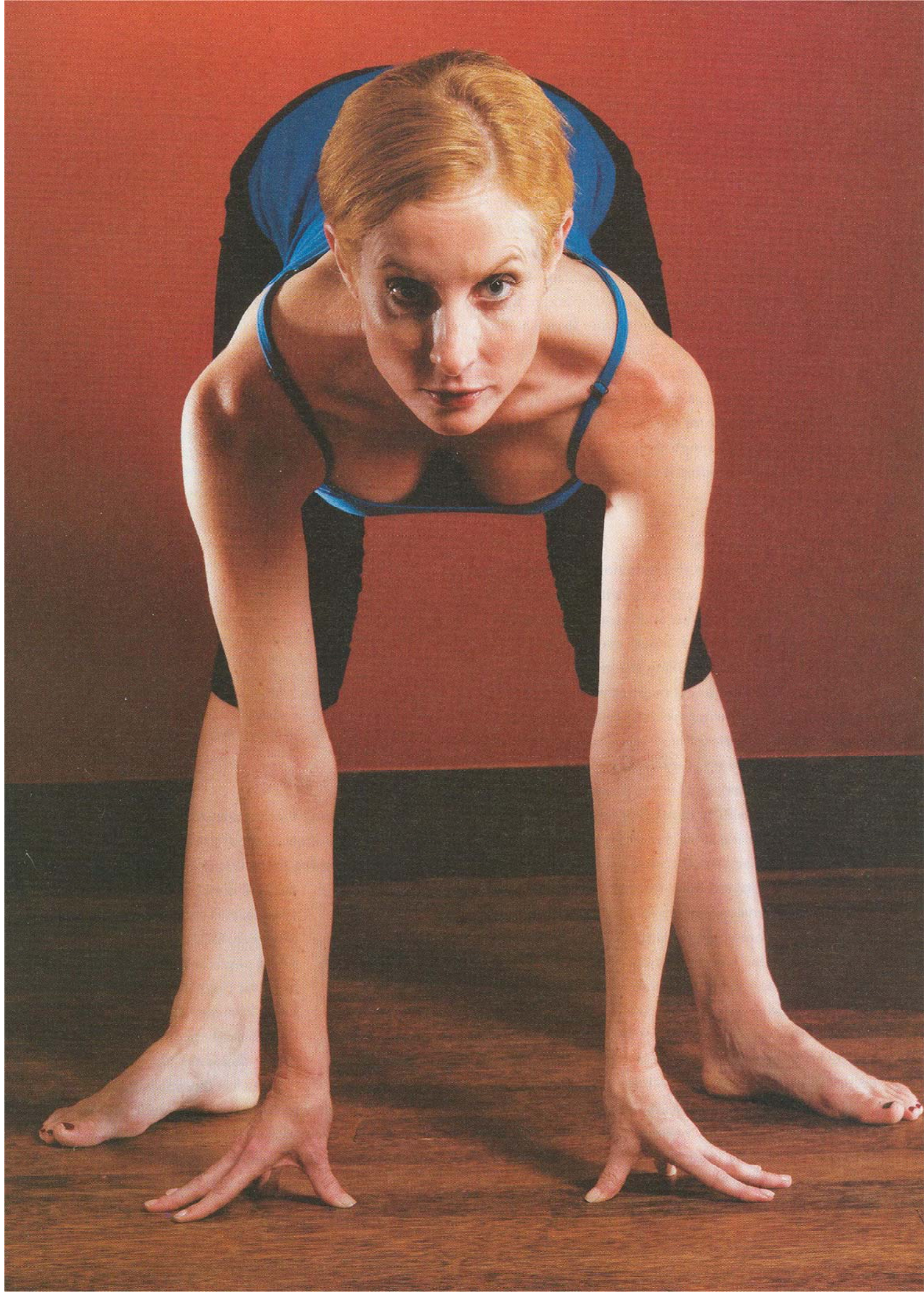
literally means “lifter of the anus”) form a hammock that supports the bladder, uterus or prostate, and rectum. These muscles form a series of loops between the tailbone and the pubic bone and attach to the obturator internus, one of the deep external rotators in the hip. Together, the pelvic floor and perineum play a role in bowel and bladder function as well as orgasm; but it is the deeper pelvic floor that is primarily involved in postural support and breathing.

The pelvic floor works in sync with the transversus abdominis, or TA (the abdominal muscle that wraps like a girdle around the belly), and the multifidi (deep spinal muscles). When the pelvic floor contracts, the TA helps support the spine. If your core is healthy, this coordinated action happens automatically, whether you're lifting into Bakasana (Crow Pose) or moving a sofa. But if your core is weak or overly tense, your spine may be more vulnerable to injury.

Demystifying mula bandha

So, is this the mysterious mula bandha we're describing? Almost, but not quite. Mula bandha, or the “root lock,” is a conscious action, a dynamic engagement and release of the pelvic floor in relationship to the movement of the diaphragm. By engaging in mula bandha, you create postural support while allowing your breath to move freely. More subtly, mula bandha initiates an energetic lift along the entire length of the spine.

Normally, when the diaphragm lowers on your inhalation, your pelvic floor relaxes and moves down,



and when the diaphragm lifts on your exhalation, your pelvic floor follows suit. When you engage mula bandha, however, your pelvic floor actively lifts on your exhalation. You may choose to release it on your inhalation, or, for greater postural support (when you're doing a challenging hand balance, for instance), keep it lifted, resisting the downward movement of the diaphragm. If you restrict the space in the pelvic floor, you need to create space elsewhere for the breath; otherwise, it will be tense and constricted. As long as there is no excess tension in your upper abdomen, your diaphragm will lift the ribs, creating a chest breath rather than a belly breath. When you're properly doing mula bandha, your breath will still feel effortless.

Off the mat, you can engage mula bandha whenever you need more support for the spine. Whether you're reaching for a dish on a high shelf or pulling a stubborn weed in the garden, finding it may prevent you from throwing your back out.

Keeping your balance

In any case, though, you should not hold your pelvic floor in a perpetual contraction. As with all muscles, it must be able to both contract and release. Some of us tend to grip the pelvic floor; others may have too little tone. Neither is healthy. Striking the proper balance may seem simple, but for many it requires professional help. Indeed, there is a growing specialty within physical therapy that treats pelvic floor issues—issues that can develop into very serious problems.

A weak pelvic floor can lead to prolapsed organs, incontinence, or inability to reach orgasm, as well as loss of support for the spine, breathing difficulties, neck and back pain, or sciatica. Treating a weak pelvic floor is more straightforward than dealing with excessive tension, say physical therapists. Core-strengthening can generally remedy the situation, but choosing the right kind of core exercise is crucial. "The big misconception is that if you go to a killer abs class everything will be OK," says Leslie Howard, a San Francisco-based yoga teacher who leads workshops about the pelvic floor. "In fact, you're only putting more pressure on an already weak area by strengthening the front and not the bottom. Think of the body as a container for your organs like a tote bag, but the bottom of the bag has a few loose

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Pelvic stress

While working with the pelvic floor is a new and growing specialty among physical therapists, physicians are still catching up. "Pelvic pain is not recognized formally within medicine," says New York-based urologist Dr. Elizabeth Kavalier. "Gynecologists treat cervical cancer. Urologists treat prostate cancer. But no one has taken ownership of pelvic pain."

Only in the last decade has research revealed correlations between musculoskeletal problems and pelvic pain. The data shows that one in five Americans—men included—will experience some type of pelvic floor issue; and by the age of 75, 80% of women have some form of pelvic prolapse (sinking of the pelvic organs).

What causes pelvic dysfunction? It can be anything from a bad fall on your tailbone to poor posture or prolonged sitting. "We're turning into jellyfish from sitting for long hours and not using our postural and antigravity muscles," explains physical therapist Anne Duffy. Other causes may include episiotomies and hysterectomies (or for men, prostatectomies), urinary tract and yeast infections, or constipation. Even drinking too much water can lead to excessive urine production and trigger pelvic pain.

Whatever the immediate cause, life stress plays a major part. "If you can't turn off tension, it may manifest in urinary problems because when you're stressed, you unwittingly clench even more," Dr. Kavalier points out.

Whether it's lack of tone or too much, the therapists agree that yoga's emphasis on breath, relaxation, and integrated movement can work wonders for the health of the pelvic floor and organs. Healthy breathing acts as a pseudo-massage for the organs housed in the pelvis, helping digestion and elimination.

"Everybody can benefit from pelvic fitness," says Dr. Kavalier. "It should be part of general health maintenance."

stitches. It doesn't matter how strong the sides of the bag are if the bottom is about to fall out!"

Overly gripping the pelvic floor is equally problematic and may lead to trigger points, spasms, and chronic pain. **Dr. Pamela Morrison, DPT, a New York City-based physical therapist specializing in pelvic floor issues, terms these folks "clenchers" and points out that the same people may habitually clench their jaws too.**

Physical therapists treat pelvic floor issues with exercises, behavior modification, relaxation techniques, and biofeedback. Yoga, with its emphasis on healthy breathing, awareness, and core-strengthening can also help build the appropriate kind of strength and relaxation.

For those who clench, learning to drop the pelvic floor is essential. A good time to practice is when you have to go to the bathroom, explains New York City-based physical therapist Amy Stein, MPT, who also specializes in the pelvic floor. "You need to recapture what it feels like when the flow begins and your muscles finally relax and let go—that's dropping the pelvic floor," she says. Dr. Morrison suggests practicing what she calls a "bulge maneuver," a minor bearing down, throughout the day.

Unfortunately, most people don't know when they're gripping the pelvic floor. To bring awareness to this area, some therapists recommend doing Kegel exercises (intense contractions of the pelvic floor), followed by relaxation. "The hardest thing is to teach people to relax because it's teaching them to do nothing," explains physical therapist Anne Duffy, MA, PT, another New York City-based pelvic floor specialist. "If you get them to first contract the muscle, then let it go, they can usually do it." You can't overestimate the importance of relaxation when it comes to the pelvic floor. "Patients need to do a meditation or relaxation practice daily, like they're taking a pill," says Duffy.

Janet Hulme, MA, a physical therapy and educator in Missoula, Montana, has developed a system called physiological quieting, which incorporates elements of Savasana and diaphragmatic breathing, along with biofeedback


techniques using hand-warming. When everything else relaxes, the pelvic floor follows suit, according to Hulme. "It's a matter of re-educating and rebalancing the entire autonomic nervous system."

Hulme emphasizes the integration of the pelvic floor with the legs and hips. She describes the pelvic floor as a rotator cuff: a series of muscles that interconnect with

each other and never work alone.

"The pelvic rotator cuff is a muscle system in which all the muscles work together—never separately—and are stimulated by the midline rotation of the hip," she says. "When you use the legs symmetrically, rotating your hips out on the inhale and in on the

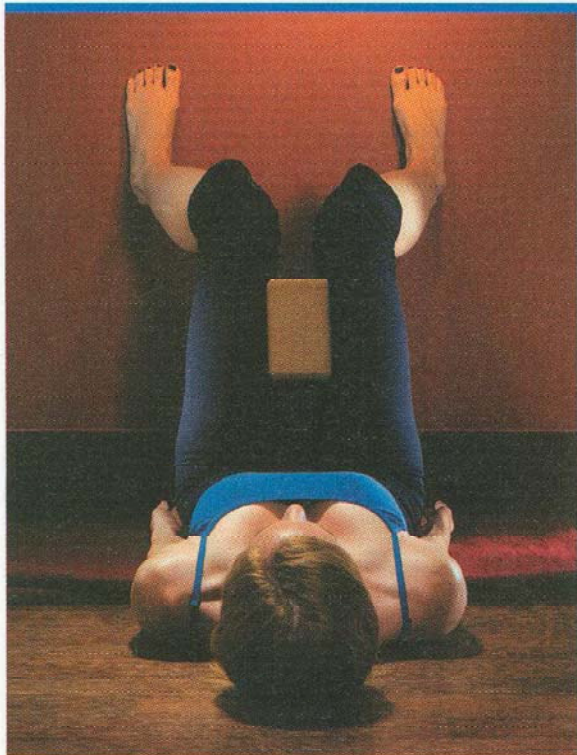
exhale, you automatically lift the pelvic bowl, close the bladder and bowel outlets, realign the sacroiliac and sacral-lumbar joints, and optimize standing balance. Once you've activated the short rotators of the hip, then you've automatically activated every muscle in the whole rotator cuff."

So as all muscles activate, your yoga practice elevates... and so does the health of your pelvic floor. 

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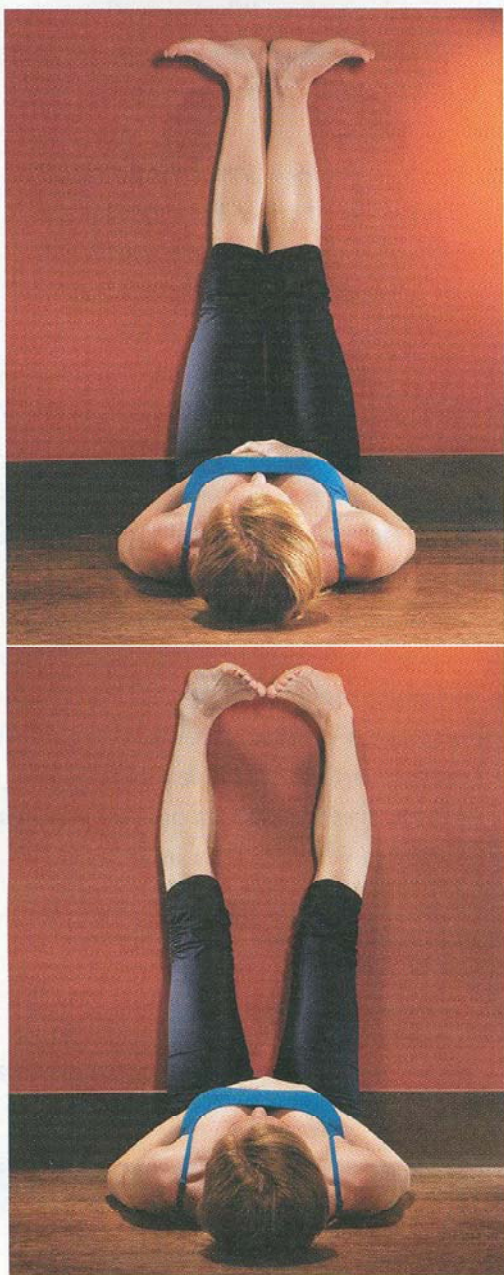


Pelvic Practice

Exploring the geography

Sensing the distinctions between the front and back of your pelvic floor will help build your awareness of this area.

- Lie on your back with your feet on a wall, knees bent to 90 degrees. Place a folded blanket under your hips to reposition your organs and decompress your spine. With a block between your knees, internally rotate your thighs so your feet are wider apart than your knees. Squeeze the block, and you'll sense the front of the perineum drawing in.
- Remove the block, and buckle a strap around the area just above your knees, keeping them a little wider than your hips so your toes turn out slightly. Press your knees into the strap as you draw the heels isometrically toward each other. You'll feel the back of the pelvic floor in action.
- Then, position your feet on the wall with your knees hip-distance apart. Isometrically, draw your heels and inner thighs toward each other. Sense how your pelvic floor engages.
- Draw your left foot off the wall and press into your left inner knee with your right hand. Feel the engagement of the pelvic floor. Repeat on the other side.



Pelvic rotator cuff

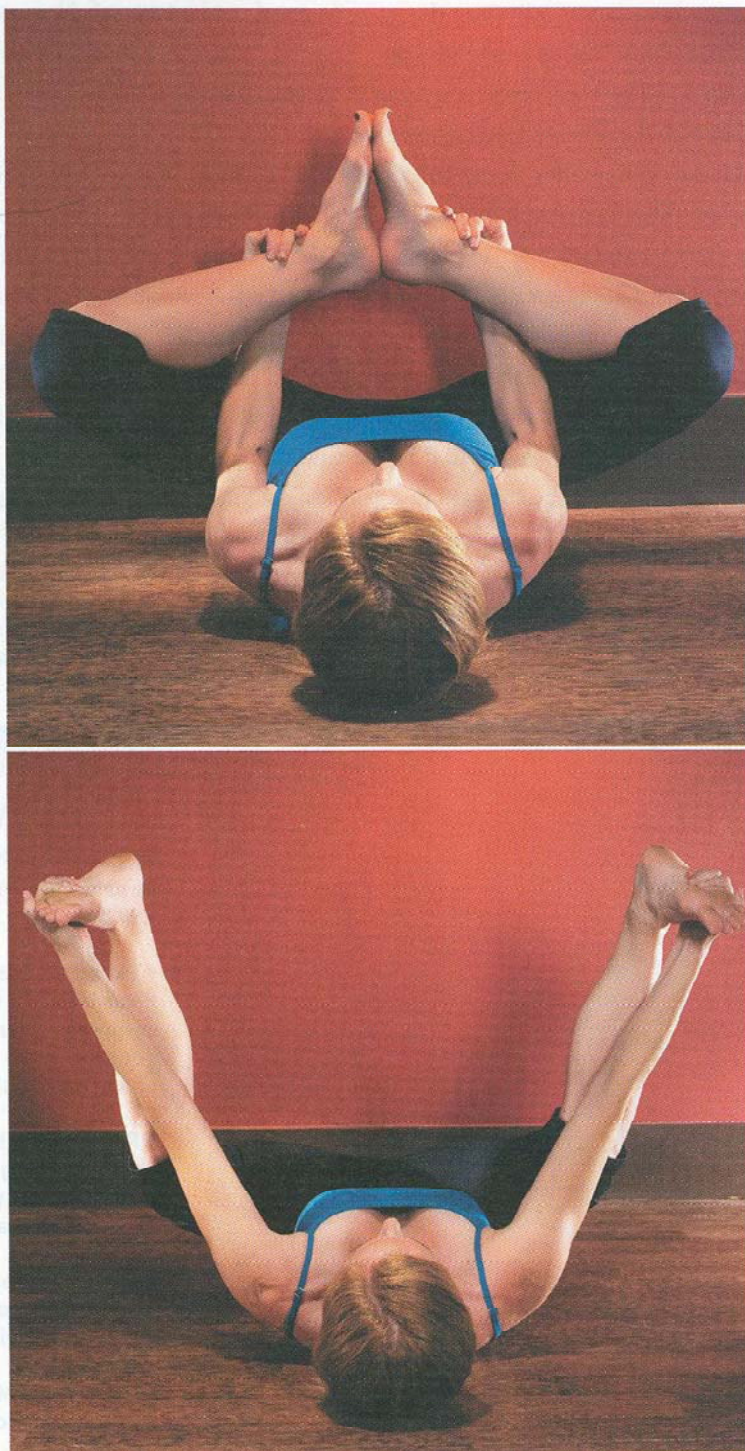
Physical therapist Janet Hulme suggests this series as a way to integrate your pelvic floor with your legs, hips, and breath. Contracting the external rotators of the hip on your inhalation and the adductors on your exhalation will stimulate the pelvic floor to engage during both phases of the breath. Once you've mastered the concept, you can apply it in many poses, such as Downward Facing Dog, Boat Pose, and Cat/Cow.

- Lie on your back, legs extended. On your inhale, rotate your hips out so your heels come together and your toes point out. On the exhalation, rotate your hips in so your heels widen and your toes touch.
- Lie on your back with your legs straight up in the air, or resting against a wall. On your inhale, rotate your hips out. On your exhale, rotate your hips in.

Supine hip openers

Because many hip, lower back, and abdominal muscles are directly or indirectly connected to your pelvic floor, it is important to stretch these muscles.

- Lie on your back with your legs in the air, knees bent to 90 degrees and touching, feet apart. Inhale and open the knees, bringing the soles of the feet together in Baddha Konasana. Exhale, back to the initial position. Repeat for 10 breaths.
- Lie on your back, arms by your sides, with your knees drawn in toward your armpits, feet apart. On your inhale, draw one knee into one armpit. On your exhale, swivel your hips to the other side, drawing the opposite knee into the armpit. Repeat for 10 breaths. Repeat the series, this time extending and externally rotating the opposite leg.

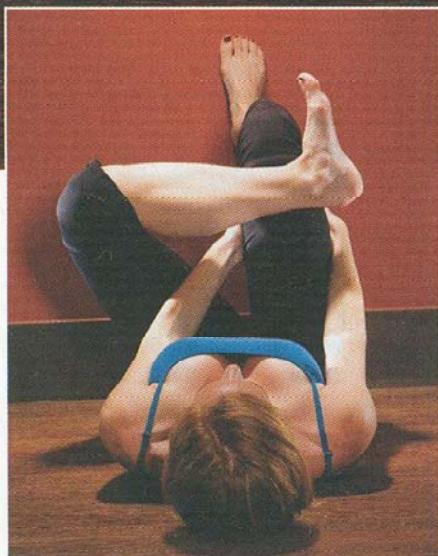




**Supine Parivrtta
Trikonasana
(Revolved Triangle
on the floor)**

The belly and inner thighs work in unison here, making this an easy way to access the pelvic floor

- Line up your pelvic bones so one hip is over the other. Bring your inner thighs toward each other strongly, and draw your lower belly muscles up toward your solar plexus. If you can't hold your foot, use a strap. And if your foot does not rest easily on the floor, use a block.



Hip rotator stretch at wall

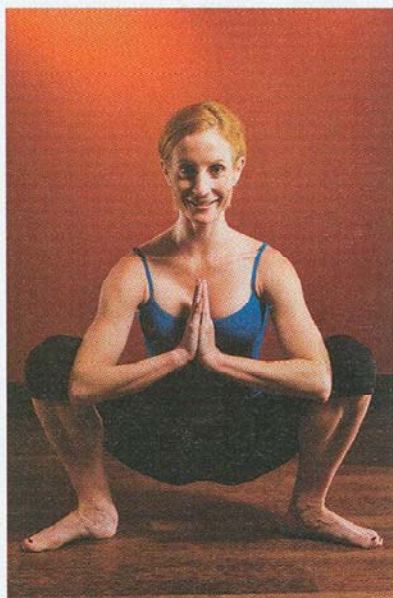
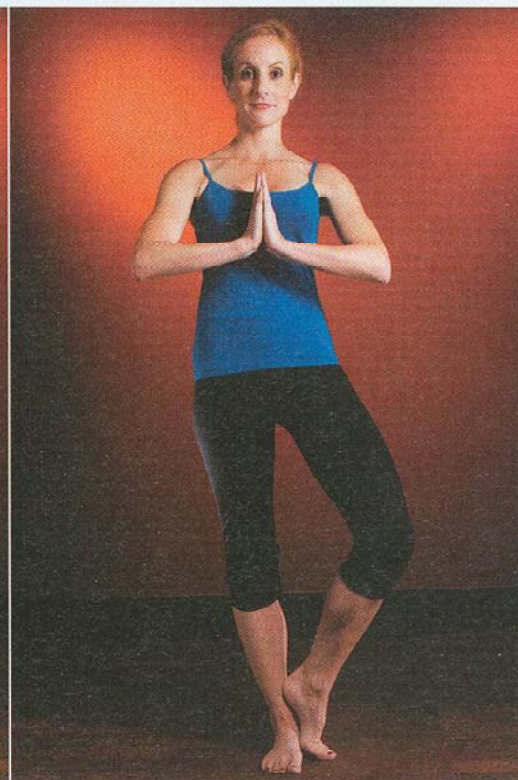
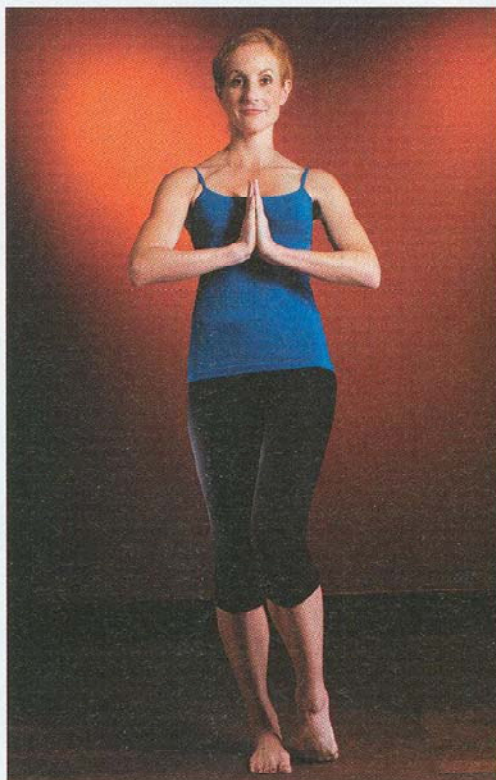
This pose deeply stretches the piriformis, one of the external rotators of the hip.

- Lie on your back, with your right leg up the wall.
- Cross your left ankle just above your right knee and slide your right foot down the wall until you feel a stretch in the left outer hip.
- To intensify the stretch, flex your right foot and draw the toes toward your chest. To create more space in the left hip, bring your left hand around your left thigh and draw your sitting bones toward the wall. Repeat on the other side.

Tree series

This series will teach you to engage the pelvic floor to help maintain balance.

- While standing, inhale and draw your right foot up your left inner shin for an easy Tree Pose. Exhale and slide the toes toward the left outer ankle, drawing the right knee towards the midline. Repeat other side.
- Bend your right knee, pointing the sole of the foot back. Inhale, rotate the knee out away from the midline so that the right heel points to the left. Exhale, internally rotate the thigh, drawing the knees together and the right heel towards the right. Repeat on the other side.



Squat

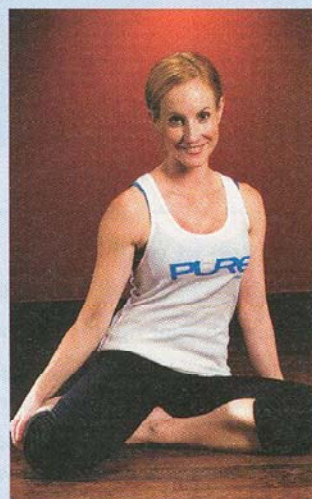
Use this pose to explore both engaging and releasing the pelvic floor.

- To release the pelvic floor, visualize the breath descending and opening the nether regions as you inhale. Let your exhale be passive. To tone the pelvic floor, make your exhalation active, drawing the perineum up and squeezing your buttocks while engaging your inner thighs.

Transversus march

The transversus abdominis muscle acts as a girdle around the abdomen and works with the pelvic floor and multifidus (a deep back muscle) to create postural support.

- To feel it, lie on your back with your knees bent and feet on the floor. Bring your hands to your lower belly and simply laugh, which engages your transversus.
- In this position, lift one foot a few inches on your exhale and lower it on your inhale. Keep your spine neutral, being careful not to flatten or overarch your lower back.
- Walk your feet out a few inches further from your hips and repeat.
- Bring your feet back in, and repeat the same action with both legs together, pressing a block between your inner thighs.



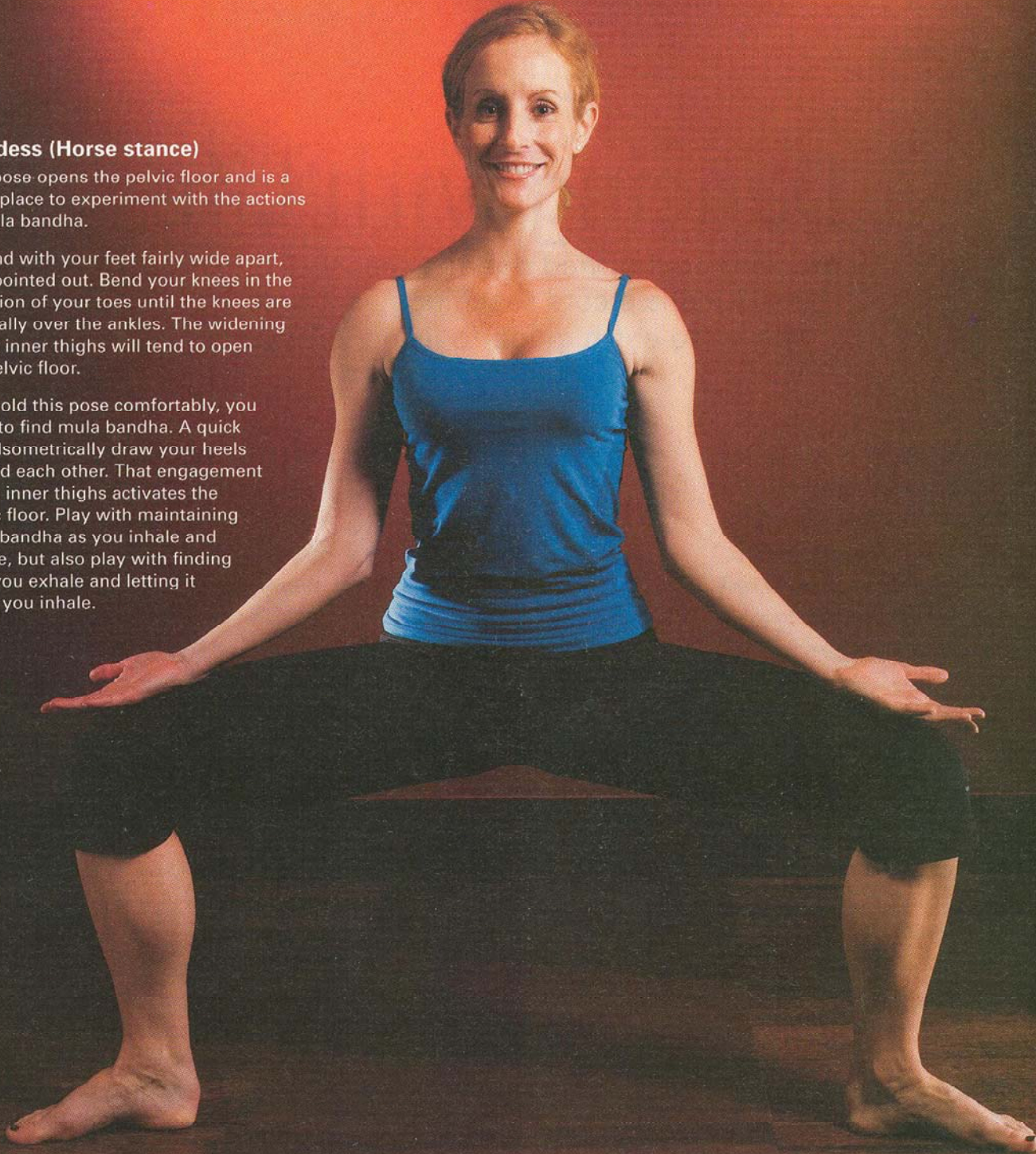
Pictured left, and throughout this story, is yogini Michelle Demus, who just happens to be the program director for the gorgeous, new Pure Yoga studio, also shown on these pages.

Known all around the world for its superior programming and excellent teachers, the beautifully designed New York City center offers over 100 classes per week in styles ranging from Ashtanga to Yin Yoga, from Hot to Vinyasa Flow to Anusara, as well as ongoing workshops and special events. Dedicated to presenting the best yoga experience possible, Pure creates the perfect environment for the modern yogi to learn, be inspired, and evolve. There are beautiful lounging areas and practice spaces, and don't miss the fab Italian-designed showers! There are plenty of them so you can luxuriate for as long as you like for the perfect after-practice restoration. For more information, visit pureyoga.com

Goddess (Horse stance)

This pose opens the pelvic floor and is a great place to experiment with the actions of mula bandha.

- Stand with your feet fairly wide apart, toes pointed out. Bend your knees in the direction of your toes until the knees are vertically over the ankles. The widening of the inner thighs will tend to open the pelvic floor.
- To hold this pose comfortably, you need to find mula bandha. A quick trick: Isometrically draw your heels toward each other. That engagement of the inner thighs activates the pelvic floor. Play with maintaining mula bandha as you inhale and exhale, but also play with finding it as you exhale and letting it go as you inhale.



Kegel exercises

Often prescribed by physical therapists, Kegel exercises bring blood flow, nutrients, and oxygen, and help pump out lactic acid from over-contracted muscles. A Kegel exercise is simply an isolated contraction of the perineum. The action is often described as trying to stop the flow of urine midstream. You can practice anywhere, whether sitting on a bus or standing in line at the supermarket.

- Do them in two ways: with long holds of 10 seconds and short holds of two seconds. The first engages the slow-twitch, postural fibers, which comprise 70-80% of the pelvic floor; and the second turns on the remaining fast-twitch fibers.
- Try to isolate the right or left side of your pelvic floor. For example, if you're sitting in a chair, try to draw your right sitting bone toward the midline. Then, repeat with the left. Which side is stronger? Practice the same exercise to strengthen the weaker side.
- To experiment with Kegel exercises in asanas, yoga-core guru Jill Miller suggests you simply hold the contraction while breathing in and out to create more pelvic floor support. However, she is careful to distinguish Kegels from mula bandha. "Kegels are a squeeze/release action that happens in isolation," she says. "You're not doing them to connect to the rest of the body. Mula bandha, on the other hand, very specifically harnesses apana energy (the energy of the exhalation) for the practice." In any case, the pelvic floor is recruited automatically, Miller notes, when the abs and the inner thighs are engaged correctly.

You can also add a light Kegel with each exhale to your regular Kapalabhati practice. This should feel like a fluttering of your pelvic floor, not a tight squeeze, and prevents inadvertent bearing down on the pelvic organs.