

Forget Six-Pack Abs

By Fernando Pagés Ruiz

Have you ever stood at the mirror, sucked in your stomach and thought, “I wish I could look like this all the time?” If you grew up in the United States, your answer is probably yes. Madison Avenue has sold us the notion that taut abdominals are the quintessence of health and beauty. Rock-hard bellies are used to promote everything from underwear to cereal.



But if you yearn for the rippled look of “six-pack” abs, consider what you may sacrifice to obtain it: That look might cost you flexibility and freedom of movement. Overdoing abs exercises can lead to a flattening of the lumbar curve, creating a weakened spinal structure. “We’re even beginning to see hunchback conditions because of excessive abdominal crunches,” claims biomechanics and kinesiology specialist Michael Yessis, Ph.D., author of *Kinesiology of Exercise* (Masters Press, 1992).

Society’s obsession with flat tummies has psychological consequences too. “We want to control our feelings, so we make our bellies hard, trying to ‘keep it together,’” says yoga teacher and physical therapist Judith Lasater, Ph.D., author of *Living Your Yoga* (Rodmell Press, 2000). Soft bellies appear vulnerable; abs of steel don’t. But the traditional military posture of attention—chest out, belly in—not only makes soldiers appear hard and invulnerable, it also foils their independence. Soldiers are supposed to follow orders, not intuition. Yogis may be warriors too, but we want to shed armoring. Tension interferes when trying to access the deeper wisdom that rests in the belly. As yogis, we require a supple abdomen in which we can sense the stillness of our being.

Healthy Bellies

“We’re a culture afraid of the belly,” laments Lasater. In our societal obsession with abdominal minimalism, we often lose sight of the true nature of this crucial part of the body. Abdominal muscles assist breathing, align the pelvis, flex and rotate the trunk, keep the torso erect, support the lumbar spine, and hold in the organs of digestion. The crunch-obsessed fitness buffs are partly right, though: Strong, toned muscles at the core of your body support good health. But that does not mean we should cultivate a permanent navel cramp, hold our breath, and stand like soldiers on parade. Take a look at the Buddha, perhaps the world’s best-known yogi. In many paintings and statues, he doesn’t have “abs of steel.” Yogis know that chronically tight abdominals aren’t any healthier than chronically tight hamstrings or back muscles. Yoga can help you develop the perfect balance of abdominal strength, suppleness, relaxation, and awareness.

Of course, different yoga teachers approach abdominal exercise in different ways. Some approach the belly primarily through sensory exploration, helping us become sensitive to all the layers of muscles and organs; others use standing poses, employing the arms and legs to strengthen the abdominals in their function as stabilizers for the limbs. Still others stress motion, emphasizing that the value of abdominal muscles lies in their ability to move and change shape. But all of the yoga teachers I spoke to highlighted four themes in common: (1) Movement springs from the body’s center of gravity just below the navel; (2) asanas train this core to act as a stable base and fluid source of movement; (3) abdominal muscles should be toned but not tense; (4) the first step in abdominal fitness requires learning to sense this core, becoming familiar with it from the inside.



Tummy Topography

A basic knowledge of the belly's anatomy can help us approach core work with a more accurate mental map. So let's peel away the layers and see what lies under the skin.

Abdominal skin differs from much of the skin covering the rest of the body. It has a subcutaneous tissue that loves to hoard fat. It can store up to several inches. Those fat-free torsos you see in advertisements are possible for less than 10 percent of the population. You have to have really thin skin to show muscle, explains Richard Cotton, spokesperson for the American Council on Exercise, and this takes more than diligent exercise; it takes the right genetics.

You have to be young too. Once fat cells accumulate around your torso, they don't disappear. You can starve them; they'll shrink. But they will always be there, endeavoring to fill up. Too much belly fat—we all know—is unhealthy. But working too hard to eliminate fat can also cause serious problems. Women can suffer estrogen depletion, bone weakness, and fractures. “A few millimeters of fat over those muscles don't matter,” Cotton says. Most adults, including distance runners and people of optimal health, carry a slight spare tire around their middles.

Instead of obsessing about fat, we'd do better to focus deeper. Right under the skin, a sturdy wall of four paired muscles stretches over our internal organs. On the surface, the straplike rectus abdominus extends along the front, from pubic bone to sternum. On either side, a thin but powerful muscle, called the external oblique, courses diagonally from the ribs to the rectus, forming a “V” when viewed from the front. Running perpendicular to the external obliques, the internal obliques lie just below. These two pairs of muscles work in concert, rotating the trunk and flexing it diagonally. The innermost layer of abdominal muscle, the transversus, runs horizontally, wrapping the torso like a corset. You flex this muscle to pull in your belly. The sinewy, three-ply sheath formed by the transversus and the obliques provides a strong, expandable support; it protects the viscera and provides compression that aids elimination and a housing flexible enough for diaphragmatic breathing.

You can exercise all of these muscles with yoga. For example, when you raise your legs and torso in Navasana, you're contracting the rectus abdominus, drawing your sternum toward the pubic bone. Holding postures like Navasana helps invigorate this muscle isometrically, toning your abdomen without compromising flexibility. You engage the upper portion of the rectus when you flex your torso forward while keeping your legs stable, as in Paschimottanasana (Seated Forward Bend). Conversely, you engage the lower portion of this muscle by raising your legs while maintaining a stable torso, as in Urdhva Prasarita Padasana (Upward Extended Foot Pose, a.k.a. Leg Raises; see below). To keep the rectus not just strong but flexible as well, it's important to combine contraction exercises with complementary stretching postures like Setu Bandha Sarvangasana (Bridge Pose) or Urdhva Dhanurasana (Upward Bow Pose). A strong, responsive rectus will protect your lower back and allow you to sit up with ease. But don't overdo it. Overworking this muscle can not only compromise your backbends, it can actually bunch up your torso and flatten the natural curve of your lumbar spine.

Rotational exercises like Jathara Parivartanasana (Revolved Abdomen Pose) engage the internal and external obliques, key muscles for developing a firm abdominal wall. These muscles also stabilize the spine while rotating the trunk and pelvis. For example, when you kick a ball, the obliques rotate your pelvis. When you throw a ball, the obliques pull your shoulder around. In asana practice you can exercise the obliques by either holding the shoulders steady while rotating the trunk, as in Jathara Parivartanasana, or rotating the shoulders while keeping the legs steady, as in Parivrtta Trikonasana (Revolved Triangle Pose). These muscles also stabilize your vertebrae to maintain spinal alignment when you lift a heavy weight. When toned well, the diagonal muscle fibers of the internal and external obliques form a powerful, interlacing network that draws in the abdomen. As you engage the obliques in asana practice, imagine yourself cinching up the strings of a corset, drawing from the sides to flatten the front.



The transversus abdominus also plays an important role in maintaining a toned abdominal wall. You engage this muscle when coughing, sneezing, or exhaling forcibly. Unlike the other three abdominal muscles, the transversus doesn't move your spine. Perhaps the most effective means of exercising it entails working with the breath. Pranayama practices involving forceful exhalations, like Kapalabhati and Bhastrika (called by a variety of English names, including Breath of Fire, Skull Shining, and Bellows Breath) provide an excellent workout for the deep transversus.

To feel this muscle contract, stand with your feet shoulder-width apart, bend your knees slightly, and place your fingers on your sides, just below the rib cage. Now cough and feel the muscles under your fingers contracting forcefully. To contract this muscle even further, try this: Rest your hands on your thighs. Take a full breath, then exhale completely while contracting your abdomen to expel the last bit of air from your lungs. Then, without drawing in any new air, begin counting aloud: One, two...etc. You will experience your transversus cinching around your waist tightly, like a belt. Before the lack of oxygen becomes uncomfortable, relax your abdominals and allow the air to draw in slowly. This important classic yoga exercise is called Uddiyana Bandha (Upward Abdominal Lock). As you begin to grasp it, you can try further traditional exercises like Agni Sara Dhauti (Cleansing through Fire) and Nauli (Abdominal Churning), which are used to massage the abdominal organs.

Breathing Room

People who work with the breath—singers and woodwind musicians, for instance—know it's connected to the belly. Your diaphragm lies at the base of your lungs, directly over your liver and stomach. When your diaphragm contracts, it moves these organs out of its way, pushing your belly out slightly. If you breathe primarily by using the muscles of your rib cage, without taking advantage of the diaphragm's power, you're limiting your breath to accessory muscle groups too weak and inefficient to fill your lungs completely. But if your abdominal muscles don't release, your diaphragm can't descend fully. That's why yogis balance abdominal strength with flexibility.

Keep in mind that deep, diaphragmatic breathing does not entail pushing your belly out deliberately. Full belly breathing just requires a naturally alternating engagement and release. To assure deep diaphragmatic breathing, first engage the abdomen in a complete exhalation, then allow your lungs to fill up naturally, relaxing the abdomen but not pushing it outward.

This fluid interplay of abdominal muscles and lungs provides an excellent focus for a meditation that you can use to complete your abdominal work. Lying on your back in Savasana (Corpse Pose), breathe slowly and deliberately, sensing the strength of your inner core as your obliques and deep transversus muscles compress to expel the air from your lungs completely. Then enjoy the flow of oxygen that fills your chest as these muscles release, creating space for prana to stream into your heart like water flowing into a basin. After a few minutes, allow your breath to resume its natural pattern. Observe it without criticism or effort. Imagine your abdominal cavity as the fluid container of your deepest wisdom and feel the energy at your navel radiating throughout your body.

Your Sacred Center

Our center of gravity lies just below the navel, a spot many yoga teachers call the "power center." The source of our vitality, the abdomen is a sacred space in our bodies, so we would do well to shift from criticizing how it looks to respecting how it feels. Ana Forrest, owner and primary teacher at Forrest Yoga Circle in Los Angeles, says she's observed that as people begin to sense and move from their lower torso, over time they experience a surge in creativity and sexuality.



Throughout the world's healing and mystical traditions, the belly is seen as an important center of energy and consciousness. Tantra yoga sometimes represents the navel as the home of rajas, or solar energy. In Tantric practice, the yogi stirs up rajas in the belly by using the breath, helping to create a divine body endowed with paranormal powers. You've probably noticed that many of India's great spiritual adepts sport prodigious bellies. These tremendous tummies are thought to be full of prana. Hence, Indian artists often depict their deities with a paunch.

In China, the gentle art of tai chi emphasizes the lower abdomen as a reservoir for energy. Tai chi teacher Kenneth Cohen, author of *The Way of Qigong* (Ballantine Books, 1997), explains that it's possible to strengthen the abdominals by learning how to compact qi (prana) into the belly. "From the Chinese viewpoint, the belly is considered the dan tian or 'field of the elixir,' where you plant the seeds of long life and wisdom," Cohen explains.

If you're skeptical of all this esoteric anatomy, consider the work of Michael Gershon, M.D. "You have more nerve cells in the gut than you do in the combined remainder of the peripheral nervous system," Gershon claims. Gershon, who chairs the department of anatomy and cell biology at Columbia University's College of Physicians and Surgeons at Columbia Presbyterian Medical Center, says he's quite sure that our thoughts and emotions are influenced by the gut.

Gershon came to this unorthodox conclusion through meticulous research on serotonin, an important brain chemical that also functions in the bowel. Operating independently from the brain, a huge nervous system that Gershon has dubbed the "second brain" works silently in the abdomen. Gershon explains that this gut brain, properly known as the enteric nervous system, doesn't "think" in the cognitive sense—but it constantly affects our thinking. "If there isn't smoothness and bliss going up to the brain in the head from the one in the gut, the brain in the head can't function," Gershon says.

So the next time you're critically eyeing your stomach, you might consider instead saying a reverent Namaste to your power center and home of your gut instincts. And you can also help cultivate the belly bliss Gershon recommends by employing an integrated approach to abdominal work, combining somatic and energetic awareness with asana and pranayama.

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