

The best exercise to get head-to-toe hot (sculpted legs, a perky butt, the whole shebang) is the one people are most likely to botch. Not you, not anymore. A tweak or two can help you personalize the move for your body. Go deep or go home, class.

# YOU DON'T KNOW

# SQUATS

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STYLING: GABRIELLE PORCARO, HAIR: TAKEO SUZUKI FOR KEVIN MURPHY/L&A ARTIST, MAKEUP: CARLO LONGO FOR MAC PRO/RAY BROWN PRO, SOLOW AT CARBON38 SPORTS BRA, LULULEMON SHORTS

**T**he form police are real—and their favorite beat is the squat. Scroll through social media commentary on any squat demo video and you'll likely find more critiques there than on any other move, says physical therapist and athletic trainer Barb Hoogenboom. Why? The trend toward body weight-focused routines and the rise of CrossFit (which emphasizes the squat) make the masses think they're experts on how it should be done. In fact, even our fitness director, Jen Ator—a certified strength and conditioning specialist—has had her squat videos on our Facebook page torn apart. Yep, snippy commenters were fitness-nerding-out by insulting her valgus (read: her knees rotate slightly inward) and “lack of ankle dorsiflexion” (when ankles have limited mobility; not the case with Jen!).

While we appreciate the passion of these critics, they tend to overlook the underlying issue: that everyone squats differently depending on their body type, injuries, and even surgeries.

Exacerbating the issue is that we've all been given the same instructions. “Fitness professionals learn a textbook definition for a proper squat, which gets

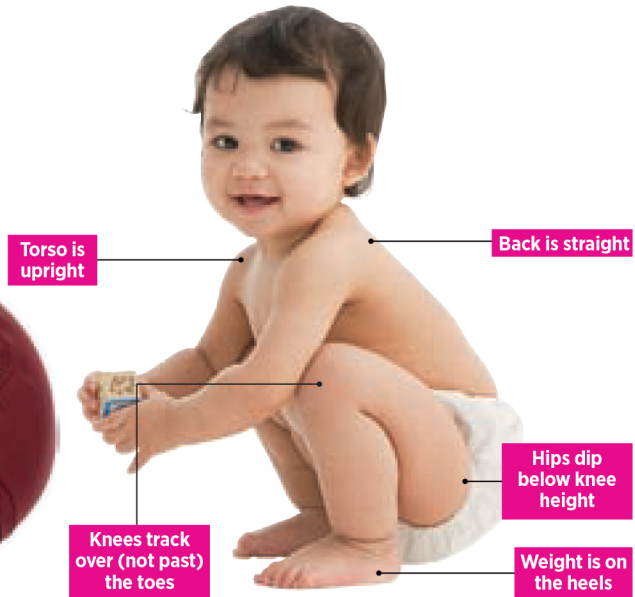
passed down to clients,” says physical therapist and certified strength and conditioning specialist Mike Reinold, owner of Champion Physical Therapy and Performance in Boston. “But as you train more people, you realize that it's unrealistic—rather, impossible—for everyone's squat to look exactly the same.”

That's because the squat, unlike other foundational exercises—the plank, pushup, or situp—involves multiple muscle groups and joints working in various planes of motion. More specifically, your hips hinge back, your torso moves down, and your knees shift forward and outward, which is a lot going on at once. “When an exercise is that dynamic, a ton of factors—from your anatomy to your mobility—can affect the way your squat looks,” says Reinold. Of course, textbook form cues (see “Baby Got Back,” below) exist for a reason: to max out the effectiveness of the move while keeping you safe from injury. But forcing flawless technique can actually do just the opposite. “The only perfect squat is the one that honors your body and doesn't cause pain,” says Hoogenboom.

We got the lowdown on the reasons why your squat might look a bit unconventional, plus how to resolve—or adjust for—each one. Then we asked top experts how to use the universal exercise to meet your specific goals. Get ready to make the squat yours, haters be damned.

### Baby Got Back

You've been doing squats since way before you could say the word—and pretty perfect ones at that. Which is why pros often point to infants as the model performers of the move: The squat is a natural progression that occurs between learning to sit up and being able to stand. Here, the five form ideals from a little one (who hasn't had the chance for growth spurts, a 9-to-5 desk job, or random sprains to get in the way).



BLEND IMAGES—KIDSTOCK/GETTY IMAGES (BABY); BODY LANGUAGE SPORTSWEAR SPORTS BRA, KIRAGRACE SHORTS

PHAT BUDDHA WEAR SPORTS BRA, ONZIE LEGGINGS



**Get Low**  
**Myth:** Deep squats are bad for your knees.  
**Truth:** Old (like, 1960s-old) studies suggested deep squats—lowering your hips so far that they track below your knees—put a tremendous amount of force on your knee joints, increasing your risk for injury. More recent research, like a 2013 study published in Sports Medicine, found no such thing.

# SQUAT THIS, SPOT THAT

Many pros use the squat to assess a client's body before a workout. "It reveals practically everything," says Kyle Dobbs, personal training manager at the Wright Fit gym in NYC. "Everything" includes your physical history (traumas, chronic pains), current daily routine (how often you sit, stand, walk, stretch, run, and exercise), and strengths and weaknesses (muscular imbalances). Drop into a basic body-weight squat and check your own form for these common concerns.

## Knees Collapse In

Once you've lowered into position, your knees cave in so they align closer to your big toes than the middle of your feet. It's a condition called valgus, and it can be both the cause and effect of knee pain and is sometimes linked to, oof, ACL injuries.

**The Cause:** Some experts blame tight hips—from too much sitting, running (without stretching), or both. But some research suggests that stiff ankles may also be responsible. Limited ankle dorsiflexion (a fancy term for how well you can point your foot up) causes your feet to turn in as you squat, which rotates your legs, knees included, inward.

**The Fix:** Reduce sitting hours as much as possible, and spend at least three minutes stretching your hips with lunges and pigeon pose or happy-baby pose when you wake up, after a workout, and before bed. Strengthening hamstrings and glutes will also help lessen stress on your hips—try three sets of 20 glute bridges four days a week. To improve ankle mobility, trace lowercase Ts for a minute every day.

## Lower Back Rounds

As you approach the bottom of your squat, your tailbone tucks under, creating a curve in your spine. Experts have dubbed it "butt wink" (funny)—and over time, it can lead to a disk herniation (not so funny).

**The Cause:** Tight hip flexors prevent your pelvis from lowering into a deep squat, so your spine steps in to help tilt it backward. Another culprit: sucking in rather than bracing your abs, which throws your back into a flexed position.

**The Fix:** Stretch your hip flexors at least twice a day: Stand and hold one knee, then the other, into your chest for one minute. To develop abdominal stability, practice bracing your abs (tightening them like someone is about to punch you) and breathing from your diaphragm (your belly will expand and contract) through plank variations, like forearm or side plank.

## Knees Pass Toes

At the bottom of your squat, your knees aren't lining up with your toes but extending past them, so your body leans slightly forward. Your heels are actually lifting off the ground, shifting your center of gravity forward. Not only are you missing the full backside-toning benefits of the squat, but you can also fall.

**The Cause:** The issue usually traces back to poor glute activation. In other words, your quads initiate the sit-back movement instead of your glutes and hamstrings. You might also have tight calves and ankles—perhaps from daily jogs or your darned stiletto habit—which prevent you from grounding your heels.

**The Fix:** Train your glutes to turn on during exercise by doing deadlifts and donkey kicks, and stretch your lower legs by bending alternate knees in downward dog.

## Lower Back Arches

As you deepen into your squat, your spine looks more like half of a U than a V—well beyond a natural curve in your back. The stress on your spine in this position (especially if you add weights) may also increase your risk for disk injuries.

**The Cause:** Ugh, tight hips strike again! But this time it's combined with tense lats, the muscles around the sides of your back. The two issues produce anterior pelvic tilt, in which your hips rotate forward, jutting out your belly and curving your spine.

**The Fix:** At least twice a week, strengthen your core with planks, and foam-roll your lats: Lying on your side with a roller under your armpit, roll your body up and down.

## Asymmetrical Legs

You put more weight on one side as you settle into your squat, so your body looks a bit off-balance. You may only notice by looking in a mirror.

**The Cause:** You've probably suffered some type of aggravation or injury on the side you lean away from, whether recently (in this case, you'll feel some discomfort) or in the past (you likely developed a muscular imbalance, where your healthier side became stronger than the other to pick up the slack). Pain or not, you'll want to fix imbalances: Your better side will only continue to get stronger until it can no longer overcompensate, which could result in injury to, sorry, either side.

**The Fix:** See a physical therapist to figure out what's causing you to favor one side. When you have your diagnosis, the therapist can help you treat it.

### Open Your Mind

**Myth:** Once we reach adulthood, squats are naturally uncomfortable.

**Truth:** Our lack of perfect squat mechanics may be less about our mature bodies and more about our culture, says Hoogenboom. Many Asian countries utilize the squat as an alternative to sitting, but Americans don't. Practice makes perfect—and pleasant.



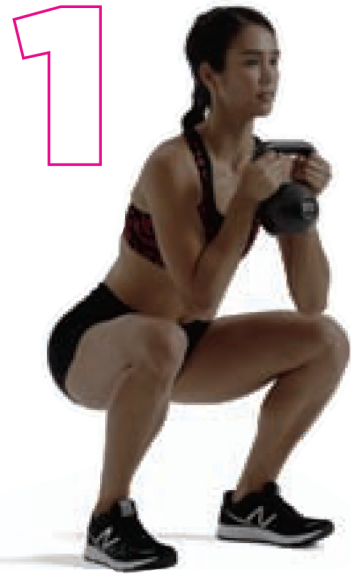
PHAT BUDDHA WEAR SPORTS BRA, OISELLE SHORTS

# MAKE IT TWO

Squats should never be marketed as one-size-fits-all. “Nobody is anatomically perfect like Da Vinci’s to accommodate your body’s restrictions, especially the build of your individual levers (a.k.a. your

# WORK FOR YOU

diagrams,” says Reinold. While you should play around with all types of squats, tweaking your form (limbs), can make the move more suitable—and efficient—for you. Check out these eight variations.



## 1 FRONT (OR GOBLET) SQUAT

Best for: Long Torso

More upper body means you’re more likely to lean forward as you lower down. Holding a weight in front of you forces you to shift your own weight back (so you don’t fall over). It distributes the load equally between your glutes and hamstrings and your quads, making it a go-to among professionals.



## 2 BOX SQUAT

Best for: Short Legs

Squatting to sit on the edge of a box or bench can ease you into a deeper stance than your legs will allow, and eliminate fear of injury. (The bench is there to support you.)



## 3 BANDED SQUAT

Best for: Knee Valgus

Placing a looped resistance band around your thighs encourages you to assume a more parallel position. As the band pulls your knees in, your brain cues your hip muscles to work harder to counteract the movement.



## 4 BACK SQUAT

Best for: Short Torso

Holding a bar against your shoulders—particularly for those who are short to average height (5’4”)—better distributes weight to the posterior chain without overstressing your teeny lower back.



## 5 SUMO SQUAT

Best for: Tight Hips

Separating your feet more than shoulder-width apart and turning your toes outward help isolate the posterior chain and inner thigh area—and the width opens up room for your pelvis to dip low.



## 6 HEEL-ELEVATED SQUAT

Best for: Flat Feet

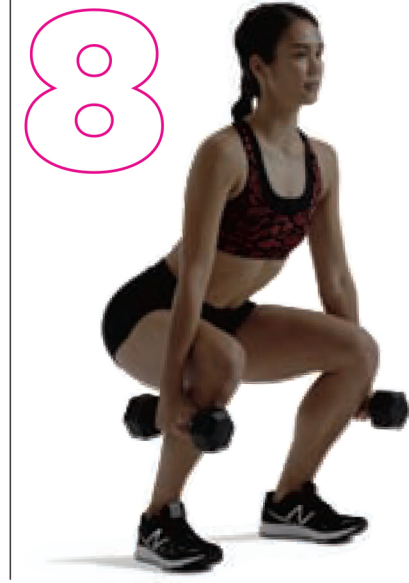
The lack of an arch makes throwing your weight into your heels rather difficult. Lifting your heels can help redistribute weight backward, where it belongs, making each rep more effective.



## 7 TOES-OUT SQUAT

Best for: Long Legs

Pointing your toes out to 45 degrees (not as extreme as a sumo stance) can give your hips more space to squat lower, as a lengthy lower half makes it tougher to get close to the ground. (Be sure to keep your knees aligned with your middle toe.)



## 8 DUMBBELL SQUAT

Best for: Asymmetry

Holding a weight at each side as you lower into your squat helps you instantly spot and correct any side leaning: If one dumbbell is closer to the ground than the other, something is clearly off. Work on evening out the weights and, in turn, your body. ■

BETH BISCHOFF, STYLING: VLADIMYR PIERRE-LOUIS, HAIR AND MAKEUP: SYLVESTER CASTELLANO/BERNSTEIN & ANDRIULLI, LULULEMON SPORTS BRA, KIRAGRACE SHORTS, NEW BALANCE SNEAKERS

## #SQUATGOALS

Dobbs shares four ways to utilize the bread-and-butter exercise, whatever your workout intent.

### Lose Weight

You need high volume to amp the muscle-building, fat-burning effect. Once or twice a week, perform six sets of five reps of a loaded squat (goblet or back) at 50 to 60 percent of max weight. (Choose a load that feels challenging by the third rep of each set.)

### Run Faster

Build power with heavy front squats (75 percent of max weight), three to five sets of three to five reps. On other days, do Bulgarian split squats (a lunge in which your back leg is bent, foot on a bench), three sets of 10 per side. Do each once or twice weekly.

### Reduce Back Pain

As long as it’s cool with your doc, try slow and controlled front or box squats, three to five sets of five reps. Focus on stabilizing your hips and bracing your abs for each rep—they’re key to strengthening the muscles in your back.

### Shape Your Booty

Back-loaded squats better challenge your posterior chain. Two or three times per week, perform three to five sets of six to 10 reps, at 60 to 70 percent of your max weight. Avoid bouncing and using momentum, and focus on squeezing your glutes with every rep.