Chapter 1

Hinging and Squatting Your Butt and Legs to Primal Perfection

In This Chapter

- Developing hinge movements
- Discovering how to squat deeply (without wrecking your knees)

In terms of neuromuscular activation, squats and hinges soar high above most other exercises; they recruit more muscle fibers, demand more metabolically, and subsequently chop more fat and build more muscle.

To keep it simple, you can think of hinging as maximum hip bend with some knee bend, and you can think of squatting as maximum hip bend *and* knee bend. In a hinge, the butt reaches back. In a squat, the butt reaches down. Knowing the difference is important because hinges are heavily driven by the posterior chain (hamstrings, butt, lower back), whereas squats require a bit more from the anterior chain (front side) — specifically, the quads.

This chapter is dedicated to showing you the primal hinging and squatting movements you need to form, firm, and strengthen the legs, butt, and midsection. Here, you discover how to perform the choicest lower body exercises for a cast-iron posterior and legs that won't quit — all without wrecking your knees or wrenching your back.

The Lowdown on Hinges

The purpose of the hinge is to move and produce force from the hips. This is a necessary life skill. Being able to move properly from the hips allows you to lift weight safely up off the ground without wrecking your back and maximizes your athletic abilities.

The most basic, or primal, hinging pattern is the dead lift: a bending of the hips to reach down and pick something up. Conventional wisdom tells you that you shouldn't lift with your back, but in fact you *should* lift from your back — as well as from the rest of your posterior chain.

For example, when you watch a baby pick something up off the ground, the baby almost invariably reverts to the dead lift to do so. Very rarely will any baby pick something up from a squat because the dead lift (which is interchangeable with *hinge* in this book) is the natural human crane position. When the back is kept flat, the hips reach back, and the knees bend slightly, you're in position to heave a considerable load from the floor.

Perhaps the most potentially injurious way to lift any weight off the ground, especially if you're new to weight training, is to do so with a rounded (hunched) back. When hinging, push your chest up (think "proud chest") to maintain the natural curvature of your spine.

The following sections give you a few more details and benefits about the hinge.

Using your hips in the hinge

An athlete's power comes from the hips. Hinging shows you how to fully use the strength and power of your hips. Whether you aim to pick something up without wrecking your back or to jump across a creek without ruining your pants, using your hips will help you do just that.

In a properly hinged position, the hips take the load, not the back. (And often, the hinge is referred to as a *hip hinge*.) A proper hinge ensures optimum spinal alignment and transmission of force; that is, when you hinge properly, the hips do the heavy lifting and the back is kept safe. Here's how:

1. **Keep your back flat (never rounded or overarched).**
2. **Push your hips back as far as possible.**
3. **Allow your knees to bend slightly (but not so much that they come forward).**

   The bottom of a hinge should have your legs and torso looking like the less than sign (<).

Everyone's hinge will look slightly different. As long as your shins are vertical, your back is flat, and your hips are above the knees (but below the shoulders), you're good to go!

Counting the benefits of a strong hinge

Developing the hinge movement pattern is extremely important. A strong, patterned hinge makes all the heavy lifting of life easier. Literally.

But there's more to it than that. A strong hinge offers the following benefits as well:

- Less risk of back injury
- Less risk of knee injury
- More power and athletic ability
- A stronger, firmer butt
- A resilient, sturdy back
- Functional, durable hamstrings

Practice your hinge as often as possible. Whether you're picking up a pencil or 500 pounds, get those hips back and keep the back flat!

Beginner Hinging Exercises

You can express the hinge in many ways. But like most all other movements, you should start out slow with the basics. The basic dead lift is a perfect introduction to the hinge. The dead lift, which is picking something up (and putting it back down), is as fundamental as it gets.

Don't let the unpretentious nature of this movement fool you. The dead lift will be a staple in all the primal fitness programs because it's a monstrous strength-building exercise; it allows you to load the system with more weight than just about any other movement.

The following sections outline the pattern for the dead lift and the single-leg dead lift.

The dead lift

The dead lift is simply the hinge put to work. To get started practicing the dead lift, you need something to pick up. Start with a kettlebell or a dumbbell (and eventually you'll move on to a set of kettlebells, dumbbells, or a

barbell). Most men can start out with a weight between 35 and 40 pounds and most women between 18 and 25 pounds.

1. **Stand on top of the weight so it's positioned between your heels, assume a shoulder-width stance, and point your toes out slightly (between 10 and 20 degrees). (See Figure 1-1a.)**
2. **Push your hips back toward the wall behind you.**

   Imagine you're reaching your butt back for a bench that's just out of reach.
3. **Keep your back flat, but let your knees bend as you continue to reach your butt back as far as you possibly can without toppling backward.**
4. **When you hit maximum hip bend, grab hold of the weight and take a deep breath into your belly. (See Figure 1-1b.)**

   Be sure to keep the head and neck in line with the rest of your back as well. Focus your eyes on the ground slightly in front of you or onto the horizon where the wall meets the floor.
5. **Push your heels hard into the ground and stand up as quickly as possible. (See Figure 1-1c.)**
6. **Reverse the movement to set the weight back onto the floor. Don't round your back to set the weight down.**

   Be sure to start and finish the dead lift with good posture.

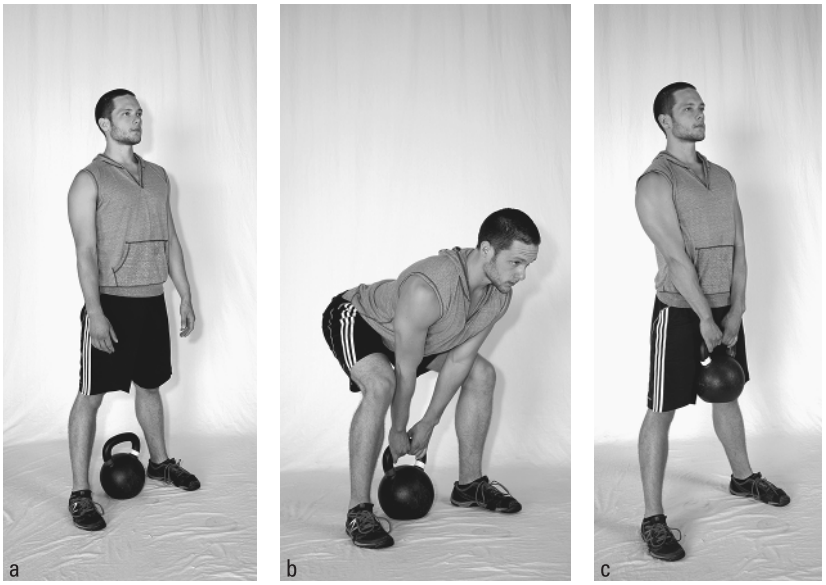


Figure 1-1: The deadlift is the fundamental hinge movement.

Photos courtesy of Rebekah Ulmer

Whether you're lifting 35 pounds or 350, respect the weight all the same. Don't get into the habit of setting the weight down lazily or with poor form. What you practice is what you'll revert to when under stress. Get in the habit of doing it right.

Sometimes mobility may be a limiting factor in the dead lift. If you feel like you have to compromise your form to reach down to the weight, bring the weight up to you! There's no point in performing an exercise unsuccessfully or with poor form when you can make small adjustments to help you train around mobility restrictions. Simply find a small box or any other implement to elevate the weight, as shown in Figure 1-2, to make the weight easier to reach until your mobility improves.

The single-leg dead lift

The single-leg dead lift is pretty much what it sounds like — the dead lift using only one leg — with a few minor tweaks, of course. Most natural and athletic movements happen from a split stance, not an even one, so it's equally important to train the one-limbed (unilateral) movements as it is the

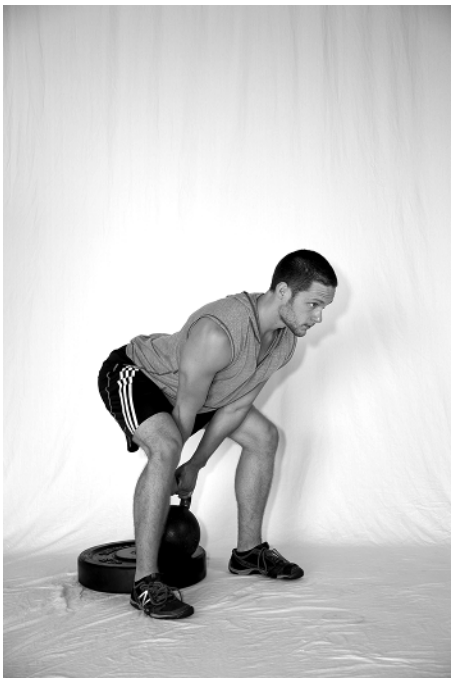


Figure 1-2: Elevating the weight makes it easier to reach.

Photo courtesy of Rebekah Ulmer

two-limbed (bilateral) movements. The big benefits of the single-leg dead lift that don't necessarily come with the conventional dead lift are the additional balance, coordination, and motor control components.

Start by using a kettlebell or dumbbell for this exercise, but if you want to develop extra balance and coordination, practice this movement as often as possible without weight. Here are the steps for the single-leg dead lift with a weight:

1. **Stand on top of the weight so it's positioned between your heels (refer to the setup for the dead lift in the previous section and see Figure 1-3a).**
2. **Push your heel back and up toward the ceiling.**

   Be sure to minimize any twisting and rotation throughout the movement. Both of your shoulders should fall and rise at the same rate; you want to keep them as square as possible throughout the movement.
3. **As your back heel starts to rise, naturally let yourself hinge at the hips.**
4. **Allow your knee to bend as you hinge.**

   To keep your balance, your knee may even come slightly forward in the single-leg dead lift.

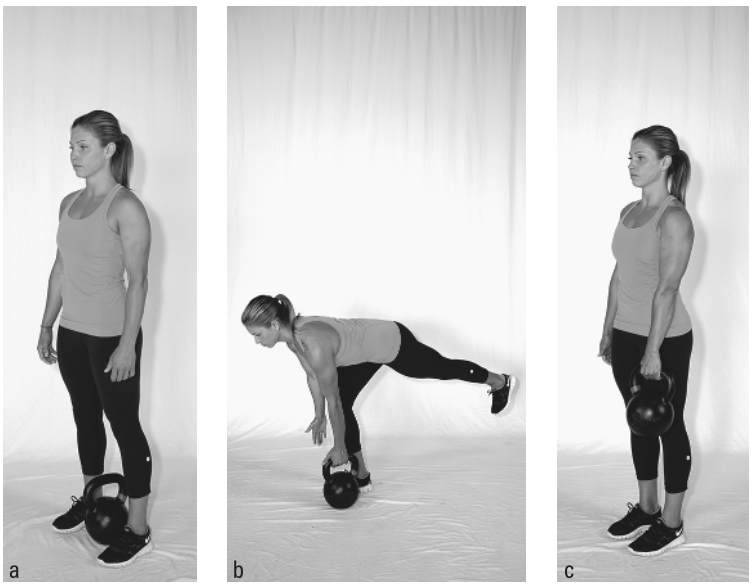


Figure 1-3: The single-leg dead lift is all about control.

Photos courtesy of Rebekah Ulmer

This is a single-leg dead lift. Not a "stiff leg" single-leg dead lift. So let the knee bend! If you don't, you run the risk of overloading the hamstring.

5. **When you're able to, reach down and grab the weight with the arm opposite the planted leg.**

   For example, if your right leg is on the ground, grab the weight with your left arm (see Figure 1-3b).

6. **Finish the movement the same way you came into it, standing tall at the top, as shown in Figure 1-3c.**

7. **Be sure to place the weight back down exactly how you picked it up.**

Intermediate Hinging Exercises

The next step in hinging progressions is to add some power to the pattern. In this section, you discover the swing and the one-arm swing, two explosive hinging exercises.

Don't proceed with intermediate hinging exercises prematurely. The swing is built off the back of the dead lift, so if you don't have that pattern close to perfect yet, your swing and everything else hereafter will suffer. If you need more practice with the dead lift, refer to the "Beginner Hinging Exercises" section.

Paleo fitness is about progressing at your own pace. There's no prize for being the first person to master all the exercises. The more time you spend practicing the basics, the easier the more advanced movements will be later.

When you've mastered the dead lift, the swing comes easy, because the swing is really just a fast and continuous string of dead lifts.

The swing

Swings are as handy as hot sauce. They go well with anything and spice up even the blandest dishes. This is to say that you can pretty much add swings to any workout (foolishly assuming that you don't already do so) to instantly make it better.

The swing shows you how to generate power/explosiveness from your hips and is a marvelous all-around fat-chopping device. It blends strength and cardiovascular efforts, a trait shared by few exercises.

The swing also strengthens the muscles of the lower back, and strong evidence supports that swings may ward off back problems later in life. Swings also commonly lead to what has been affectionately dubbed the "kettlebutt" — a firm, strong, and aesthetically privileged backside.

The swing is best performed with a kettlebell (and it's often called a "kettlebell swing"), but you may use a dumbbell as well. A barbell is far too unwieldy for this exercise.

Here's how to do the swing:

1. **Assume a shoulder-width stance approximately one foot behind the weight you're using, and point your toes slightly outward.**
2. **Hinge at the hips like you would in a dead lift (refer to the earlier section on the dead lift), reach out, and grab hold of the weight (see Figure 1-4a).**

   Be sure to get the hips back and keep the back flat.
3. **Start the swing with a forceful hike back of the weight, like a center hiking a football (see Figure 1-4b).**

   Keep the handle of the weight above your knees at all times; otherwise, your back may round. Also, don't be shy about the hike! You have to forcefully throw the weight back to properly load the hips for the swing.

Figure 1-4: The swing is a power movement that blends strength and cardio.

Photos courtesy of Rebekah Ulmer

4. **When the weight reaches the top of the backswing, immediately reverse the movement by driving your hips forward and standing up as quickly as you can.**

   Your hips and knees should extend simultaneously. Think "jump," but keep your heels planted on the ground. The hips should visibly snap forward when executing the swing. The aim is to be as explosive as possible, regardless of the weight you're using.

5. **Allow the weight to float no higher than eye level before reversing and repeating the movement. Don't lean back at the top of the swing; just stand tall. See Figure 1-4c.**

   If you have issues with your back, allow the weight to float no higher than shoulder level. When done right, the weight should float outward and upward. The movement is powered entirely by the hips. Your arms are simply loose chains connecting the weight to your body.

While performing the swing, keep the arms relaxed but the armpits tight so your shoulders don't get pulled forward by the force of the weight. Imagine that you're squeezing a wad of cash or wringing a sponge in your armpit. This will help to keep the shoulders in a safely packed position.

The one-arm swing

The closest relative to the (two-arm/kettlebell) swing, the one-arm swing adds an additional grip challenge and rotary stability component (the ability to prevent rotation). Just like the two-arm swing, your best bet is to use a kettlebell or dumbbell for this exercise.

Because you now bear the weight by only one side of the body, a good one-arm swing can be measured directly by the amount of rotation that doesn't occur. So work to keep your shoulders square through the movement. Here are the steps to the one-arm swing:

1. **Set up like you would for a two-arm swing (see previous section), reach out, and grab the weight with one arm (see Figure 1-5a).**

   Grab the handle of the weight as close to dead center as possible.

2. **Hike the weight back as you would a two-arm swing while minimizing any twist in your torso (see Figure 1-5b).**

   With the one-arm swing, you may rotate your thumb slightly in (downward) on the backswing to ensure that the weight doesn't crash into the knees.

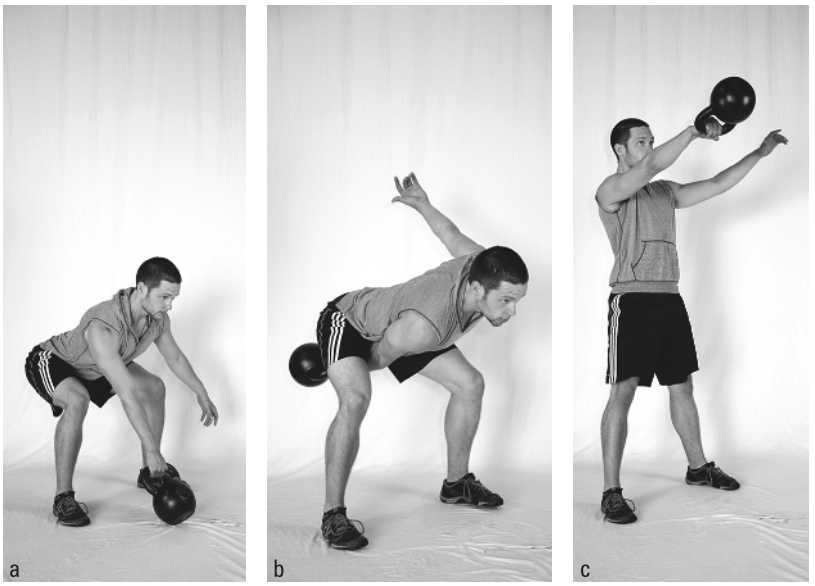


Figure 1-5: The one-arm swing challenges your grip strength and stability.

Photos courtesy of Rebekah Ulmer

3. **When the weight reaches the top of the backswing, snap the hips forward and stand up as quickly as possible to complete the movement.**
4. **Allow the weight to float no higher than eye level (see Figure 1-5c) before reversing and repeating the movement.**

   If you have issues with your back, allow the weight to float no higher than shoulder level.

Remember to keep your armpit tight throughout the exercise. Don't let the weight pull your shoulder forward.

Advanced Hinging Exercises

The exercises in this section tread less stable ground, both literally and metaphorically. These movements aren't more advanced in the sense that you perform them with more weight (although that may sometimes be the case) but because of the higher levels of control, concentration, and coordination required for proper execution.

For example, you wouldn't attempt the snatch before the two-arm swing any more than you'd try to juggle before first learning to catch.

The beginner and intermediate hinging movements earlier in this chapter show you how to produce and reduce force from the hips — a necessary skill to maximize athletic potential and lessen injury risk. But there's one more skill you need to know, and that's the ability to redirect force — both toward you and away from you. To be able to both subtly and aggressively redirect force is a true exhibition of athleticism. You see this in all domains of sport; for example, the judo player who, through proper timing and subtle movement, redirects his opponent's oncoming force into a powerful hip toss.

But this is merely a hidden benefit. Cleans and snatches are markedly more infamous for building the backside, bolstering lung capacity, and butchering body fat.

The clean

The *clean,* another powerful hip-dominant movement, develops your ability to produce, reduce, and redirect force — a necessary athletic skill, even for non-athletes. The clean can also be a tremendous cardiovascular conditioner and power builder by itself. What's more is that heavy cleans, especially heavy double-kettlebell cleans, show you how to take a hit!

Cleans performed with a kettlebell or dumbbell differ slightly from cleans performed with barbells, sandbags, or other such devices that you can't easily swing between your legs. This section covers kettlebell or dumbbell cleans because they're slightly more forgiving than barbell cleans (especially for those with restricted shoulder mobility), and the learning curve is less intimidating.

The purpose of the clean is to bring the weight explosively up into the rack position, where you place the weight in front of the chest so you can easily press, squat, jerk, and so on. In the rack, or the finished position of the clean, your forearms should be vertical and pressed against your rib cage. Here are the steps to the clean:

1. **Set up exactly how you would for a one-arm swing (see the earlier section), reach out, and grab the weight with one arm.**
2. **Start the clean with a forceful hike back of the weight (see Figure 1-6a).**

   Up until this point, the movement should be identical to the one-arm swing.
3. **When the weight reaches the top of the backswing, snap your hips forward (just like you would a swing).**

Figure 1-6: The clean starts like the one-arm swing and finishes in the rack position.

Photos courtesy of Rebekah Ulmer

4. **As your hips drive forward, keep your elbow in close to your body and draw the weight up your center line (see Figure 1-6b).**

   Do your best to keep the weight as close to your body as possible. The more the weight casts outward, the less efficient the movement becomes. If it helps, imagine you're trying to zip up a big coat.

5. **Catch the weight in the rack position, with your forearm(s) against your rib cage, as shown in Figure 1-6c.**

   If you're using a kettlebell, allow it to gently roll onto the forearm before landing in the rack. A common mistake with the clean is to use the arms to curl the weight up. The hips must power the movement. Think about it like this: The hips are the engine, and the arm is the steering wheel.

Sometimes the best fix for poor clean technique is to pick up a heavier weight, which forces you to use more hips and less arms and to seek the most efficient trajectory. Most of the time, however, the best way to fix your clean is to go back and fix your swing and one-arm swing. The same goes for the snatch, which you find out about in the next section. Often, people venture into cleaning and snatching way too soon. Be sure to master the swing and one-arm swing before attempting the clean and the snatch; doing so will make the clean and the snatch that much easier.

The snatch

To perform the snatch, you swing the weight back between your legs and bring it up over your head in one smooth, uninterrupted motion. This movement brings you to the pinnacle of your primal hinging progressions.

The snatch builds on all the preceding exercises. If you haven't spent adequate time perfecting your swings, one-arm swings, and cleans, you're not ready for the snatch.

The snatch manufactures the raw power and "never say die" conditioning of an Olympian. And when applied liberally, it blasts body fat like a blowtorch. When you get into high-rep snatching, you'll see what we mean.

This section focuses primarily on kettlebell and dumbbell snatches because they're more forgiving, easier to learn, and don't require an Olympic lifting platform. Here's how to do the snatch:

1. **Set up behind the weight (kettlebell or dumbbell) like you would for a one-arm swing or clean (see earlier sections) and hike the weight forcefully back between your legs (see Figure 1-7a).**
2. **Drive your hips forward and explode out of the hinge. Imagine you're trying to jump through your heels.**

   To do the snatch right, you have to fully commit yourself to the movement; otherwise, the bell won't go where it needs to. Be sure to snap those hips!
3. **As the weight accelerates upward, keep your elbow in close to the body, guiding the weight up your center line (not letting it arch out wildly; see Figure 1-7b).**

   This portion of the snatch is sometimes referred to as the *high pull.* Notice in Figure 1-7b how the elbow is slightly bent and stays relatively in line with the body. This form ensures an efficient trajectory. The farther the weight gets away from you on the way up, the less efficient the movement, so keep it tight.
4. **If using a kettlebell, practice "punching" through the bell around eye level to ensure a smooth transfer of the weight onto the forearm (see Figure 1-7c).**

   When you go to punch through the bell, be sure to loosen your grip to avoid tearing any callouses. It may even help if you "spear" through the bell and open your hand entirely.
5. **Finish the snatch overhead in a full lockout position; that is, lock your elbow and line your bicep with or slightly behind your ear (see Figure 1-7d).**

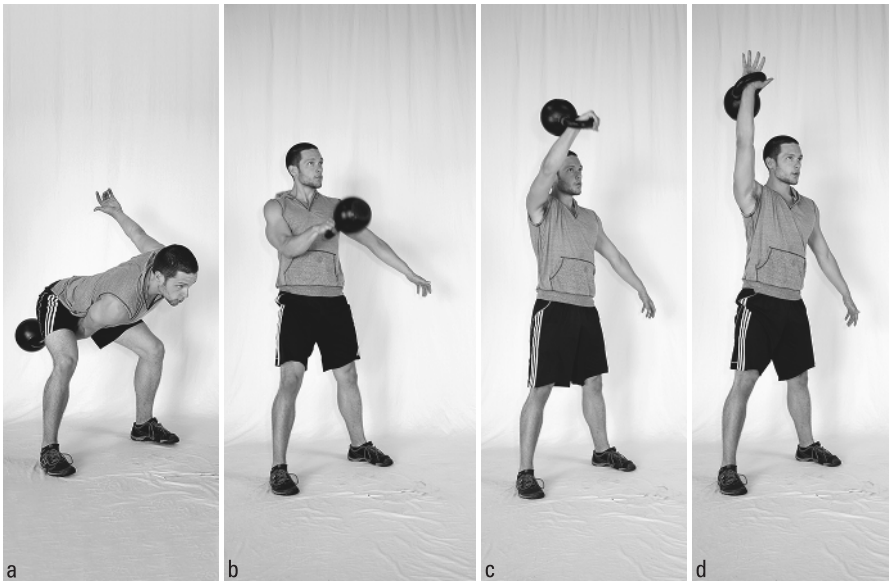


Figure 1-7: The snatch is the pinnacle of primal hinging progressions.

Photos courtesy of Rebekah Ulmer

It will take some time to find your groove, but in the end, the snatch should be one smooth and graceful movement.

To avoid unnecessary callous tears when using kettlebells, maintain a relatively loose grip. Hold on just tight enough to keep the bell in your possession but loose enough so the handle may rotate without grinding up your hands.

The Lowdown on Squats

It's often joked that the squat is an essential movement for eating dinner in Thailand and taking care of business in the woods. But there are other uses for the squat. The squat is the most potent of all exercises; pound for pound, it burns more calories and triggers more muscular activation than any other movement. The squat is also the king of all strength-building movements, and nothing can dethrone it.

Heavy squats are marvelous. They place a tremendous amount of stress on the body and flood the system with natural growth hormones (including natural human growth hormone).

Another benefit of the squat less talked about but equally valuable is to help you sit down, perhaps the most common application. But it should be noted that the original intention of this movement pattern was not to sit down but to stand up. People first enter the squat as babies, from the ground (oftentimes out of a crawl) and use it to stand. So like the Turkish get-up (see Book IV, Chapter 3), the squat is just as useful of a device to pick yourself up off the ground as it is to sit down onto it.

The following sections squelch some common myths about squatting and explore the many benefits of this technique.

Getting to the truth about squatting

People often think squatting is bad for your knees. But forget about that. *How* you squat may be bad for your knees, but the squat itself isn't bad for the knees. In fact, there are no bad movements, only a lack of preparation for movement. You need to strengthen the knees just like all other joints and muscles. And the only way to strengthen the knees is through movement.

If you have prior knee issues, or any issues for that matter, always get clearance from your doctor before beginning any type of fitness program.

Another common, somewhat silly myth is that your knees shouldn't cross over your toes during a squat. It's okay if your knees cross over your toes as long as they stay in line with your toes. The knee is meant to bend. In fact, it's just about the only thing it can do, so let it do just that.

Exploring the benefits of a deep squat

The deep squat is an essential pattern. Ideally, you should be able to squat butt to ankles with your heels on the ground and your knees in line with your toes, all the while keeping your back relatively flat. Go ahead and give it a try! If you have the mobility, the bottom of a squat should feel like a rest position — like you could really hang out there for a while.

The cave man probably spent a lot of time hanging out in the bottom of a bodyweight squat, and you might want to do the same. The more time you can accumulate in the bottom of the squat throughout the day, the better. This position loosens your hips, toughens your joints, and gets you up off the couch!

As your deep squat improves, so will your lower body strength, lower body mobility, and general usefulness in society. An uninhibited squat is a strong indicator of functional movement. It requires ample mobility of the ankles, knees, and hips and stability of the pelvis. What does that mean? Well, a lot has to be working right for someone to squat deeply. It means your working equipment is somewhat in order, so you're less likely to fall apart.

Here are a few ways to work the squat into your daily routine:

- Answer at least ten e-mails a day from a squat.
- Talk on the phone from a squat.
- Watch TV from a squat (or, at the very least, watch the commercials from a squat).
- Eat one time during the day from a squat.
- When waiting in line, get down into a squat (let 'em stare!).

Beginner Squatting Exercises

The beginner squatting exercises in this section are easy to understand and easy to use. They include the goblet squat, the bodyweight squat, and the goblet lunge. These squats are the most user-friendly variations; all intend to produce a big calorie burn while improving your squatting pattern.

Be patient with the squat, and don't get discouraged if you can't squat very low at first. The depth will come — especially when you practice the movements in Book IV, Chapter 3. And don't ever push into a range of motion where you feel uncomfortable or are unable to maintain proper form.

The goblet squat

"Well, the funny thing about the goblet squat … is that it answers the question: What do the hips do? And if … the kettlebell 'reverse engineers' the action of the hips, … then in the goblet squat, the movement greases that key human motion: the squat." And there you have it in plain speech, by Dan John himself, master strength coach and originator of the goblet squat.

The goblet squat is the speediest way to get someone squatting properly and quickly. Really, it's nearly impossible to do wrong. The following steps walk you through it:

1. **Grab a kettlebell or dumbbell and hold it directly in front of the chest, like a goblet (hence, the name *goblet squat;* see Figure 1-8a).**

   Keep the weight held as snuggly to the chest as possible.

2. **Assume a little wider than hip-width stance, and point your toes slightly out. This is your squatting stance.**
3. **Start the movement by sitting down, as if you're reaching your butt down for a curb. (It may help to think that you're pulling yourself down between your legs.)**

   Keep in mind that in a squat, you sit down; in a swing, you sit back.

4. **Continue to descend for as long as you're able to keep your heels on the ground, your knees in line with your toes, and your back flat (see Figure 1-8b).**
5. **When you stand up, be sure that your hips and shoulders ascend simultaneously.**

Photos courtesy of Rebekah Ulmer

Figure 1-8: The goblet squat helps develop proper squatting form.

The bodyweight squat

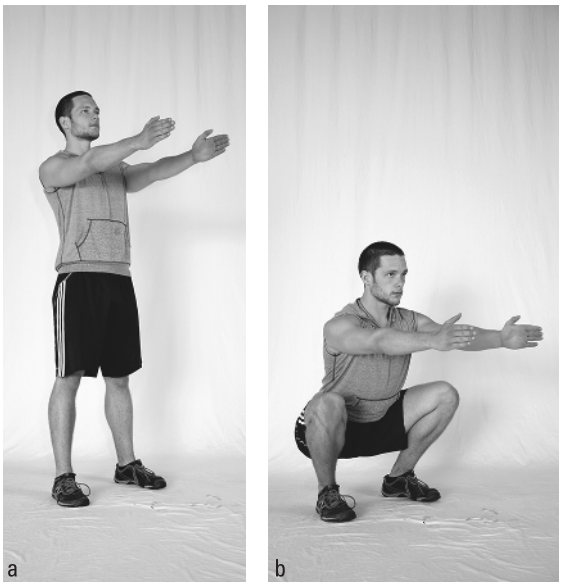
It may strike you as odd to find the bodyweight squat after the goblet squat in terms of progressions, but there are good reasons for that. For one thing, the bodyweight squat is horribly overworked, and people generally lack the authentic mobility and stability to properly do one.

So don't be surprised when you discover that the goblet squat comes easier than a bodyweight squat. The natural counterbalance of the weight helps compensate for mobility issues, allowing for a greater range of motion with better form.

With that being said, the bodyweight squat is still great, and it should be everyone's goal to perform one beautifully. Here's how:

1. **Assume a hip-width stance and point your toes slightly out.**
2. **Reach your arms out in front of you for balance (see Figure 1-9a) and begin to sit down, pulling yourself between your legs.**

   Your knees *will* come forward in a squat; just be sure they stay in line with your toes.



Photos courtesy of Rebekah Ulmer

Figure 1-9: The challenge with the bodyweight squat is maintaining balance.

3. **Go as low as you can, keeping your heels on the ground, your knees in line with your toes, and your back flat (see Figure 1-9b).**

   Do your best to keep your weight evenly distributed throughout your feet.

4. **When you stand up, be sure your hips and shoulders ascend simultaneously.**

The goblet lunge

The lunge isn't a squat *per se,* but it's still a knee, or quad, dominant movement, and it's still an extremely valuable one at that. The lunge is effectively a squat taken from a split stance, or more simply, a sort of single-leg squat. Because most of your movement occurs either from a split stance or as the result of pushing off just one leg, you want to train the unilateral (one-limb) movements, such as the lunge, just as extensively as you train the bilateral (two-limb) movements, such as the squat.

You can perform the lunge with either a weight held in the goblet position (like you would a goblet squat) or with no weight at all. You may find that holding a weight in front of your chest assists with balance and posture. Follow these steps to do the goblet lunge:

1. **Assume a hip-width stance and hold the weight in front of your chest as you would a goblet squat (see the previous section).**

2. **Begin by stepping back deeply with one leg (see Figure 1-10a), maintaining the hip-width stance. Imagine you're lunging on railroad tracks.**

   Maintain a fairly square and upright torso throughout the lunge. That means don't lean forward, twist, or rotate. Also don't go too narrow with your stance, unless you want to topple over.

3. **Continue to lunge back until the knee of your back leg reaches the ground (see Figure 1-10b). You may rest your knee there, but don't bang it.**

   Notice that in the lunge, both feet are pointing forward.

4. **To come out of the lunge, push equally off your front leg and back leg and return to the starting position.**

   Be sure to keep your back toes tucked, not pointed, so you can push off the ball of your back foot when lunging.

Figure 1-10: The goblet lunge is like a single-leg squat.

Photos courtesy of Rebekah Ulmer

Intermediate Squatting Exercises

After your squatting mechanics are sound, you can start to load the movement considerably. With squats, and with most movements relating to the squat, you can move a lot of weight, and sometimes that's precisely what you should do.

When you load a movement — meaning you add weight to it — you cement the pattern. Don't push the weight until your form is near faultless.

The two exercises in this section are favorite variations for adding more weight to squats and lunges in the quickest and safest manner possible.

The racked squat

With a racked squat, you perform a squat with weight held in the rack position (in front of your chest). This squat is best done with two kettlebells, two dumbbells, or a sandbag. Racked squats stress the core in a unique way and light up your abs.

When starting out with "racked" exercises, start with just one weight (either a kettlebell or dumbbell) in the rack to get accustomed to the position before moving onto two weights.

Follow these steps to do a racked squat:

1. **Clean the weight up into the rack position (see the earlier section on the clean).**

   Keep your forearms vertical and tight against your rib cage (see Figure 1-11a). Take a small step if needed to assume your squatting stance (feet shoulder-width apart; toes out).

2. **Take a deep breath into your belly and start your squat.**

   Imagine you're pulling yourself down between your legs. Keep your back flat, heels on the ground, and knees in line with the toes (see Figure 1-11b).

   Be sure to keep air in your belly throughout the movement to help keep your spine safe.

3. **When you've hit your maximum depth, push your heels into the ground, drive your hips forward, and stand up.**

Photos courtesy of Rebekah Ulmer

Figure 1-11: A racked squat with two weights really calls on your core muscles.

The racked lunge

The racked lunge not only lets you load more weight onto the movement, but it may also provide an additional challenge for your core — especially if you're using two different size weights. You'll know it when you feel it.

And, yes, you can use two different size weights for just about any exercise, and from time to time, you should do just that. Rarely in life do you pick up anything that's perfectly even in weight. So it doesn't need to be that way at the gym either.

Here are the steps for the racked lunge:

1. **Clean the weight into the rack position and assume your squatting stance (see the earlier sections for these movements and Figure 1-12a).**

   Keep your stance approximately shoulder-width throughout the lunge to keep your balance.

2. **Step back into a deep lunge (see Figure 1-12b).**

   You may plant your hind knee on the ground; just don't bang it.

3. **Push hard from both your front and hind legs to stand up out of the lunge.**

   Be sure to keep your back toes planted (not pointed) so you can push off the ball of your foot (rather than your instep) when lunging.

Photos courtesy of Rebekah Ulmer

Figure 1-12: A racked lunge with two weights requires good stability.

Advanced Squatting Exercises

The front squat allows you to move a considerably larger load through the squatting pattern than the intermediate racked or goblet squats. Due to the placement of the weight, it requires more shoulder mobility, too. The second advanced exercise — the pistol squat — serves as one of the best single-leg bodyweight exercises in existence for strengthening the lower body.

The front squat

You want to perform the front squat with a barbell, solely for the reason that you can load more weight onto a barbell than you can handle with a set of kettlebells or dumbbells. But other than the amount of weight and the placement of the weight, the movement pattern is identical to the goblet squat or racked squat (discussed earlier in this chapter) — so don't move too hastily onto the front squat until you have those two movements mastered.

Note: To perform the front squat, you also need a rack to hold the barbell in between sets.

Here's how to do the front squat:

1. **Set up under the barbell so it lies across the front of your shoulders just above your clavicle and close to your throat (see Figure 1-13a).**

   Hold the barbell with a *clean grip* — where your fingers loosely grip the bar just outside of your shoulders while you drive your elbows up and in until your forearms are parallel with the ground. Support the weight with your body, not your arms; the clean grip simply acts as a placeholder for the weight across the front of your shoulders.

2. **Stand up out of the rack, and step away.**

   Get in the habit of taking as few steps as you need to find your squatting stance — there's no point in wasting time or energy messing around with your stance.

3. **Take a deep breath into your belly and start your squat (refer to the earlier section "The goblet squat" for the basic squat form, and see Figure 1-13b).**

   As always, keep your back flat, heels on the ground, and knees in line with your toes.

   It's imperative to keep air in your belly when under load. Breathe out while pushing your tongue against the roof of your mouth when coming out of your squat (to maintain intra-abdominal compression), but just don't breathe all your air out.

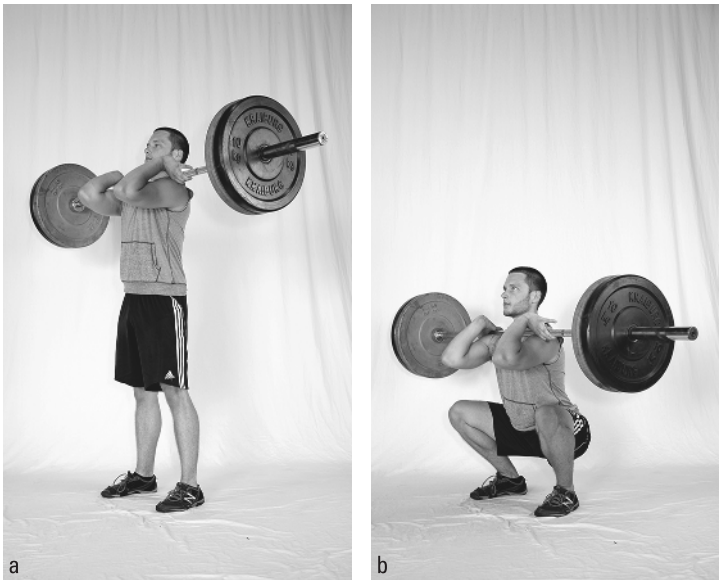


Figure 1-13 The front squat uses the standard squat pattern but with different weight placement.

Photos courtesy of Rebekah Ulmer

4. **When you've hit your maximum depth, push your heels into the ground and drive your hips forward to stand up and finish the movement.**

You're not done with the front squat until the barbell is placed safely back on the rack. Just because you've completed the rep doesn't mean you can relax. Stay tight and maintain good form the entire time you're under the bar. Keep those elbows up!

The pistol squat

The pistol squat is a full squat on one leg. It sounds simple, but, as you probably know, simple isn't always easy — and the pistol squat is an undeniable testament to that fact.

The pistol squat requires not only brute strength but also stability, mobility, balance, and coordination. It's not only a fantastic leg strengthener in itself but also a viable metric of your overall movement abilities. If you can do a pistol squat, you have gained a lot; if you can't, you have a lot to gain.

You can do the pistol squat with or without weight. Often, people find the pistol squat is more accessible when they're allowed to hold a small weight

out in front as a counterbalance. Experiment and see what works best for you. Follow these steps for the pistol squat:

1. **Assume a shoulder-width stance and extend your arms out in front as a counterbalance.**

   If you choose to weight the pistol squat, hold it in the goblet or rack position (see earlier sections for these positions).

2. **Lift one leg straight up off the ground (see Figure 1-14a); the higher you can get it up, the better.**

   Try to keep your elevated leg fully extended out in front of you throughout the entire movement. It may even help to keep your toes pointed straight up. Also, be sure to start with your working leg heel on the ground.

3. **Begin to squat down as low as you can on one leg (see Figure 1-14b) while keeping your heel on the ground, your knee in line with your toes, and your back as flat as possible.**

   If you keep falling on your butt, try holding a light weight out in front of you to act as a counterbalance, as shown in Figure 1-14b.

4. **When you hit rock bottom (if you're able), push your heel hard into the ground and drive your hips forward to stand up.**

Figure 1-14: You do the pistol squat with one leg out in front of you.

Photos courtesy of Rebekah Ulmer