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The Press

Mark Rippetoe

The press is the oldest barbell exercise in the gym. As with many old things, its value often goes underappreciated.

Picking up a weight and pushing it overhead is so basic a movement that one suspects some sort of DNA-type explanation for it. Children can be observed doing this to show off for their buddies. Preliterate civilizations in Borneo probably have a name for picking up logs from endangered rain forest trees and then putting them overhead, completely unaware of the threat this poses to the planet. I'm quite sure the first thing ever done with a barbell was a standing press, because it is the logical thing to do with a barbell.

Fifty years ago, if a fellow physical culturist wanted to know how strong you were, the question would have been, "How much can you press?" It was reckoned that a man should be able to press his bodyweight. Since not many women had at that time figured out they weren't going to get big ol' ugly muscles from lifting weights (Abbye "Pudgy" Stockton being a very important and gorgeous exception), these ancient people would probably not have known that a woman should be able to press two thirds of her body weight. Of course these numbers can apply only to people who actually train the lift. Most people don't. They bench press instead.

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I am a cynical bastard. I truly believe that the reason typical commercial gym members would rather bench press is because they get to lie down. (This is not to say that the bench press is useless; in fact, next month we will investigate its usefulness in detail.) Same thing with leg presses, leg extensions, leg curls, lying triceps extensions, seated anythings, preacher anythings, and Pilates. If you're trying to relax after a strenuous day in the cubicle, go ahead and do your yoga class, finish up with some seated alternating-arm three-pound dumbbell presses on a balance ball, and have a nice smoothie. But if you want to get strong, it's probably going to involve standing with a heavy bar in your hands.

First, let's get some nomenclature problems out of the way. In resistance exercise, the general term "press" refers to a multi-joint extension that drives an external resistance away from the body. (In gymnastics, the term refers to movements that use the body itself as resistance.) So the squat is not a press (the bar is not being driven away from the body; the bar loads the trunk segment, which is then lowered and raised), and the leg press actually is a press. If we use the term "press" specifically in reference to barbell exercise, we mean a standing overhead press with a bar in both hands, the older term for this being the "two-hands press," which has been shortened over the years to the simpler form. Anything that modifies this movement must be described with a qualifying term. The military press is a press done in strict "military fashion," with heels together and no torso movement, sometimes with the back against a wall. (Things have gone so far down the toilet with respect to weight room terminology that the typical Gold's Gym personal trainer thinks a seated behind-the-neck press is a military press.) A dumbbell press is a standing press done with a dumbbell in each hand, unless the alternating version or the one-handed version is specified. A push press is done with the help of the legs and hips, which start the upward momentum of the bar and can add as much as thirty percent to the weight that can be used.

Pressing a bar overhead develops core strength, and somehow manages to do so without a Swiss ball. Since the kinetic chain—the parts of the body involved in the transmission of force from the places where it is generated to the places where it is applied—in the press starts at the ground and ends at the hands, everything in between these two points gets worked, one way or another. This includes pretty much everything. Specifically, the trunk and hip muscles have to stabilize the body while the force being generated by the arms and shoulders gets transmitted between the bar and the floor. This can get really hard when the weight gets up close to 1RM, and heavy presses require and develop a thick set of abs and obliques. Vasily Alexeyev, the "Big Russian" weightlifter from the 1970s and the strongest presser in history, was not merely a fat man.

In contrast, the kinetic chain in the bench press extends from the bench, or more correctly from the place where the back and the bench connect, to the bar. Good benchers brace against the ground with the legs, but the exercise still omits the active balancing and stabilizing work that the core must do in a standing press.

Working toward a bodyweight press is a laudable goal. It provides an appreciation of, and a connection with, an important part of the history of weight training, a time when equipment was simple and training was straightforward. When you press, you train with Kono, Alexeyev, Starr, Grimek, and Cyr. When you press, you train much more than the shoulders and arms. You train the soul of the sport of barbell exercise.

The press we will perform will not be a strict military press, but it will be stricter than an old-style Olympic weightlifting press, where torso movement got so out of hand that the lift was dropped from the sport. It starts at the rack or the squat stands with an empty bar, set at about the same height as a squat, at the middle of the sternum. The grip will be just outside the shoulders, wide enough that the index fingers clear the deltoids, not so wide that the arms drive out at an angle on the way up. For most people this will be between 18 and 22 inches apart. The thumbs should be around the bar and the heel of the palm should be as close as possible to the bar, well down away from the fingers so that it is close to the bones of the forearm that will drive it up. In this position the wrist will be tight and flexed slightly back.

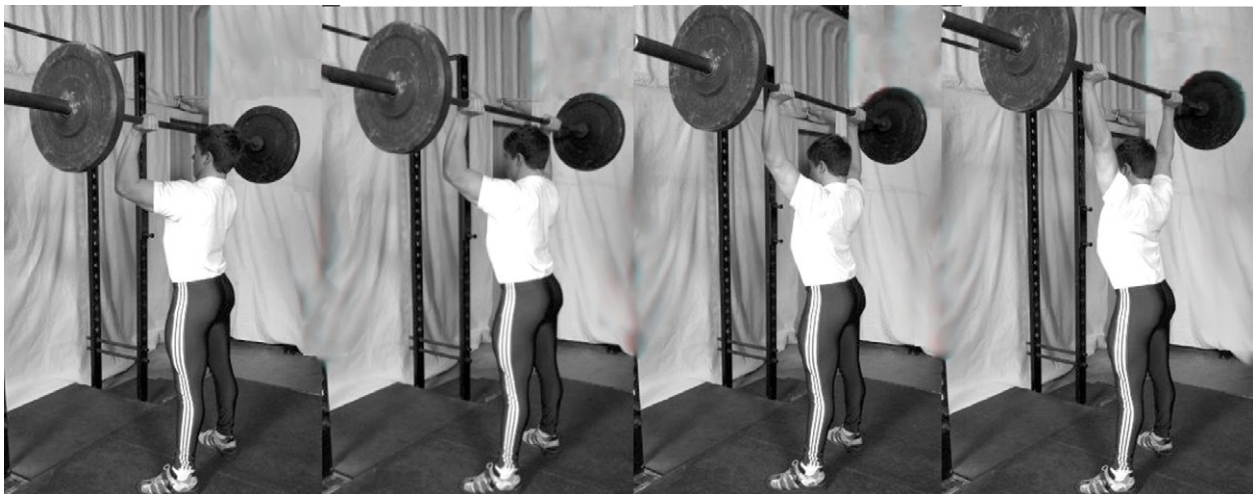
Take the empty bar out of the rack and take one step back. The bar should rest on your shoulders with your elbows slightly in front of the bar. This is an important detail, since if the elbows are behind the bar, you will drive it forward away from you on the way up. Your flexibility may not permit a good position at first, and the bar may not want to sit down on your shoulders properly, but flexibility will come with time and a proper press can be done as long as the elbows are in front of the bar.

Your stance will be comfortable and wide, wider than a pulling stance and maybe almost as wide as a squat stance. A strict military press is supposed to be harder, and a very close stance certainly makes it that way. Our object is to see how strong we can get using the press, and stability should not be a concern.

Look straight ahead to a point on the wall level with your eyes and lift your chest. This is accomplished with the muscles of the upper back and can be thought of as raising your sternum up to your chin. This fixes several position problems that usually result in a bad bar path, and it improves tightness in the upper torso between reps.

Take a big breath, hold it, and drive the bar up over your head. (Hold your breath while the bar is moving. This increased pressure provides support for the back and chest, and is essential for safety when moving heavy weights. This is discussed at length in my and Lon Kilgore's book *Starting Strength*.) In the lockout position, most people will have the bar slightly in front of the head at first, so make sure that your bar is over your neck, the highest point on your skull, right over your ears. This is where the bar must be if it is to be locked out in balance with your spine in normal anatomical position. Once there, the elbows should be locked and the shoulders actively shrugged up so that the bar is supported by the skeletal components and the traps, and not just the triceps. This is the position the bar is going to be at the end of every correct rep.

From your correct starting position, lean back very slightly and drive the bar up, keeping it in as close as



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possible to your face. As soon as the bar passes the top of your head, get under it. Move your body forward under the bar and use this motion to help lock the bar out at the top. Don't move the bar back, move your body forward. When this is done correctly, the forward movement of the body helps straighten out the shoulder, which helps drive up the elbow into lockout.

There will be a small amount of lateral movement involved in getting the bar from a position in front of the neck to a point over the ears. This distance should be made up with the forward movement of the body, not the backward movement of the bar. Pushing the bar back instead of up is inefficient and misses the opportunity to leverage the elbows into extension with the powerful hip extensors working through a properly rigid torso. Abdominal, low back, and hip strength—"core" stability—make this possible, and make pressing an incredibly effective core exercise.

Start with the empty bar and do a set of five. Add a little weight—20 or 30 pounds if you're as huge, massive, and powerful as I am, ten or even less if you're intelligent enough to appreciate the usefulness of maintaining good form while learning a new movement—and go up doing sets of five until the bar speed starts to slow. Stay there and do two more sets, and call it a workout.

The press is hard. You won't be able to press what you can bench. You have to support with your whole body what the bench supports when you lie down to press. So you're doing all the work instead of letting the bench do some of it; you're supporting, balancing, and manhandling the whole load. This is how strength was, and is, built.

Mark Rippetoe is the owner of Wichita Falls Athletic Club/CrossFit Wichita Falls. He has 28 years experience in the fitness industry and 10 years as a competitive powerlifter. He has been certified as an NSCA Certified Strength and Conditioning Specialist since 1985 and is a USA Weightlifting Level III Coach and Senior Coach, as well as a USA Track and Field Level I Coach. He is co-author, with Lon Kilgore, of the books *Starting Strength: Basic Barbell Training* and *Practical Programming for Strength Training,* and has published a collection of his essays titled *Strong Enough?*

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