

BY JOE WUKEBEN // PHOTOS BY LARISSA UNBEDWOOD

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## BARBELL STEP-UP



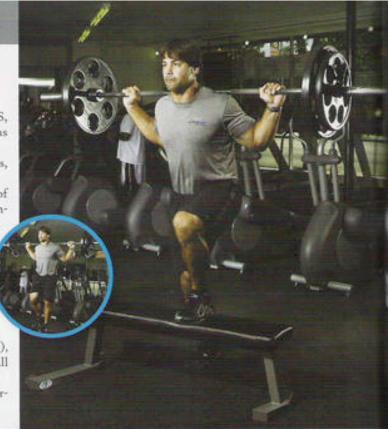
CONTRIBUTOR: David Sandler, MS, CSCS, co-owner of StrengthPro Inc. in Las Vegas (strengthpro.com)

WHERE IT HITS: Quads, glutes, hamstrings,

WHY IT'S EFFECTIVE: "Step-ups require a high degree of strength, coordination and balance - all marks of true athleticism," Sandler says. "From a balance standpoint, using a barbell is significantly more difficult than using dumbbells. A bar can sway from side to side and front to back, whereas you can easily drop dumbbells to the floor if you lose your balance."

HOW TO DO IT: Place a loaded barbell across your upper traps as if to squat and stand facing a plyometric box or other stable, raised surface. Step up onto the box with one foot (your thigh should be parallel to the floor), then return to the start. Alternate legs each rep, or do all reps with one leg before switching sides.

>> HOW MUCH TO DO: 3-4 sets, eight reps per leg at a moderate tempo, t'/-2 minutes of rest between sets.











complex

>> CONTRIBUTOR: Mike McGuigan, PhD, lead power scientist at the New Zealand Academy of Sport North Island, Auckland

>> WHERE IT HITS: Quads, glutes, shoulder

>> WHY IT'S EFFECTIVE: "The explosive nature of the high pull means it's ideal for training for a variety of sports," McGuigan states. "It works multiple muscle groups and has a similar pattern of movements to those required in jumping. It also has the advantage of being less technical than other Olympic weightlifting exercises like the clean."

>> HOW TO DO IT: Stand erect with your feet hip-width apart. Grasp a barbell in front of your thighs with your arms extended and hands shoulder-width apart. In one explosive motion, dip down slightly with your legs, then explosively extend your knees and hips as you pull the bar as high as possible, leading with your elbows as if to do an upright row. Let the weight drop back to the start position, settle yourself, then start the next rep. Make sure you pull to a consistent height with each rep. As fatigue sets in, your pulls will naturally become lower and lower. It's a good idea to set a mark at a moderately challenging height and try to bring the bar to that point on every lift.

>> HOW MUCH TO DO: Three sets, 5-6 reps, two minutes of rest between sets



CONTRIBUTOR: Zach Even-Esh, strength and conditioning coach and owner of the unorthodox Underground Strength

Gym in Edison, New Jersey

>> WHERE IT HITS: Quads, glutes, hamstrings, back, shoulders, biceps

>> WHY IT'S EFFECTIVE: "Because this movement requires you to rip the weight off the floor and press it overhead, you're working explosive power from the ground up," Even-Esh says. "Your legs, back, grip, shoulders and biceps work intensely to lift the dumbbell. The exercise is also easy to learn. Time is often of the essence for athletes, and choosing complicated movements can minimize progress."

>> HOW TO DO IT: Place a relatively heavy dumbbell on the floor in front of you and stand erect with your feet about shoulder-width apart. Bend at the knees and waist to grasp the weight with one hand. Keeping your chest out and your back slightly arched, explosively pull the dumbbell straight up as high as you can, then drop underneath it and catch it in the "clean" position (elbow forward, weight on or just above your front delt). Extend your knees, then explosively press the weight overhead. Carefully reverse the motion to return the dumbbell to the floor. On subsequent reps you can start with the dumbbell on the floor or hold it at mid-shin level. Repeat for reps, then switch arms.

>> HOW MUCH TO DO: 3-5 sets, 3-5 reps per arm, 1-2 minutes of rest between sets M&F

