

Are you in search of just the right formula to blast past a stubborn plateau? Achieve new results by tossing this hard-core routine into the mix every so often.

Increase Your

Flex Appeal **3**



BY CHRIS CANDER | PHOTOGRAPHY CATHY CHATTERTON

Strength training pundits advocate getting a full range of motion (ROM) movement during exercises so often that you may not realize that there's another training option that can be added to your repertoire. Three-phase training, which is a form of partial rep training, has been used by strength training coaches for decades to increase muscle size and power. This technique isn't meant to be used exclusively, nor will it turn you into a swimsuit model. But if you want to turn heads with a high-powered fitness routine, leave obstacle course competitors in the dust or simply lift your kids in and out of their car seats with ease, add some of these challenging exercises to your regular ROM training.

weakest link

The adage "A chain is only as strong as its weakest link" applies to the human body as well. During your full ROM movement, there is typically a "sticking point," which is the most difficult phase because your leverage is at its weakest. For example, during a chest press, the sticking point typically occurs about midpoint in the upward movement. A lifter gets "stuck" with the bar in the space between just off the chest and about halfway up. Obviously, the amount of weight you can lift for the full ROM is limited by how much you can get past that threshold. However, your pectorals may actually be capable of lifting heavier weight beyond the sticking point.

By breaking the ROM into phases, you'll be able to work to increase the strength at your weakest link, which will allow you to increase the amount of weight you lift for full ROM movements and, ultimately, improve the strength and size of the muscle. And don't forget: Stronger muscles are not only vital to an efficient metabolism but are less prone to injury and help protect joints as well.

forever 21s

Fitness expert Mocha Lee has used three-phase training for more than a decade. Nearly any exercise can be

broken into three-phase movements, but her favorite example is doing biceps curls as 21s. "The way to do them is to hold dumbbells hammer-style at your sides," she says. "Perform seven reps from the bottom to the halfway point, then seven from just the halfway point to the top and seven full ROM reps."

There is no scientific justification for doing a total of 21 reps; that number has just been passed down as lore over the years. You could just as easily do 15 or 30 as long as you focus the effort in each range. If necessary, you can use a heavier weight to challenge your weakest phase, then switch to a lighter weight for the other phases.

benefits

Among the benefits, says New York-based fitness trainer Lalo Fuentes, is that you bring less momentum to the exercise when you perform it in phases. "It's always tempting to swing the weights when you do movements like biceps curls," he says. Additionally, you can isolate muscles in the different phases. "During a three-phase squat, your focus will be on the quads in the first phase (from standing to halfway) and on the glutes and upper hamstrings in the second (halfway to parallel). In the third phase, which is a full ROM movement, your legs will be completely fatigued."

Because you'll be doing more reps in three-phase movements, you'll also burn more calories during your workout. You'll stimulate all the muscle fibers in the muscle group and, therefore, increase hypertrophy, or growth, when you force the weaker fibers to continue working instead of letting the stronger ones take over right away.

There is even scientific evidence to support this type of training. A 10-week study conducted by the University of Southern Mississippi and University of Alabama compared partial versus full ROM training in the development of maximum strength. The scientists concluded that lifting weights through a partial ROM develops maximum strength just

Hit It Hard

Here are some high-intensity training guidelines that will help you boost your fitness level and develop muscle strength.

EXERCISES Find eight to 12 strength training exercises that work all of the major muscle groups.

FREQUENCY Do at least three nonconsecutive sessions per week if you do a circuit or four split sessions with 24 hours of rest before working the same body part again.

SETS Do three to four sets of each exercise.

RESISTANCE Approximately 70 to 80 percent of your maximum.

REPETITIONS Do eight to 12 controlled repetitions.

REST Allow only 30 to 45 seconds of rest between sets.

PROGRESSION Aim for a five percent increase resistance whenever 12 controlled repetitions become easy.

SPEED Use slow to moderate movement — for example, two seconds lifting and four seconds lowering.

RANGE Whenever possible, use full range of movement.

as effectively as using full ROM.

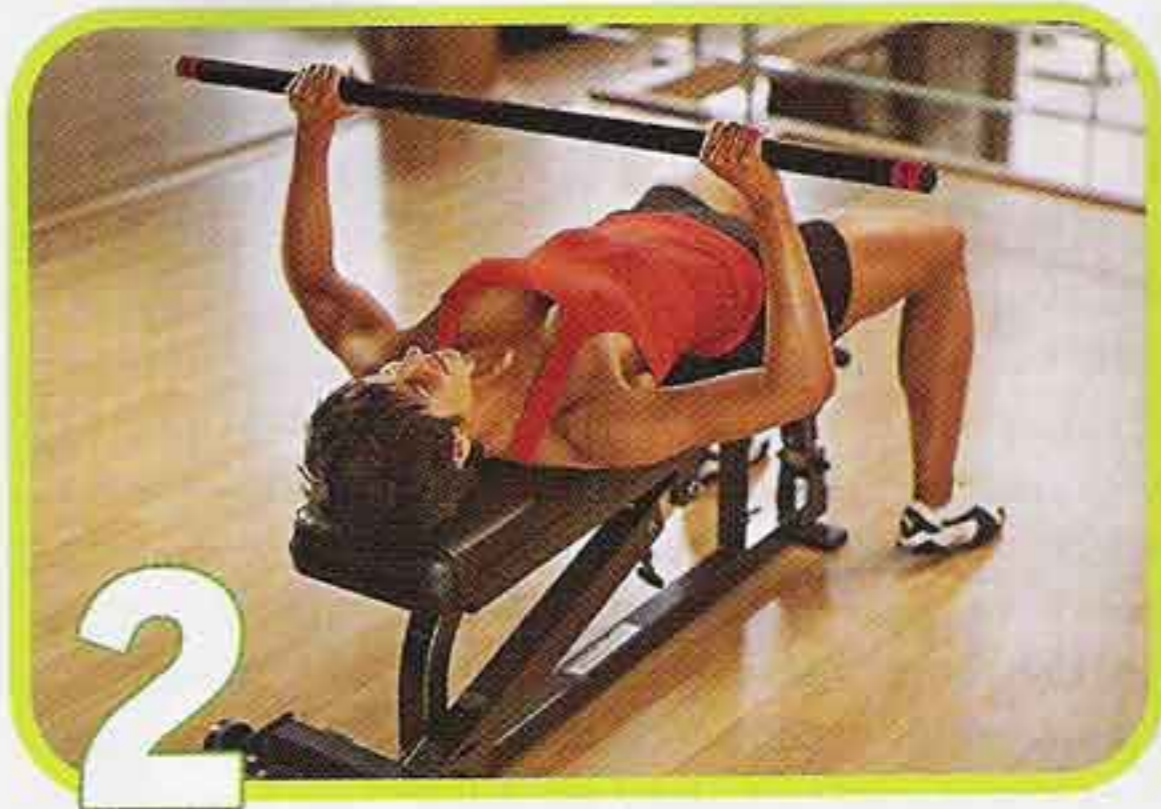
According to former U.S. Marine Corps Captain and fitness trainer Charla McMillian, however, you should not do any type of partial rep training as a substitute for traditional full ROM training. "Nor should you use this technique on any exercise that poses a higher risk of joint and other injury when the full ROM is not completed," she says. "This is great for some athletes, but novices and recreational gym-goers may not be able to control the weights should those sticking point fibers truly fail."

easy as 1-2-3

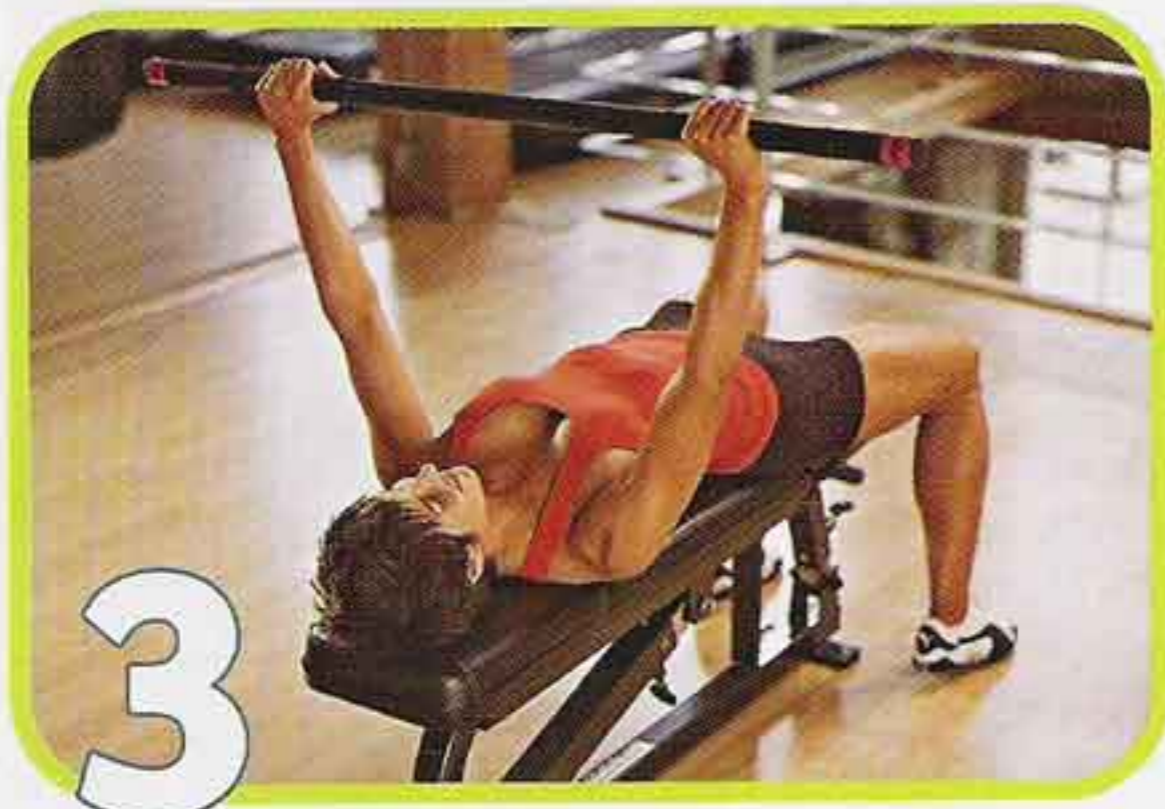
Occasionally, add three-phase exercises to your normal routine to conquer a performance plateau or enhance your strength. You can do them in one of two ways: Add them to the end of a regular ROM set when you are unable to complete a full rep, or do two-three sets of one three-phase exercise for each body part.



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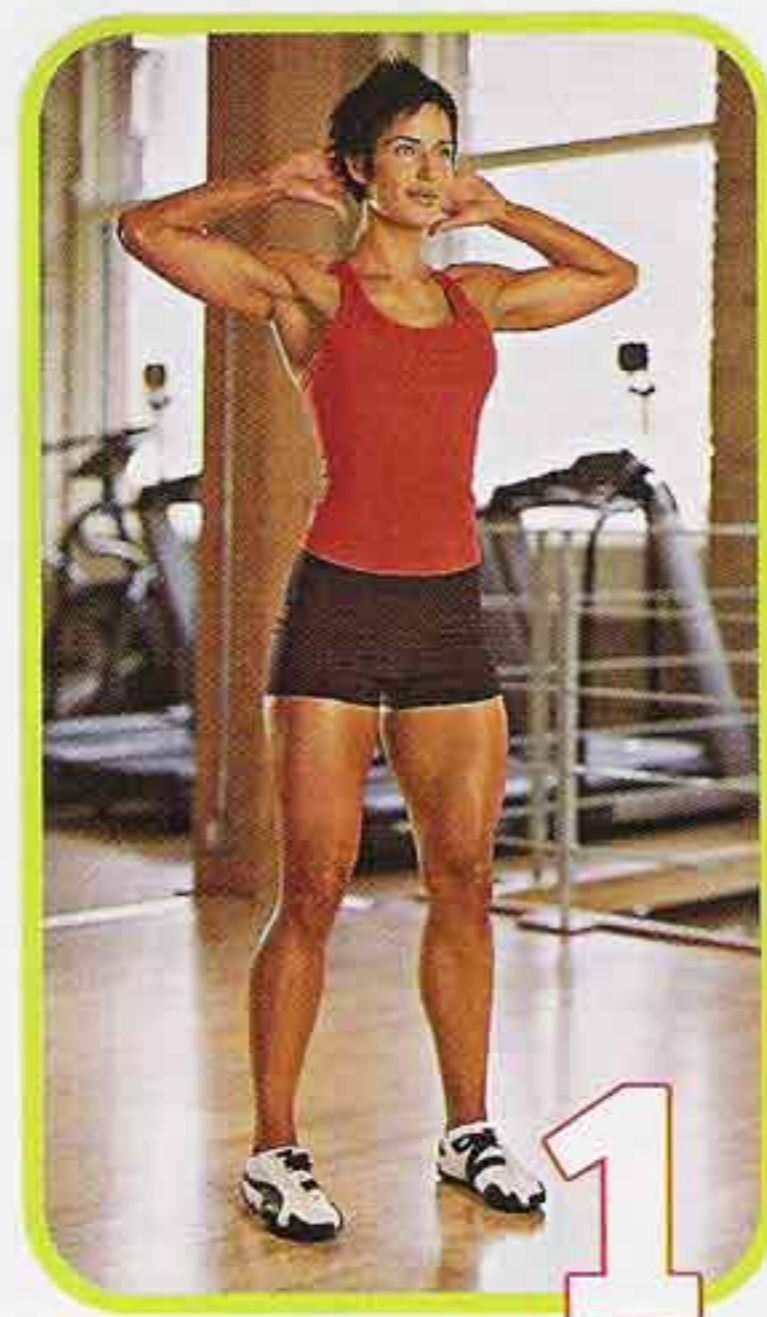
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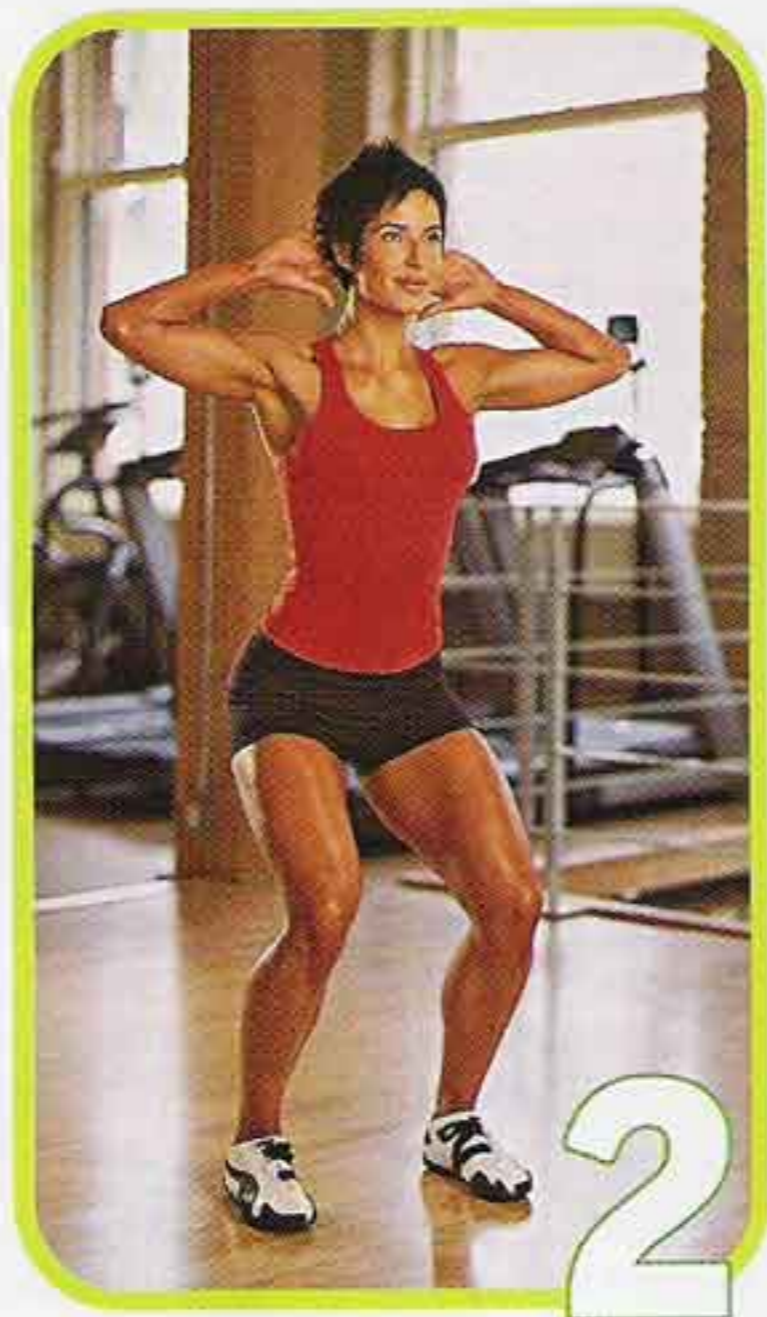
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chest press

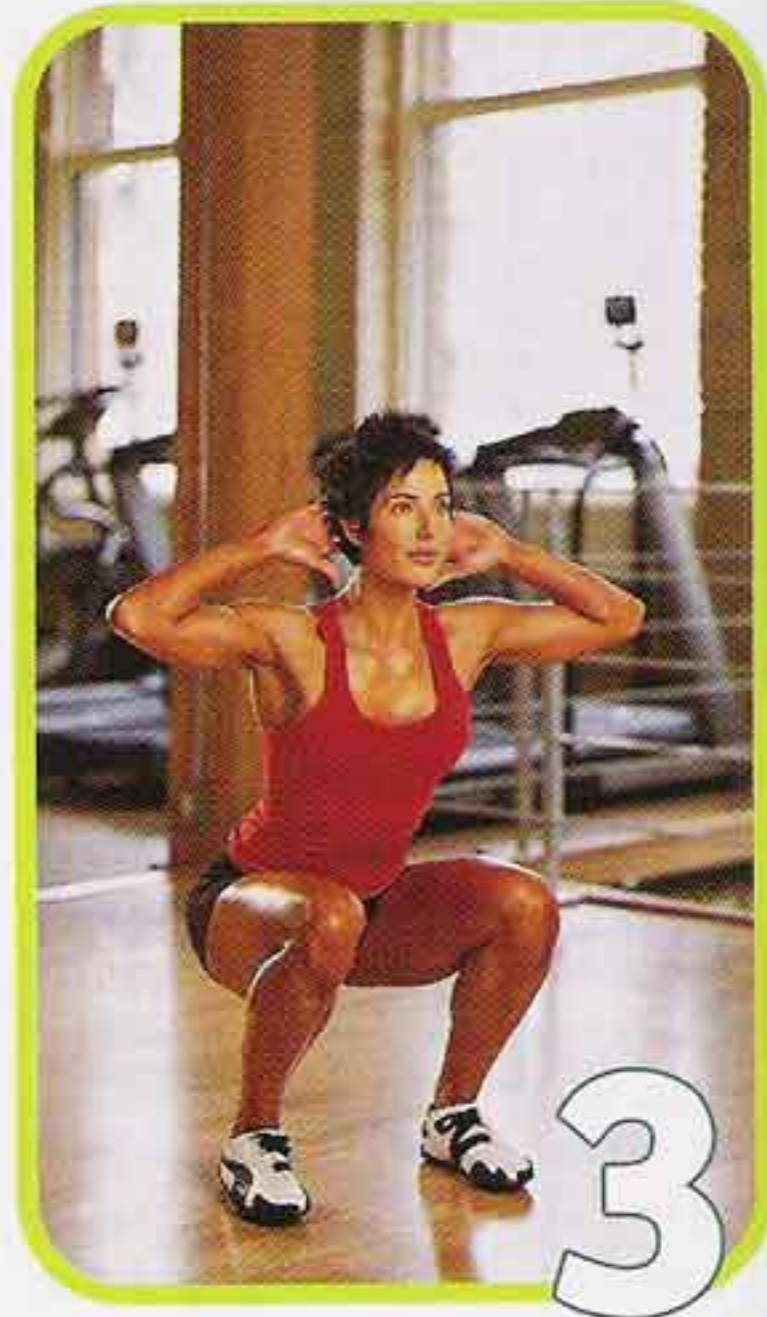
Lie on a flat bench and position your feet flat on the floor. Start with a grip broader than shoulder width with a weighted bar of your choice lowered to the middle of your chest. For phase one, drive the bar halfway up over the middle of your chest until your arms are bent at about a 45-degree angle, then slowly lower the bar back for five to seven reps (1 to 2). For phase two, drive the bar up from midpoint to a full arm extension, then lower only midway back for another five to seven reps (2 to 3). In the final phase, do five to seven full ROM reps (1 to 3). This exercise works the pectorals.



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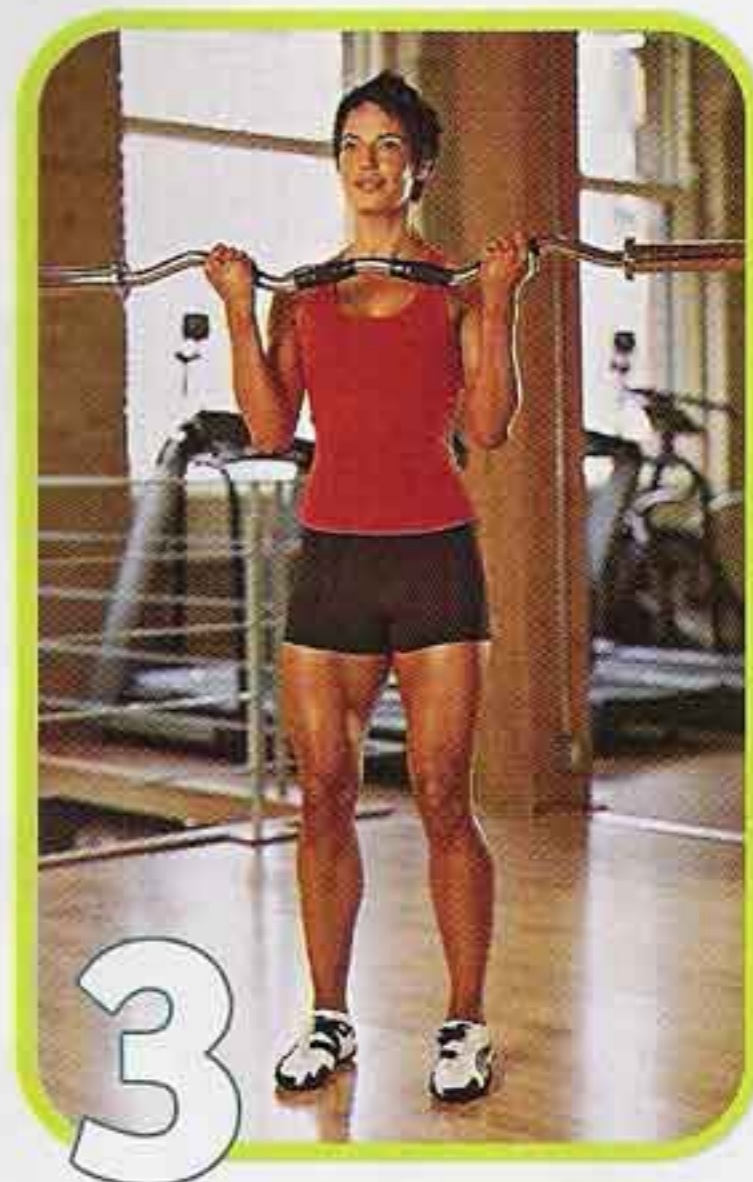
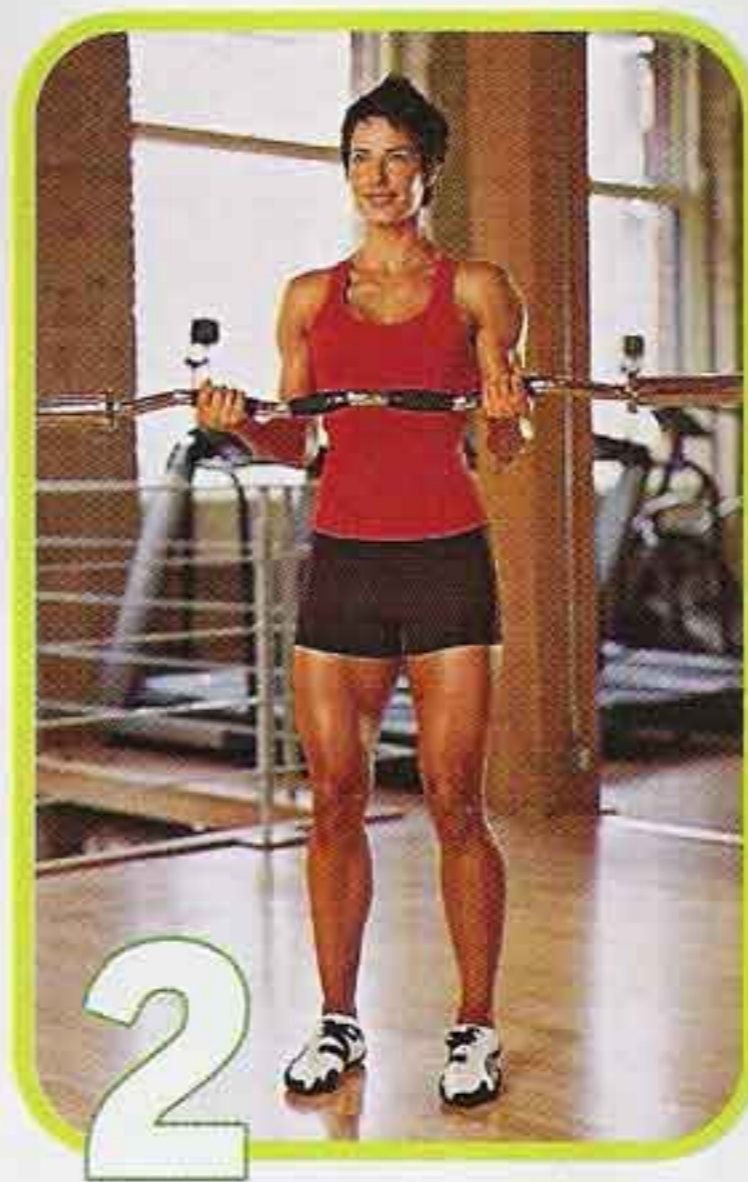
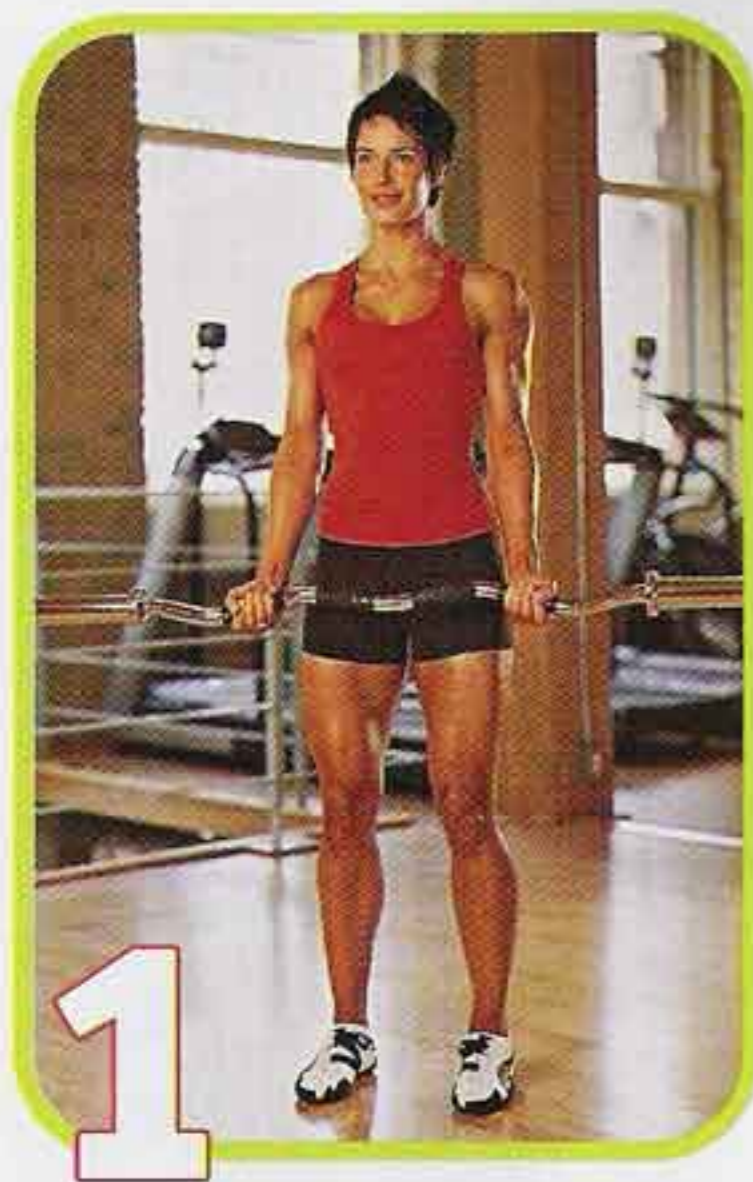


3

squats

Stand with your feet slightly wider than shoulder width. In the first phase, place your hands behind your head and squat down about six inches, then come back up for 10 to 15 reps (1 to 2). In the second phase, do only the bottom half of a full squat for another 10 to 15 reps (2 to 3), making sure

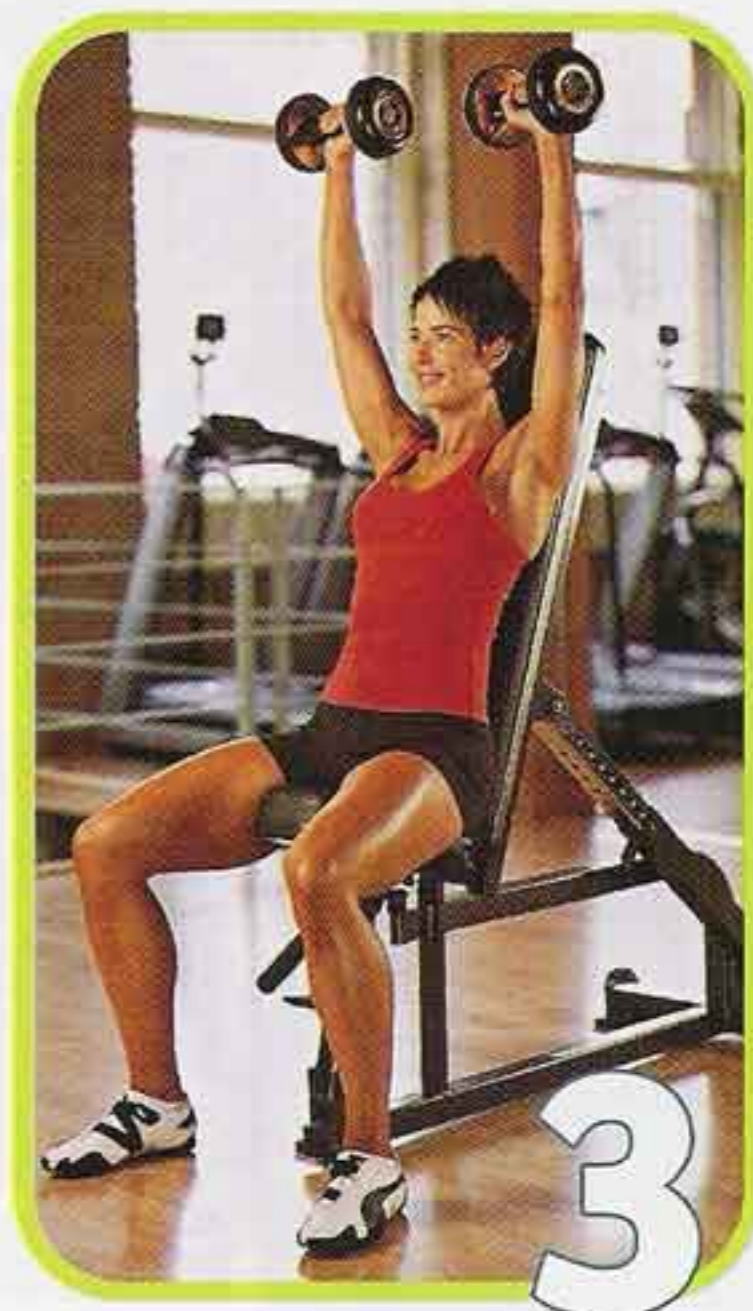
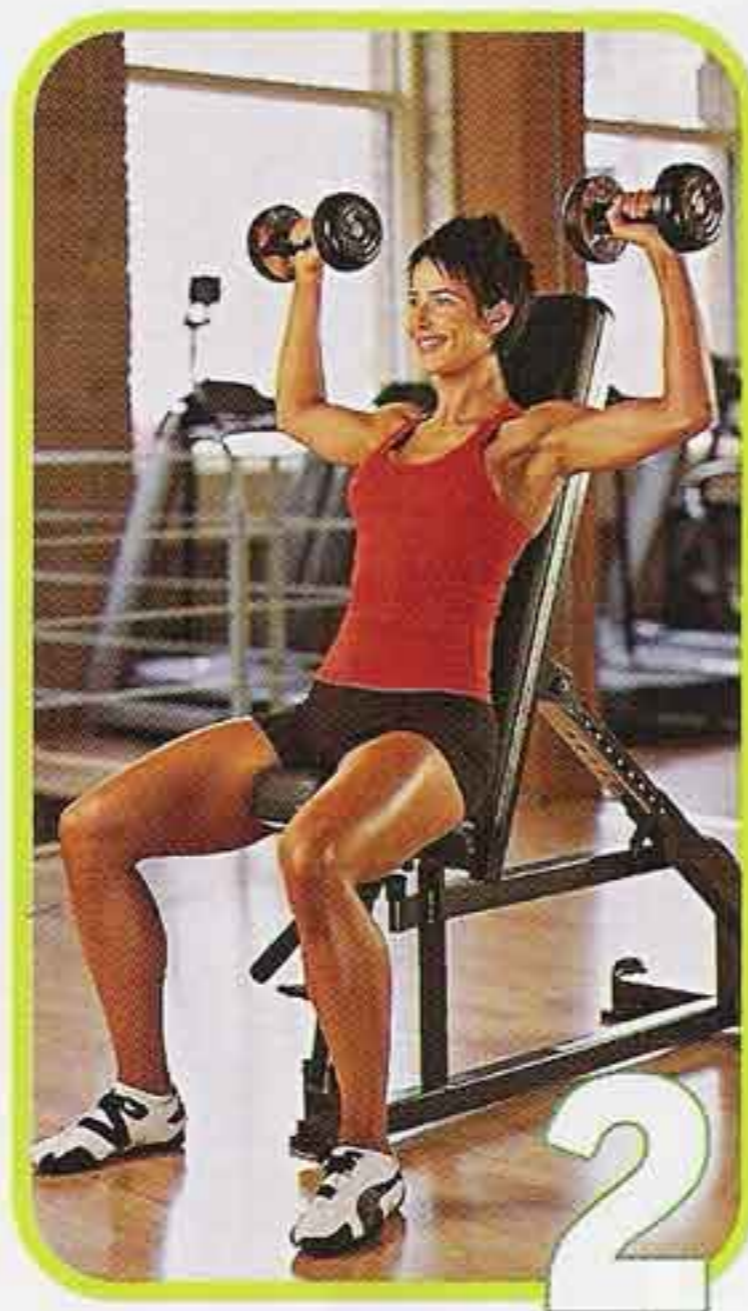
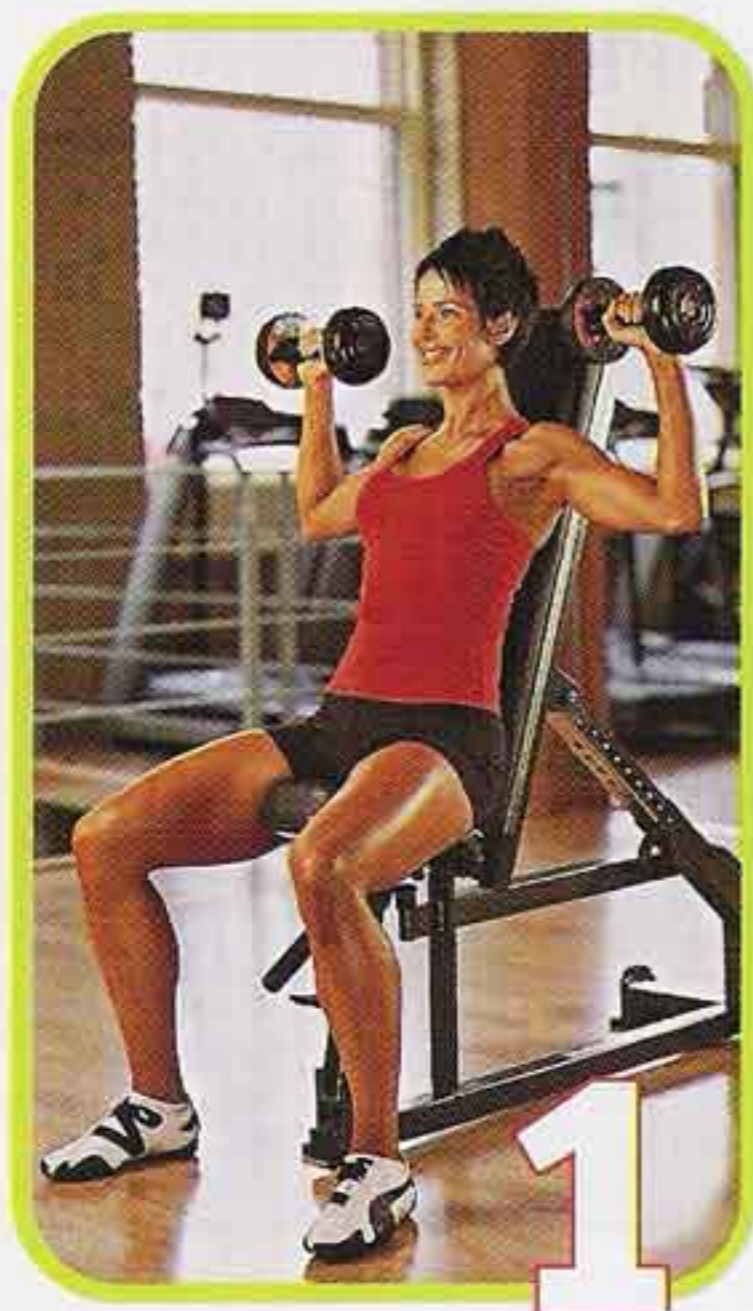
your glutes are practically touching the floor (or as far down as you can bear while keeping knees behind your toes) and thrusting your hips forward to rise back up just to the midway point. Do a final phase of 10 to 15 full ROM reps (1 to 3). This exercise works the hamstrings, glutes and quads.



biceps curl

With your hands shoulder width apart, grasp a weighted bar with an underhand grip. Start with the bar hanging down at arm's length in front of you. Without swinging the weight, curl the bar halfway up toward your chest in an arc for five to 10 reps (1 to 2). Then for phase two, lock your elbows to

your sides and curl the weight from midpoint as high up as you can and squeeze the biceps at the top for five to 10 reps (2 to 3). Finally, perform five to 10 full ROM reps (1 to 3). This exercise works the biceps.



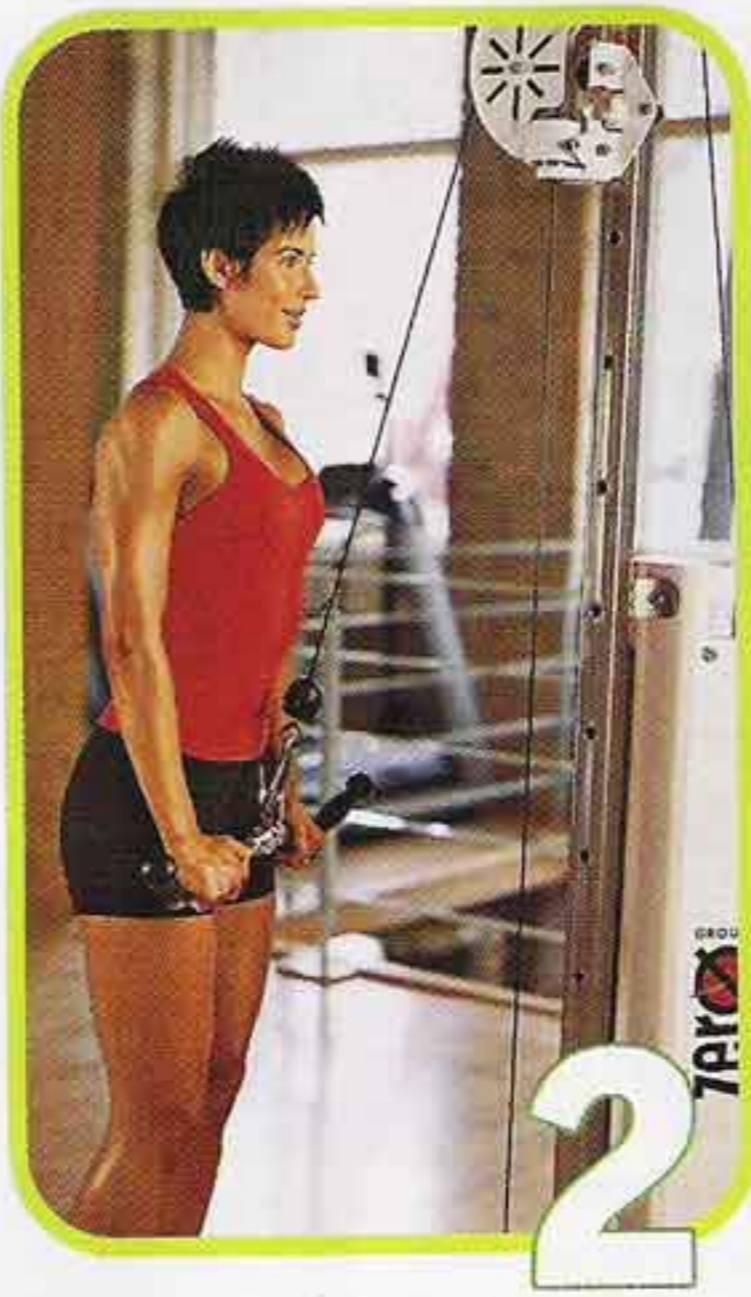
shoulder press

Sit at the end of a bench with your feet flat on the floor and adjust the back pad to support your back for increased concentration in your shoulders. Keep your chest high as you raise the dumbbells to ear level. Press the weights a few inches overhead for five to seven reps (1 to 2). In the next phase, press the

weights from that midpoint until your arms are straight and elbows are locked above your head for another five to seven reps (2 to 3). In the third phase, perform five to seven full ROM reps in a slow and controlled motion (1 to 3). This can also be done in a standing position. This exercise works the shoulders.



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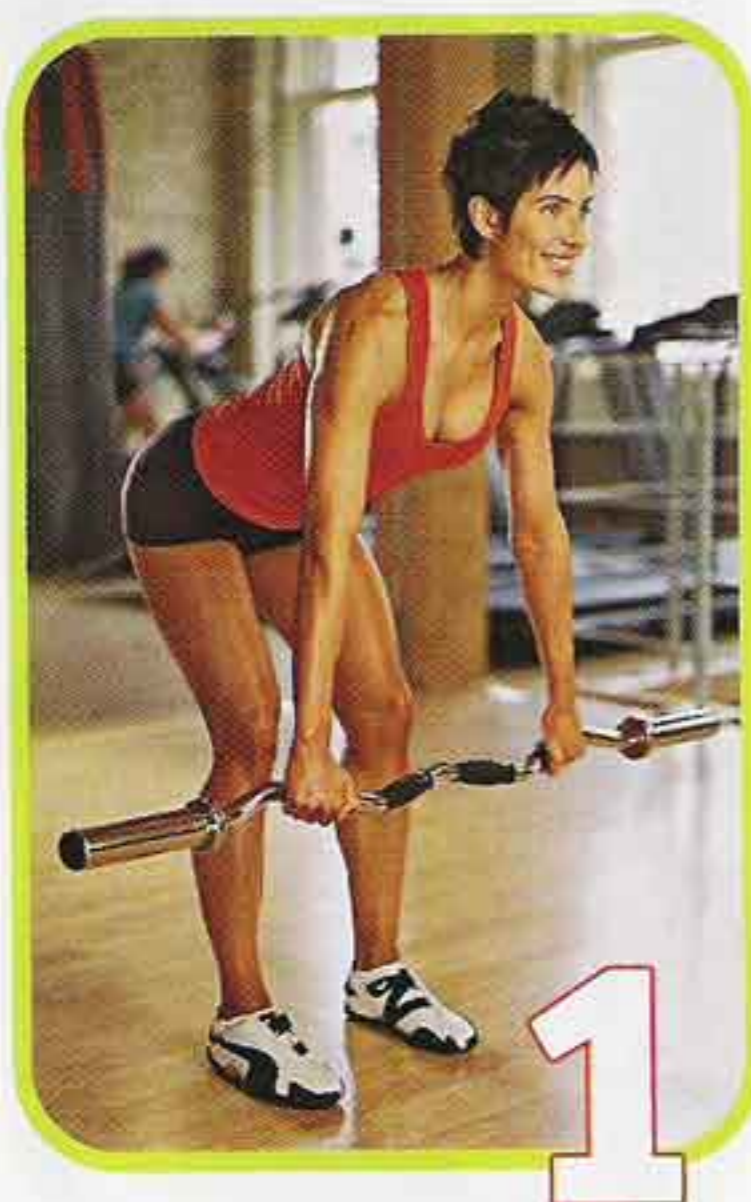


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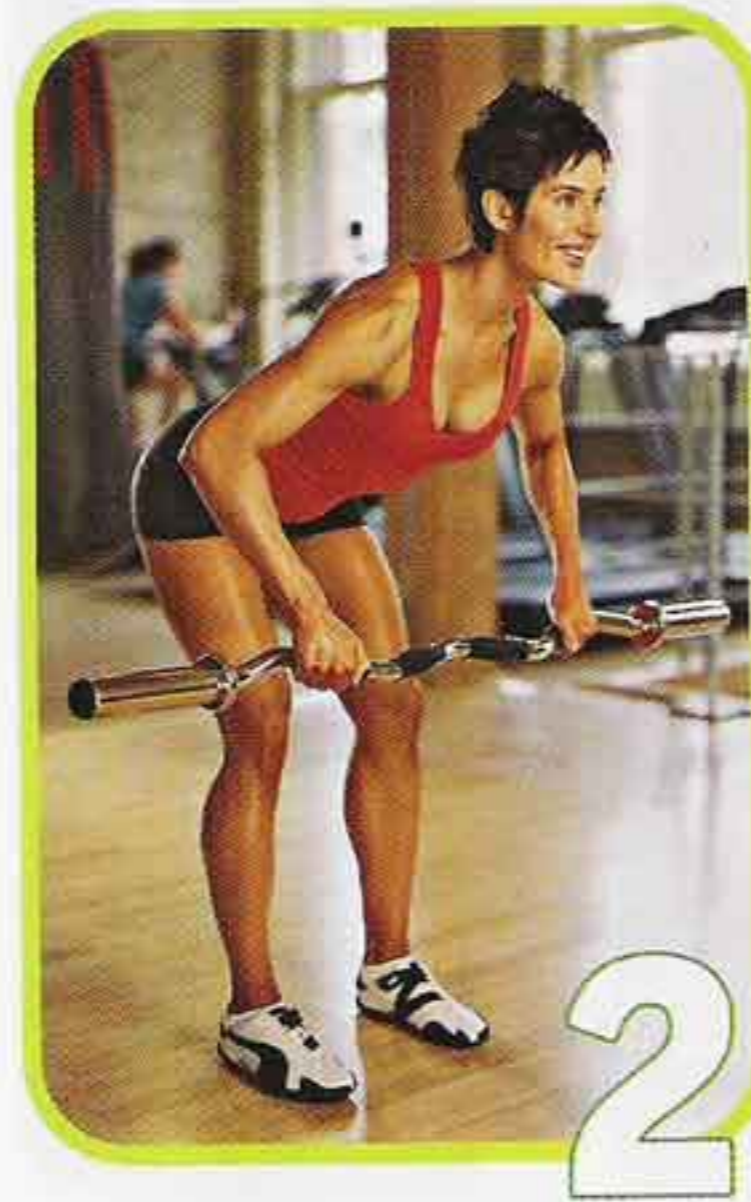
triceps pushdown

Using a high-cable pulley, grasp a short bar with an overhand grip. With your feet slightly apart and your knees slightly bent, position your forearms so they're parallel to the floor. Push the bar down as far as possible toward your thighs for 10 to 15 reps (1 to 2). Next, starting with your

forearms almost vertical, push the weight down until your forearms are parallel to the floor (3 to 1); do 10 to 15 reps. Finish with 10 to 15 full ROM reps (3 to 2). Throughout all three phases, keep your elbows and torso static. This exercise works the triceps.



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bent-over row

Position your feet about shoulder width apart, with knees slightly bent. Bend over until your back is almost parallel to the floor and grasp a weighted bar with an overhand grip. Hold the weight straight down at arm's length. In the first phase, pull the weight straight up halfway toward your chest for five to 10 reps (1 to 2). In the second phase, pull

the weight from that midpoint all the way up to your chest for another five to 10 reps (2 to 3). Finally, do five to 10 full ROM reps (1 to 3). Throughout the movement, keep your head up and your back straight, and avoid using momentum to swing the weight. This exercise works the back. 