

Now! Learn the Right Way to Build a Lean, Muscular Body!

Muscle Media All-Star

Personal Trainer, Roger Applewhite

Shows You How!

Roger Applewhite has been working as a professional trainer in Houston, Texas, for seven years and has two certifications, one from the Baylor College of Sports Medicine and another from the National Academy of Sports Medicine.

He has become one of the most famous personal trainers in America. He has dozens and dozens of clients waiting to pay up to \$300 a week for his one-on-one services, and his articles in *Muscle Media* magazine have drawn rave reviews.

In this book, Roger outlines some of the most important aspects of developing an effective, safe, and "result-producing" strength-training program, which includes an emphasis on proper biomechanics, exercise form, mental focus, and exercise selection.



"Roger Applewhite really knows his stuff! His tips on exercise techniques have helped me a ton! The photos that show proper technique take the guesswork out of how to do the exercises."

Pete Carola
Gainesville, FL

"Roger Applewhite is not only very knowledgeable but motivational as well! I've been following his routine for six weeks and have been getting great results!"

Mike Ryan
Venice, CA

"Unlike many personal trainers these days, Roger Applewhite practices what he preaches! His advice is great!"

Ryan Gougeon
East Lansing, MI

MUSCLE
MEDIA

Copyright © 1997 by Muscle Media, Inc. • 555 Corporate Circle • Golden, CO 80401

\$19.95



personal trainer

By
Roger
Applewhite

*Sets,
Reps,
Weights*

Your Step-by-Step
Guide to Building
a Lean, Muscular
Physique!

*Muscle Media's All-Star
Personal Trainer Roger
Applewhite Shows You
How to Build a Bigger,
Stronger Chest; Rock-Hard
Abs; Peaking Biceps;
Bulging Triceps; a V-Taper
Back; Broad, Strong
Shoulders; and
Powerful Legs.*





Photo: Kai

Roger Applewhite

Introduction

Years ago, personal trainers were people who pretty much just held the hands of their clients as they took them from machine to machine. They'd count reps and keep their clients company and maybe make them feel less intimidated about being surrounded by all the odd-looking machines (and people). If a person were lucky enough to hook up with one of the better personal trainers, he or she might actually see some progress in a few months or years. More often than not, the trainee would develop complete dependence on the trainer, learning nothing about the hows or whys of training the body.

Things, obviously, have changed. At least I hope they have. Today's personal trainers are students of biomechanics, physiology, and nutrition. Today's personal trainers teach clients about form, mental focus, biomechanics, supplements, workout pace, and intensity. They want their clients to make as much progress as possible and take pride and pleasure in seeing a client undergo dramatic changes.

I'm Roger Applewhite, and I'm one of the *new* personal trainers. I'm not a pro bodybuilder, and until recently, I never appeared in any of the bodybuilding magazines. I started training when I was 11 years old, and right then and there, I discovered something that would make me happy the rest of my life. I dedicated myself to learning everything I could about training. I read all the muscle magazines, all the journals, and spent hundreds of hours experimenting with new techniques. I pursued two training certifications and built up a thriving personal-training business in Houston, Texas. There may be other trainers out there who possess a similar body of knowledge, but few are more passionate about what they do.

I consider myself lucky because each day, I get to work in an environment I love and do something I'm passionate about. I can't think of a better career—I get to share my knowledge, help other people reach their goals, and make money at the same time.

However, I'm usually limited to the amount of people I can reach. After all, there's only one of me, and there are only so many hours in a day. Then, in what I consider to be one of the luckiest things to ever happen to me, Bill Phillips, the Executive Editor of *Muscle Media* magazine, noticed me, liked what he saw, and recruited me to write a "Personal Trainer" column for that great magazine.

Since then, I've reached an enormous number of people, and I'm proud—and a little overwhelmed—to say that most of the audience wants more. Hence, this book. I've compiled training routines for each body part, along with helpful advice on such complicated concepts as set/rep schemes, time under tension, and proper form.

It doesn't matter if you're a beginner, intermediate, or advanced weight trainer—I'm certain the information in this book can help you a great deal. If you're just starting out, you'll have the opportunity to learn the *right* way to train from the get go. Those of you who've been training for a while, pay careful attention to my tips on biomechanics and proper form—you may discover that by making a slight adjustment here and there in your workouts, you could significantly enhance the effectiveness of your training program.

I'm gonna take you through a full-body workout, and at the end of this book, I'll give you tips on how to organize your whole routine. We've got a lot of information to cover, so let's get to it!



How to Build a Bigger, Stronger Chest

For some reason, working the chest gives me more pleasure, more satisfaction, than working any other body part. I'm not sure why that is, though. Maybe it's the feeling of all the blood engorging the chest, so close to the heart, that makes it feel so good. You've got to admit that no other body part gets a better pump than the pecs. If you've worked them, worked them right, worked them *hard*, they'll swell up so full and tight, they'll feel like they're going to burst.

On the other hand, it might be a mental thing rather than a physical thing. If you study myths and legends or popular folklore, you'll notice a strong chest was representative of male virility and heroism. I don't know about you, but I want to look heroic. Furthermore, the average layperson wouldn't recognize a good back, or a good pair of quads, calves, or hamstrings, even if they barreled through him during a game of sandlot football. However, a powerful chest is something everybody recognizes. Someone with a powerful chest is... well, someone to be reckoned with.

Almost anybody can improve his/her chest with only the smallest bit of know-how. Everybody knows how to do a basic push-up, and most people can fake their way through some sort of bench press. But if you really want to do it right—really want to leave everyone else in the dust—you've got to know what you're doing.

Here's a routine that works...

The Chest Workout

- Incline dumbbell presses
- Flat dumbbell presses
- Incline dumbbell flies
- Cable crossovers

#1 incline dumbbell presses



CAUTION

Don't push the weight out over your stomach or behind your head. Keep it vertical.



TIP



Raise the weights in line; don't twist the wrists on the way up.

Starting position: You get a lot of advice about what angle to use when you're doing incline exercises, but for developing your upper pecs, put the bench at a 25° to 30° angle; that's where you'll get the maximum emphasis. Lift the weight to shoulder level, keeping your upper arms parallel to the ground and your elbows at about 90°.

Stabilize: Make sure your feet are flat on the ground, and don't move them. Your spine should be straight and your abs tight. Keep your neck straight. Also, be sure to keep your shoulders back, and keep them this way throughout the exercise.

The exercise: Follow a triangular motion as you lift. The weights should meet at the midline of your body above your chest and shoulders. Visualize a smooth motion, and focus on the "squeeze" of the chest. Lower the weight more slowly than you lift it. Accentuating the eccentric phase will enhance your strength and coordination.

Sets: Try to do three to four sets. Go pretty heavy but not so heavy you can't squeeze out about 15 reps in good form the first set. Go to failure on the other sets, and try to get at least ten reps. Use a 3-0-2 tempo (three seconds to lower the weight [eccentric], no pause at the bottom, and two seconds to raise the weight [concentric]). Rest for a minute or two between sets. (This goes for all the chest exercises.)

Starting position: Sit on the edge of the bench with the dumbbells on your knees; then roll onto your back in one smooth movement while bringing the weight up to a position slightly outside and above your shoulders.

Stabilize: Keep your feet firmly planted, your back flat on the bench, and your abdominals tight (but not crunched). Keep your chin tucked, but don't lift your head. Your shoulders should not leave the bench.

TIP



Remember to keep your feet firmly planted and your abs tight.



#2 flat dumbbell presses

The exercise: Start the exercise with your upper arms parallel to the ground, and keep your wrists tight and straight. Move the weights upward in a smooth triangular motion until they meet above the center line of your body. Follow this same path down until your upper arms are slightly below parallel to the ground. Never move too fast; stay in control and focus on proper form.

Sets: Four to 5 sets, starting with a medium weight for 10 to 15 reps. Increase the weight each set, going to total failure on the last two or three. The rep tempo should be about 3-0-2. Don't rest at the top either. (Only stop at the top or the bottom if you need to restabilize yourself.)



CAUTION

Don't lift your head or your shoulders off the bench.

#3 incline dumbbell flyes

Starting position: Keep your incline bench at a 25° to 30° angle, and maintain the same position you used with the incline dumbbell presses.

Stabilize: As if you didn't know already, make sure your back is straight and flat against the bench. Tuck your chin down, but don't lift your head off the bench. Have your feet flat on the floor, and keep them there. And remember to keep your shoulders flat on the bench.

The exercise: For our purposes, your palms should not face each other; use a grip with your palms facing your feet. As you raise the weight, try to follow a triangular motion, but this time put an arc into it. Your arms will arch down and out and then up and in. Make sure this motion goes directly against gravity, not out over your stomach. At the top, when your pecs are tight and you're pulling the dumbbells together over your body's midline, make sure you keep your shoulders flat on the bench!

Sets: Do only three sets. Keep it fairly light, using a weight you can lift with strict form for 15 to 20 reps. Stick with a 3-0-2 tempo.

To place more emphasis on your upper pecs, don't let your palms face each other.

TIP



TIP

Bend both elbows slightly, and keep them at this angle throughout the flye exercise.



#4 cable crossovers

Starting position: When you set up for this exercise, be sure to lean forward slightly. You're at the correct angle when you feel the cable pulling against the inward motion of your arms and hands.

Stabilize: Stay in this slightly bent-over position, making sure your legs are a comfortable distance apart and your spine and abdominals are straight and tight. Stay with the pronated grip (palms facing down), and be sure you're not using your shoulders.

The exercise: Once again, to hit the chest hard, try to execute a triangular motion. Move down and in from the shoulders to the midline of your body below your chest. Do not cross the cables as you finish, just bring your hands close

Try to use a walking stance (one foot in front of the other) with the feet shoulder-width apart to maintain stability.

TIP



TIP



Remember that these crossovers don't really cross over. Crossing the cables decreases the emphasis on the chest.

together. Stop the eccentric portion of the exercise when your elbows reach the level of your shoulder joints. Always remain focused on getting the maximum contraction from your pecs.

Sets: Do 3 sets using a weight that will take you to total failure around 12 to 15 reps. Stay with a 3-0-2 tempo.

CAUTION

Don't walk out in front of the cable system. Just line yourself up, and lean slightly forward. The angle will not be optimal if you are in front of the cables.





How to Build Rock-Hard Abs

Abs are hot! In fact, there are so many people who want to know the secrets to building a great midsection—a firm, slender waist with rippling abdominal muscles—it’s turned into a multimillion-dollar industry of its own! I’m sure you’ve seen those “hypish” infomercials for all different kinds of ab-training devices. Some work so well you only have to do them three minutes a day, and you’ll miraculously develop a beautiful body... *NOT!*

The truth is, developing a washboard set of abs takes more than just spending a few minutes a day on some trendy ab cruncher. Like any other muscle group, your midsection needs to be trained in accordance with the proper principles of resistance exercise. It involves some work, but my guess is, if you’re taking the time to read this book, you’ve already made a commitment to putting forth some effort to getting in great shape.

Now, before I give you my ab-training tips, I need to remind you that one of the keys to building rock-hard abs is to lose bodyfat. Even though that’s not the focus of this book, I will tell you this: if you can “pinch an inch” of flab on your lower belly, you need to focus on fat loss and abdominal exercises to build a firm, defined midsection. When it comes to fat loss, the formula that works is to combine exercise with a nutritious diet and consume less calories each day than your body burns. That’s all there is to it.

While you’re working on shedding that extra layer of flab, try the following ab-training routine, so when you do get lean and mean, you will have built the best abs your genetics will allow! (By the way, most folks have better abs under that layer of fat that covers their bellies than they might imagine!)

The Ab Workout

- Cable crunches
- Crunches
- Hanging leg raises (with straps)
- Reverse crunches
- Spinal extensions

ABS

#1 cable crunches

Starting position: Grasp two handles or a rope from the cable above, and kneel on a padded surface. The cable will be above and in front of you.

Stabilize: Slowly bring your wrists down towards your head. This should take some tension and stress off the shoulders. Stabilize the hip area and keep your knees together. Your back should be straight with your torso at a slightly forward angle.

The exercise: Slowly contract the abdominals, focusing on the area from the rib cage down to the pelvis. Straighten back up very slowly, keeping constant tension on the abdominals.

Sets: Try to do 3 or 4 sets of 30 to 50 reps each. Maintain a slow tempo (about 3-0-3), and rest about a minute between sets.

Visualize rounding the back like a cat when contracting the abdominals. (This is called spinal flexion.) Keep the weight moderate and go for the burn!

CAUTION

Don't hyperextend your lower back at the top; try to keep all the tension on the abs.



Starting position: Lie flat on your back with your feet flat on the ground or on a "sit-up board."

Stabilize: Make sure your pelvis is in a neutral position before you begin. Place your hands on your upper chest. Keep your head and neck stable.

The exercise: The abdominals create the exercise. You should visualize the rib cage being drawn down and in towards the pelvis when the abdominals contract. Both the contraction and the eccentric phase should be slow and precise.

Sets: Try four sets. Go for 25 reps in each set (the tempo should be fairly slow, but don't obsess about counting), and rest about 45 seconds to a minute after each set. My abs are screaming when I finish four strict sets of these!

#2 crunches



TIP

Make a fist and place it between your chin and collarbone; with the other hand, grasp your wrist. This keeps you from moving your head and lessens the strain on your neck.



Don't put your hands behind your head. This leads to poor form and possible injury.

CAUTION



You can also place your fists on your forehead to assure you are stable and focused.

VARIATION

#3 hanging leg raises

Starting position: Support your body in the straps.

Stabilize: Keep your shoulders and elbows at the same height throughout the exercise. Make sure your body doesn't drop because this will put too much stress on your shoulders.

TIP

Exhale with each concentric phase of each repetition.

The exercise: Raise the knees up to the hip area. Controlling the trunk motion, slowly tighten the abdominals. Release and lower your legs to the starting position.

Sets: This is an advanced exercise because it requires your abs to lift the heaviest muscles in your body—your legs. For that reason, I recommend you start with 2 sets of 15-20 reps each. You can build from there as your abs get used to the load. Keep the tempo slow (2-0-2), and focus on exhausting your abs.



CAUTION

Don't drop your legs too quickly because the extra momentum could lead to lower back injury.



CAUTION

Don't try this exercise if you don't have a strong upper body. You must be able to support your bodyweight.



#4 reverse crunches



Don't perform this exercise quickly; excess momentum can cause you to lose proper form and may lead to lower back injury.



CAUTION

Starting position: Lie on your back on a slightly inclined bench, and grab the top of the bench.

Stabilize: Don't let your body slip downward because this will stress your shoulders. Bring your knees up over your pelvis. Keep your knees and your feet together to reduce unnecessary motion.

The exercise: Slowly contract the abdominals, focusing on bringing the pelvis up and in towards your rib cage. Let the abs do the work. Lower the pelvis to its starting position, maintaining constant tension on the abs.

Sets: Try about 3 sets of 10-20 reps, resting about 1 minute between sets and following a slow (3-0-3) tempo. Remember, this exercise is not easy, so don't expect to perform too many sets or reps at first.

TIP

Exhale when you contract the abs, so your rib cage will drop and allow for a more complete motion.

#5 spinal extensions

TIP

Visualize a string attached to your upper back that slowly lifts you up.



Avoid extreme hyper-extension of the lower back!

Don't perform this exercise fast.



CAUTION

Don't extend your head and neck upward during the exercise. This puts stress on the cervical area of the spine.



VARIATION

This exercise can be performed on your stomach, down on the floor. Just raise your upper body off the floor. (You can also raise your legs at the same time if you wish.) Focus on your lower back while lifting.

Starting position: You can use either the traditional Roman chair or the more modern 45° back-extension apparatus to work your lower back (spinal erector muscles). Place your heels under the pad or metal edge of the Roman chair. Make sure the forward pad is at the top of your pelvis. Start with your upper body parallel to the ground.

Stabilize: Your hip joints need to be partially stabilized by the pad and by your glutes.

The exercise: Start the exercise with your upper spine. Visualize raising only the upper back. After raising up only three or four inches, you will feel your spinal erector muscles contract. Lower your torso to the parallel position again, restabilize, and repeat.

Sets: Usually three to four sets to failure are adequate. I have found that, for most individuals, mere body-weight is sufficient resistance; however, a more advanced lifter may need extra weight. Rest one to two minutes between sets, and use a slow rep tempo (3-0-3).

supplementation

My supplement program is kind of like this exercise program we're doing: it's nothing crazy or exotic, but it really works.

Every day I take a high-potency multimineral and multivitamin. I also take Vitamin C, about 2,000 to 3,000 mg. This pretty much takes care of my body's basic needs, but I also take some other supplements to really boost my performance and gains. I take HMB four times a day, three capsules each time (three grams total). Thirty minutes before I work out, I mix a quick drink with 5 grams of Phosphagen; I drink another one of these right after I finish the workout, but I throw in 4 tsp of CytoVol. If it's a rest day, I'll take the CytoVol right before I go to bed. I also take 45 mg of V2G a day. Don't forget about H₂O either; I drink roughly 120 oz of water a day. That's my body-weight (in pounds) x .66. Run that equation for your weight, and then drink that amount of water daily.





Photo: Dennis Lane

How to Build Big Arms!

I'm sorry, but I like having muscular arms... no, make that *love* having muscular arms. I know average non-bodybuilders would shake their heads at that statement, but that's okay; I wouldn't expect them to understand. There's something just so gratifying about having lean, well-shaped biceps and triceps that it makes all the hours in the gym seem well worth it. For instance, whenever I put on a T-shirt and see how my biceps stretch out the material on the sleeves, I automatically know my body is somehow bigger, *better*, than it was meant to be.

By the same token, I love *training* arms. They're the most visual muscle group to train. When you curl a weight, you can easily watch yourself in the mirror and see the biceps swell enormously under the strain, and if your bodyfat is low enough, you can see the veins engorge and get pushed towards the surface of the skin.

The upper arm is made up of two primary muscle groups—the biceps and the triceps. I've discovered that a lot of lifters just train the biceps, thinking this will help them build significantly bigger arms; however, the triceps make up two-thirds of the upper arm mass. Thus, it is extremely important you focus on triceps training as much or more than biceps training if you want to build strong, healthy, "eye-catching" arms!

Most of my clients point at my arms and say, "That's what I want my arms to look like." Fair enough, but it takes hard work, diligence, and above all, *smarts* to build muscular arms. Here's what I tell my clients...

The Biceps Workout

- Standing barbell curls
- Preacher curls
- Incline dumbbell curls

The Triceps Workout

- Straight-bar cable pushdowns
- Lying overhead triceps extensions
- Cable rope extensions

THE BICEPS WORKOUT

Before you do any biceps exercise, it's important to establish a few ground rules on form. For instance, it's important to know where your "carry grip" is. This is the position where your hands should be placed on the bar before doing most curl exercises. Simply stand in front of a straight bar with your shoulders squared, chest up, and arms hanging naturally at your sides—sort of as if you were standing "at attention." Now, without changing the way your arms and hands naturally fall, reach out and grab the bar, palms up. This is your carry grip, and it's the correct hand position for most of the biceps exercises you'll do but especially for the first exercise in this workout.

Starting position: Your feet should be roughly shoulder-width apart. This position will afford the most stability. Grab the bar using the "carry grip" established above, but remember to keep your shoulders squared and your chest up. It's a sad fact that most people who curl slouch their shoulders and use poor posture in general. If your posture isn't letter perfect during curls, you'll be letting the biceps off easy. In other words, you'll allow other muscle groups to help the biceps move the weight, and the biceps won't grow as much.

Before starting the actual curl, you'll also want to bend your knees a little. This will lower your center of gravity and allow you to concentrate fully on doing the curl instead of concentrating on keeping your balance.

The exercise: Now, contract the biceps slowly, keeping the arms "glued" to your sides—the elbows shouldn't dig into your ribs for leverage, nor should they deviate outwards. If your elbows "wander," other muscle groups will help out, and your biceps will suffer in the long run. Try visualizing the barbell moving out and up in an arc with the elbows being the center of the arc.



#1 standing barbell curls

BICEPS

Remember to keep your shoulders squared and your chest up so your shoulder muscles don't aid in the lift. Furthermore, don't arch your back or sway backwards or forwards in an effort to recruit gravity or momentum to lift the weight for you.

As you do your reps, always lower the weight slowly instead of just letting it fall. This downward movement—known as the “eccentric” phase—is where the muscle does most of its work and, consequently, causes the most muscle growth.

Sets: Try to do 3 sets of 15 reps at a 3-0-2 tempo, resting approximately 90 seconds between sets. Although many trainers prescribe different numbers of reps, I prefer 15 as I think this stimulates both slow-twitch and fast-twitch muscle fibers and leads to the most growth. As you do your sets, always strive for total failure. In other words, you shouldn't be able to do another rep—in good form—if your life depended on it. Obviously, if you can do more reps, you need to increase the weight. Likewise, if you can't do 15 reps, you've chosen a weight that's too heavy.



CAUTION

If you find yourself moving your elbows during the exercise, you're using too much weight, and your body, in an effort to complete the curl, is “recruiting” other muscles to help lift the weight. The trouble is, we're working biceps here! Since this is the case, swallow your pride and use less weight.



CAUTION

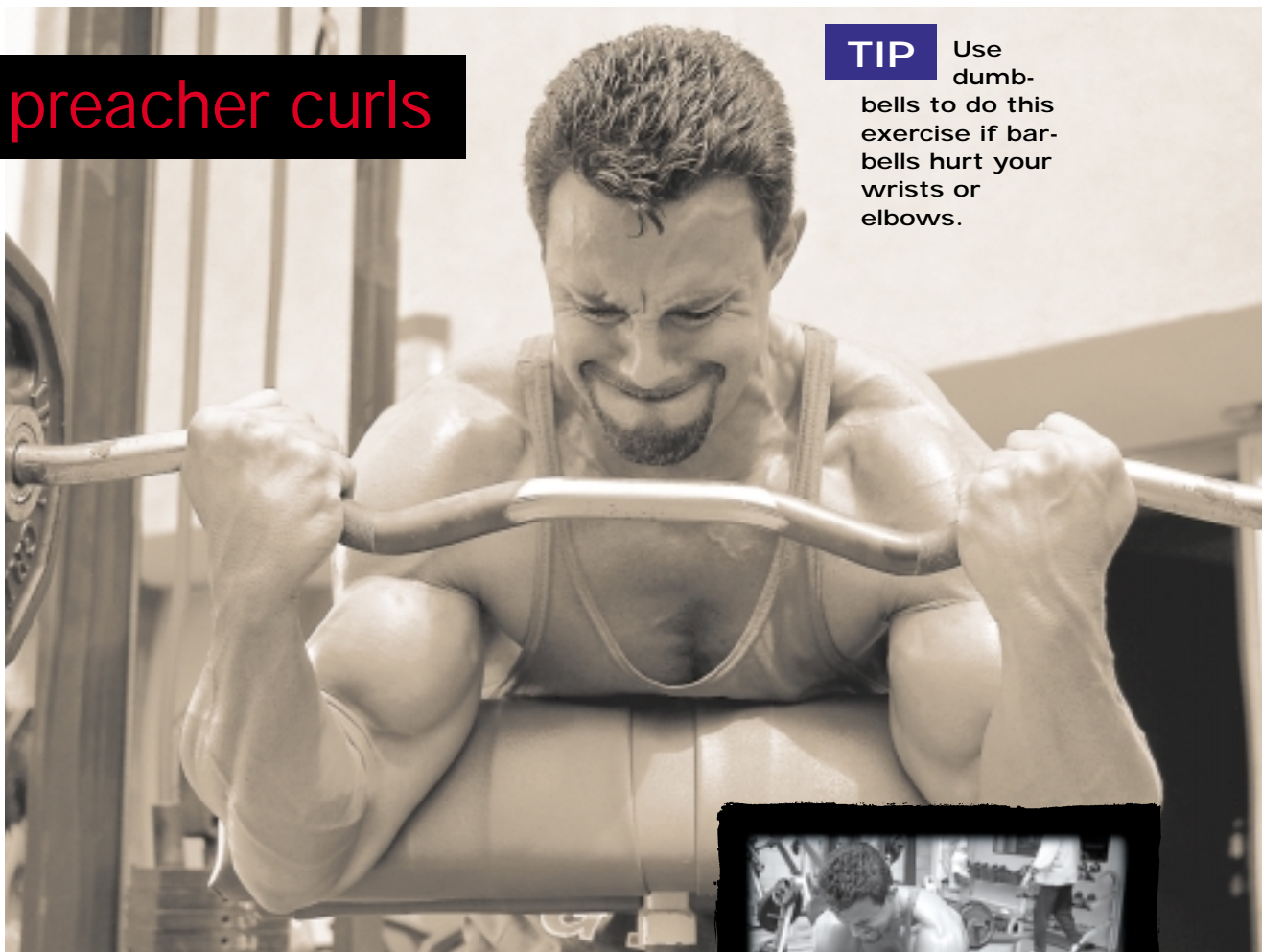
Don't round your shoulders. This takes emphasis off the biceps.



Starting position: Most preacher curl benches are adjustable, and that's because it's crucial to get the right seat height before doing the exercise. Basically, the seat should not be so low that your shoulders are elevated nor so high that you're hunched over the pad. Adjust the seat so that most of your triceps rest comfortably on the pad.

Grab the bar using approximately the same shoulder-width grip used on the first exercise. Although the shoulders try to "creep" into most biceps exercises, it's especially true of preacher curls. If you're not careful, your deltoids will do most of the work, and your biceps will, in effect, get a free ride. Keep your chest elevated, shoulders back, and tighten the abdominals. One trick I

#2 preacher curls



TIP Use dumbbells to do this exercise if barbells hurt your wrists or elbows.

use is to concentrate on keeping a little bit of tension in my lower back; as soon as that tension disappears, I know my form has deteriorated.

The exercise: Visualize moving the barbell in an arc towards your shoulders. As you begin the curl, be careful not to lurch or rock the weight to get it moving. Remember, we want to make the exercise harder for the biceps, not easier. Curl the bar towards your chin, but given the mechanics, the resistance is greater at the beginning than at the end. Consequently, as the resistance starts to let up, you've gone too far. You want to keep the tension on the biceps to get the most out of this exercise.

Sets: Go slowly, control the barbell, and concentrate on the eccentric or lowering part of the exercise. Do at least three sets, but keep in mind that it may take you a set or two to get the hang of this exercise. It's very easy to move the bar too fast, which allows momentum and gravity to assist the muscle. Obviously, you want to work with a weight you can control. Once you can do 3 sets of 12 to 15 reps in perfect form with a tempo of 4-0-3, it's time to increase the weight.



CAUTION

If you aren't careful, your shoulders will "creep" in and do most of the work.

#3 incline dumbbell curls

Starting position: Sit on an incline bench while keeping your back flat against the bench. As always, keep your shoulders squared and your chest elevated. Grab a pair of dumbbells. In the starting position, your arms will be hanging straight down.

The exercise: With your palms in the up, or supinated, position, curl the dumbbells towards your shoulders. Even though you're sitting down, it's still possible to lurch your upper body and use momentum to curl the dumbbells—don't.

Sets: Do 2-3 sets of 8-12 reps (each arm) at a 2-0-2 tempo, depending on your level of fatigue. Since this is the last exercise in your biceps workout, I want you to really fatigue the biceps.



TIP

Concentrate on the "squeeze" in the biceps. Pretend there's a walnut in your elbow joint and you're trying to crack it with your biceps.



TRICEPS

THE TRICEPS WORKOUT

Seeing a good pair of biceps isn't all that rare, but that doesn't seem to be the case with triceps. I think there are at least two reasons for this. For one, the triceps just aren't as "glamorous" as the biceps, and as such, people give them "secondary" status. That's puzzling to me because the triceps make up almost two-thirds of the bulk of the arm. You can have incredible biceps, but if you don't have any triceps mass, your arms are still going to look small. The other reason for the rarity of well-developed triceps has to do with form. Working the triceps properly requires more concentration than any other muscle group. If you start to daydream at all while doing triceps exercises, either your deltoids take over (as in the case of pushdowns, the first exercise in my triceps workout), or your back muscles, the lats, take over (as in the case of the lying overhead triceps extensions I describe later).

However, if you put as much effort into your triceps workouts as you do your biceps workouts, your tris will be every bit as impressive.

TIP Keep your head up and your shoulders back.



straight-bar cable pushdowns

#1

Starting position: Find a lat-pulldown machine and stand—don't sit—facing the machine. Generally speaking, you can use the lat-pulldown bar itself, but some gyms have straight bars you can attach directly to the lat-pulldown pulley. Regardless of which bar you choose, grab it with a palms-down, shoulder-width grip. Your arms should be bent 90° at the elbows, and you should be in the same shoulders-back, chest-out position I've preached again and again. Keep your feet shoulder-width apart for added stability. Likewise, bend your knees slightly to lower your center of gravity and give you added stability. The wrists should be locked in a "neutral" position (neither bent forward nor back) for the duration of the exercise. Tighten the abdominals to stabilize the upper torso and keep it from swaying.

The exercise: Push the bar down and in towards your legs in an arc. Continue pushing downward until your arms are straight, but don't allow your elbows to turn outward (this would indicate internal rotation of the shoulders which would mean that the shoulders are helping the triceps do the pushdown). Slowly allow the weight to rise to chest level while keeping tension on the triceps the whole time.

Sets: Do three sets to total failure, without jerking the weight downward or rounding your back. Cheating isn't going to get you anywhere, nor is bad posture. Emphasize the eccentric portion (in this case, the upward movement of the bar) as this is the part of the exercise that really stresses the muscle fibers and leads to growth. A 4-1-2 tempo is perfect. Try to do at least 15 reps each set, and rest for about 90 seconds between sets. Although different trainers have different theories about the optimum number of reps to do in triceps exercises, I think 15 works well for most people, stressing both types of muscle fibers and leading to more growth.

Once you can do more than 15 reps, WITH GOOD FORM, it's time to increase the weight.

CAUTION



Be careful to maintain good posture throughout the exercise. Don't roll the shoulders forward.

#2 lying overhead triceps extensions

a.k.a. "skull crushers"

Starting position: Find a flat bench and set an EZ-curl bar in front of one end. Grasp the bar using a shoulder-width grip, and lie back onto the bench. Your feet should be wide to ensure stability, and the bar should be held directly over your eyes at arm's length.

The exercise: Slowly lower the weight backwards and down in an arc towards your forehead until your elbows form 90° angles. Bring the weight just shy of actually touching your forehead. It's crucial that you don't move your upper arms—the only things that move are your forearms and the weight itself. It's also important not to use too much weight or to lower the weight too quickly. Otherwise, you'll find out how this movement got its nickname.

Slowly raise the weight, again making sure not to move the upper arms. Too many people let their upper arms "fall" towards their head and then do kind of

TIP You might also try this exercise using dumbbells instead of an EZ-curl bar. Simply grasp two dumbbells and assume the same position as you would using an EZ-

curl bar. Keeping your hands in a "hammer" position (grabbing the dumbbells as if they were hammers instead of weights), lower the weights to the sides of your head and raise them up again. Do the exercise exactly as you would if you were using an EZ-curl bar, except the dumbbells allow you to have a greater range of motion than you would have with a bar, thus working the triceps even more.



a lat pullover to raise the weight again. This will give you good lats, but it will do very little for your triceps. Likewise, don't allow your elbows to drift out from your body while raising the weight—this is known as internal rotation of the shoulder, and aside from potentially damaging your shoulders, it takes the emphasis off the triceps. Also remember to keep your wrists locked in a neutral position throughout this exercise, so all the tension is directed on the triceps.

Sets: This is a great exercise, so I recommend doing more sets than you might do with other exercises. In fact, I often have trainees do up to six sets with this exercise. I also stress a higher number of reps, say 15, at a very slow tempo, 4-1-4. I've found that higher reps work the triceps muscles much more effectively. Rest approximately 90 seconds between sets.

TIP

As you extend your arms, pause momentarily to flex the muscle fully to ensure optimum results.

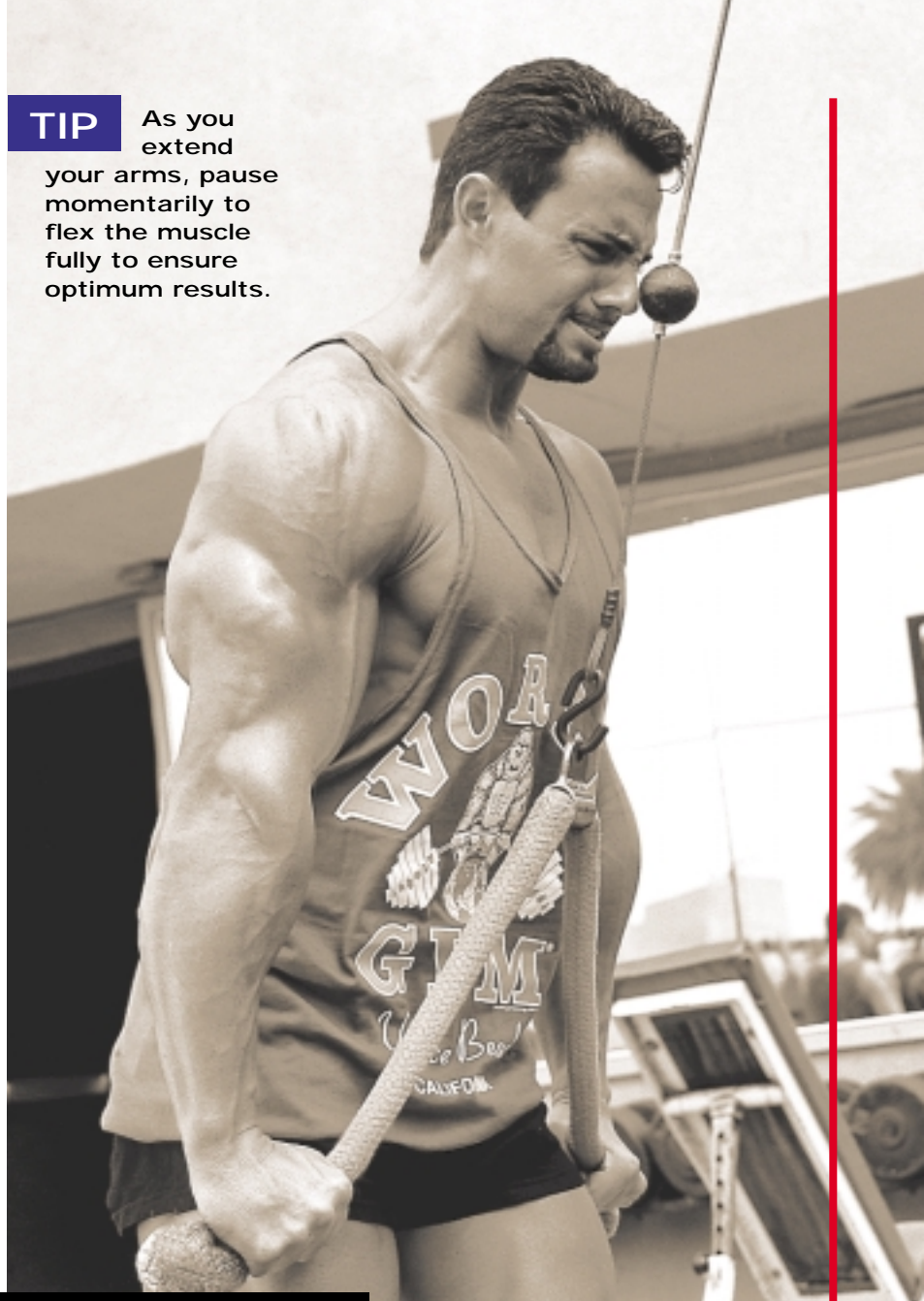
Starting position: Find a weight stack with a high pulley and attach a rope to the high pulley. The rope forces you to use a different grip which will, in turn, force you to use the triceps in a different way. Remember, there are three separate “heads” to the triceps, and each of them is used preferentially, depending on the exercise and the grip. Regardless, they all need to be worked to ensure optimum triceps development.

Grasp both ends of the rope, one end in each hand, and face the machine with your elbows bent. Place your feet roughly shoulder-width apart.

Make sure your forearms are parallel to each other throughout the exercise. Tilt your body slightly forward for balance, and keep your shoulders back, so they can’t assist your triceps.

The exercise: Extend the lower arms and the rope down and out in an arc. Contract the triceps fully. Slowly lower the weight (raise your forearms) back to the starting point, making sure you keep tension on the triceps throughout the eccentric phase.

Sets: Do 3 sets of 10-15 reps, going to total failure on each set. Use a 3-2-3 tempo. Your arms might be exhausted by this point, so do the best you can, and keep proper form throughout each and every rep.



#3 cable rope extensions

The body is very adaptive, and every routine will eventually grow stale. That's why it's important to change your routine often. Change can be very simple or complex. For instance, if you do this routine and experience good results for six weeks but find it suddenly stops working, you might want to change the order of the exercises. (Maybe do triceps first, or do your third biceps exercise first; you get the idea.) You might also choose to do fewer reps, say, eight to ten for a couple weeks, instead of the higher numbers I recommend in this book.

There are other ways to change a routine, too. You might even choose to “super-set” exercises, doing a biceps exercise followed immediately (without rest) by a triceps exercise. Subsequent supersets would involve other biceps exercises supersetted with other triceps exercises.

However you choose to do it, remember to keep your body “off balance.” In other words, subject it to new stresses as it adapts to the old ones. If you keep that in mind, it's only a matter of time before you'll begin stretching the sleeves of your T-shirts to the “breaking point.”



Photo: Dennis Lane

How to Build a Great Back!

A lot of guys don't like to train their backs since they can't really see them being worked. I guess it's an "out-of-sight, out-of-mind" thing. That's puzzling because, to my mind, the back is one of the most "visible" body parts. Let me explain...

As bodybuilders, we work on our bodies constantly, but we rarely get to show anyone the fruits of our labor. After all, you can't go around shirtless all the time, hitting poses for anybody who'll look, and wearing a tight-fitting T-shirt isn't usually an option until you've punched the time clock and gone home. Therefore, most of our friends and co-workers aren't really aware of what kind of physiques we're carrying around underneath our dress shirts, work uniforms, hospital scrubs, or suits. However, the one body part which shows through our clothes, the body part that's a testament to all our hard work, regardless of what we're wearing, is a strong, V-shaped back.

Think about it: next time you stand in line at the grocery store, bank, wherever, look at the backs of the guys ahead of you. You can easily pick out the bodybuilders based on the flare of their lats. It's like a big, "extra-wide" sign which says, "I push iron."

With that in mind, isn't it a good idea to pay a little more attention to your back? I think so, and here's how I work it...

The Back Workout

- Pull-ups
- Cable pulldowns
- One-arm dumbbell rows
- Straight-arm pulldowns

#1 pull-ups

Starting position: Before you do a pull-up, let's establish your proper grip; this grip will ensure biomechanical efficiency. First, stand upright and stretch out your arms so they're at a 90° angle from your body and parallel with your shoulders. In other words, you're making a "T." Now, while keeping your upper arms in the same position, bend your lower arms at the elbow at a 90° angle so you're imitating a goal post. This is the grip you should use for basic pull-ups.

Contrary to popular belief, a wider grip doesn't necessarily equate to a "wider" back. (You should, however, periodically vary your grip to activate different muscle fibers, but the grip I've described here is a basic one that should form the "backbone" of your back workouts.)

Using the grip we've just established, reach up and grab the bar in a pronated or palms-forward position. Try to start the exercise with the upper body angled slightly back so your shoulders allow the body to move up and down without any kind of impediment.

The exercise: Slowly pull your body up to the bar so the top of your chest nearly touches the bar and your chin is over the bar. As you move upwards, focus on pulling your elbows down at an angle towards your rib cage. Once the lats have completely contracted at the top, slowly lower the body to the starting position.

Try doing 3 to 4 sets to total failure at a 3-0-2 tempo (take 2 seconds to raise your body and then, without pausing, take 3 seconds to lower your body). Rest approximately two minutes between sets.

In the beginning, doing pull-ups with just your bodyweight should suffice, but as you progress, you may want to hang additional weight between your legs with a weightlifting belt and a chain. As a guideline, if you can do more than 10 to 12 reps, it's time to add some weight.



TIP

This is a tough exercise, and I recommend you do it first in your back workout. After all, it's one exercise where you can't reduce the amount of weight you use.

THE BACK

#2 cable pulldowns

If you don't have the strength to do pull-ups, you can do cable pulldowns, but you won't get the same results. It's a good idea to keep working on pull-ups, since it's such a great exercise. If you are strong enough to do pull-ups you may still want to do cable pulldowns, albeit with a slightly different grip, so you're working the muscles in a different way.

Starting position: The hand position on pulldowns should be the same as with pull-ups. However, if you were able to do pull-ups successfully, do your pulldowns using a parallel-grip pulldown bar (most gyms carry these in two sizes—a medium-width bar and a wide-grip bar: pick the one that's appropriate for your grip width).

Set the seat on the pulldown machine so your knees can slide easily and comfortably under the knee pad. If it's a little high, just push up with your toes so your knees are firmly pressed into the bottom of the pad.

Although most people pull the bar behind their heads, I strongly recommend you pull the bar down in front of your head, towards the top of your chest. Most pulldown machines are not properly designed to go behind the neck, and they force the shoulders to undergo undue stress, potentially leading to injury.

After you grip the bar, lean backwards slightly at the hips and arch your back. Maintain this position throughout the exercise—too many people sway and jerk their upper bodies to help move the weight.

The exercise: Slowly contract the lats and pull the bar down towards your chest. Focus on keeping your elbows directly below the bar/hands, and "slide" them in a groove towards your rib cage. Don't allow the elbows to move backwards out of this "groove" to help prevent shoulder injury.

Once you've contracted the lats completely, slowly let the bar move back up to the starting position. Strive to reach total positive failure (go until you can't do any more) between 10 and 12 reps. Do 3 to 4 sets using a 2-0-3 tempo. Rest between 1.5 and 2 minutes between sets. If you can do more than 10 to 12 reps, it's time to increase the resistance.



#3 one-arm dumbbell rows

I like doing at least one exercise unilaterally, so I can put all my focus on one side at a time.

Starting position: Find a weight bench. With your feet fairly close together, lean forward so you're supporting the weight of your upper body with your arms. Stand far enough away from the bench so when you bend your knees slightly, your spine is almost parallel with the ground. Many people like to put one knee on the bench while performing one-arm rows, but I prefer to keep both feet on the ground: it helps keep your pelvis stable while minimizing upper body rotation.

Reach down and pick up a dumbbell. The other arm should be locked at the elbow so it will support the weight of your upper body. Before starting, look straight ahead at your supporting hand instead of at the floor, so it's easier to keep your spine straight (too many people round their backs, which changes the whole dynamic of the exercise).



The exercise: Without using any momentum, slowly lift the weight as far as you can. Simultaneously tighten the abdominals to keep the body from rotating as you "row" the dumbbell. Concentrate on pulling the elbow back as far as it can go—the dumbbell should end up roughly parallel to your torso. As long as you maintain the proper shoulder position, the weight should follow the elbow up in a natural, "kinesiologically sound" path of motion.

After you've rowed the dumbbell up as far as you can, slowly lower it to the starting position—don't bounce it back up! Strive for a 2-0-2 tempo; if you can't maintain that tempo or if your form deteriorates, you're using too much weight. Do approximately 12 to 15 reps per side, for 3 sets, resting between 1.5 and 2 minutes between sets. (Since this is more of an "isolation" exercise, I prefer to do a higher number of reps and really fatigue the muscle fibers.)

If you can do more than 12-15 reps, it's time to increase the weight.



TIP

Once you become more advanced, try changing the plane of the exercise slightly. Instead of simply moving the dumbbell straight up and down, lower the dumbbell at an angle, so you lower it towards a point on the floor slightly in front of your shoulder in a "sawing wood" motion.

#4 straight-arm pulldowns

This is a good exercise to finish your back workout with because it works the back without involving the biceps.

Starting position: Stand in front of a lat pulldown bar with your arms outstretched towards the bar. Grab the bar at shoulder level, palms down, using a shoulder-width grip. Lower your center of gravity by bending your legs slightly at the knees and keeping your bodyweight on your heels (otherwise, you'll keel over like a felled tree). Find a comfortable—and maintainable—forward tilt of the upper body. This will vary from individual to individual, depending on your height and the length of your torso.

As mentioned before, tighten the abdominal muscles.

The exercise: While keeping the elbows slightly bent and the wrists “locked,” push the bar down and in towards your body in an arcing motion. Once you've contracted the lats fully and the bar has touched or come close to your thighs, slowly allow the bar to come back to the starting position.

Use a tempo of 1-1-2 (2 seconds to lower the bar, a 1-second pause, and 1 second to allow the bar to return to the starting position). Do 3 sets of between 15 and 20 reps, allowing between 1.5 and 2 minutes of rest between sets. Since this is the last exercise in your back workout, I want you to really fatigue your muscle fibers!

(A word of warning, though: you won't be able to use much weight on this exercise; the leverage isn't on your side. Don't worry, though; in this case, light weight does not equate to small lats!)



Regardless of how well this routine works, it's bound to stop working eventually. Therefore, it's important to change this or any routine often—at the very least, every four to six weeks. You might try doing close-grip pull-ups instead or even super-setting wide-grip pull-ups with close-grip ones, doing one type right after the other. You might also choose to throw bent-over barbell rows or close-grip low-pulley rows into the equation.

Regardless of what specific exercises you choose, the most important thing is to actually *work* the back—don't ignore it simply because you can't see it without using at least two carefully angled mirrors. It may not be as glamorous a body part as the biceps or chest, but the back is the one body part that will go the furthest in improving the overall look of your physique!



Photo: Dennis Lane

Building Broad, Strong Shoulders!

Today's world is full of big-shoulder wannabes.

Walk into the men's department at Sears or Nordstrom's or Macy's, and try to find a suit coat, overcoat, or leather jacket without built-in shoulder pads. You *can't* do it because every clothing manufacturer out there knows the ideal man has broad, masculine shoulders. If you don't have them, heck, add some fake ones! Personally, I take great pleasure in buying those jackets and tearing out those shoulder pads because I don't need 'em; my shoulders are big enough on their own, thank you, because I know how to train them.

Unfortunately, for most novice bodybuilders, the shoulders are among the most difficult of body parts to train. For one thing, the shoulder, or deltoid, is comprised of three heads: the anterior (front), the medial (middle), and the posterior (rear). As such, there's no single exercise that optimally works the entire shoulder. Shoulder trainees need to use a variety of exercises combined with correct body positioning, and the latter is where a lot of people miss the shoulder boat.

Injuries are another problem that often seem to come hand in hand with shoulder training. The shoulder is used in so many different exercises and so many sports and activities that it's a likely candidate for a host of overuse injuries. Using good form is very important in avoiding shoulder injuries.

Here's how I work the shoulders...

The Shoulder Workout

- Overhead dumbbell presses
- Wide-grip upright rows
- Lateral dumbbell raises
- Seated rows (on a machine)

#1 overhead dumbbell presses

Most people seem to favor the military press as their number one anterior-deltoid exercise, but I prefer overhead dumbbell presses. For one thing, there's less chance of injuring your shoulders, and secondly, this exercise allows you to press to the center instead of straight up, thereby allowing for greater contraction of the deltoid muscles. In a nutshell, it's a safer, more efficient, and more effective way to work the deltoids. However, if you have an existing rotator cuff injury, make sure you get a qualified physician's opinion before you attempt this exercise.

Starting position: Find a bench with a back support, so you can maintain proper spinal alignment while pressing overhead. Place the feet in a comfortable but stable position. Pick up a pair of dumbbells, and hold them at shoulder height, elbows out completely to the sides and palms facing forward.

The exercise: Slowly press the dumbbells up and in, so they meet or nearly meet above the crown of your head. Don't let the weights stray back and forth; keep them in line. Press the weights to just short of lockout, so you don't put stress on the cartilage. In other words, don't do the three-quarters pressing movement I see over and over again in gyms, unless, of course, you want to develop your anterior delts only three-quarters of the way. At the top, mentally contract the shoulder muscles as much as possible.

Now, slowly lower the dumbbells, keeping the weight balanced over your elbows. Don't let the upper arms rotate forward (internal rotation) or backward (external rotation). Otherwise, you risk rotator cuff injury. Stop when your elbows are parallel with your shoulder joints.

Try doing 3 to 4 sets to total failure at a 3-1-2 tempo (take 3 seconds to lower the weight, take 2 seconds to raise the weight and then contract the shoulder muscles at the top position for a count of 1). Rest approximately two minutes between sets.

You might find you have to lighten the weight a bit to do this exercise correctly, but by practicing correct form, you'll put more emphasis on the delts and less emphasis on screwing around and wasting time.



TIP Visualize pressing the weight in a triangular motion above the shoulder joints, up and in.

SHOULDERS

#2 wide-grip upright rows

Wide-grip upright rows are designed to target the medial (middle) head of the deltoid. I recommend doing this exercise every other shoulder workout to add some variety to your routine.

Starting position: These upright rows are different from conventional upright rows in that you use a very wide grip. This wide grip allows you only a partial range of motion, but it does, however, put the stress on just the medial delts, unlike conventional upright rows that work the medial delts, anterior delts, and the traps. Of course, “wide grip” is a relative term. To find the proper wide grip for you, stand up straight, and slowly raise your elbows to the height of your shoulder joints while allowing your hands to hang freely. If you’ve done it correctly, you’ll look like a scarecrow. This is the grip you’ll use when doing your wide-grip upright rows. In other words, when you row the bar up to the point where your elbows are parallel to the shoulder joint, your elbow will be bent at a 90° angle. Notice, too, that in this position, your hands are farther out in front of your body than they would be

while doing conventional upright rows. This is an important point to remember. Keeping your hands (and the bar) slightly out from the body will focus and maintain the tension on the medial delts. Don’t let the bar come in too close to your body, as this would cause the shoulders to rotate inward excessively.

Once you’ve established the proper grip, find a stance that’s shoulder width or slightly closer. You’ll also need to stabilize your body. Lower your center of gravity by bending your knees a little, and lean slightly forward.

One last point: make sure you keep your abdominals tight throughout the entire exercise. If you don’t, your lower back will start feeling fatigued by the time you’re half-way through your reps.

The exercise: Grasp the bar and slowly raise the elbows (and the bar, of course) until they’re parallel with your shoulder joints. Actually, you won’t be able to raise your elbows any higher unless you’re one of those circus contortionists. A good point to remember is to focus on the elbows instead of the bar. I always cue my clients by telling them to focus on lifting the elbows, and the bar will follow. After you’ve raised the bar as far as possible, slowly lower the weight to the starting position.

Try doing three sets of eight to ten reps, concentrating on keeping the motion exact and deliberate. If you jerk the bar up quickly, you risk injury. Maintain a tempo of 2-0-3, and rest about 90 seconds between sets.



TIP

Visualize performing the exercise with a slow, machine-like motion, and try to focus on moving the elbows instead of the bar. Keep the angles we discussed in mind.



#3 lateral dumbbell raises

Starting position: Stand with your feet shoulder-width apart or closer. Bend your knees slightly to lower your center of gravity, and tilt forward at the hips.

At this point, your elbows should be directly below your shoulder joints, not behind them and not in front of them. Keep your elbows in a slightly bent position. Tighten your abdominals, and keep them that way throughout the exercise. Finally, keep your chest elevated (this is something you should do for just about every upper body exercise).

The exercise: Slowly add tension to the deltoids by mentally flexing them. I usually tell my clients to “engage the deltoids.” This step ensures you’ll be working the deltoids from the very beginning. Now, while maintaining the forward tilt of your upper body, slowly raise the arms out to the sides and up. Stop when your elbows and the weights are parallel with your shoulders. Then, lower the weights slowly to the starting position. The elbows should stay directly in line with the shoulder joint throughout the concentric and eccentric parts of the exercise. Don’t rotate your shoulder externally as you raise the dumbbells.

One of my pet peeves—something I see happening again and again—is people who use their legs to help them do lateral raises. In other words, they spring up and down on their legs to get a little momentum going so it’s easier to get the weights up. Remember, this is a delt exercise! If you have to use your legs to get the weight up, you’re using too much weight!

Do 3 sets of 8-10 reps, using a 2-1-2 tempo.

This is the most famous and popular middle-delt exercise.



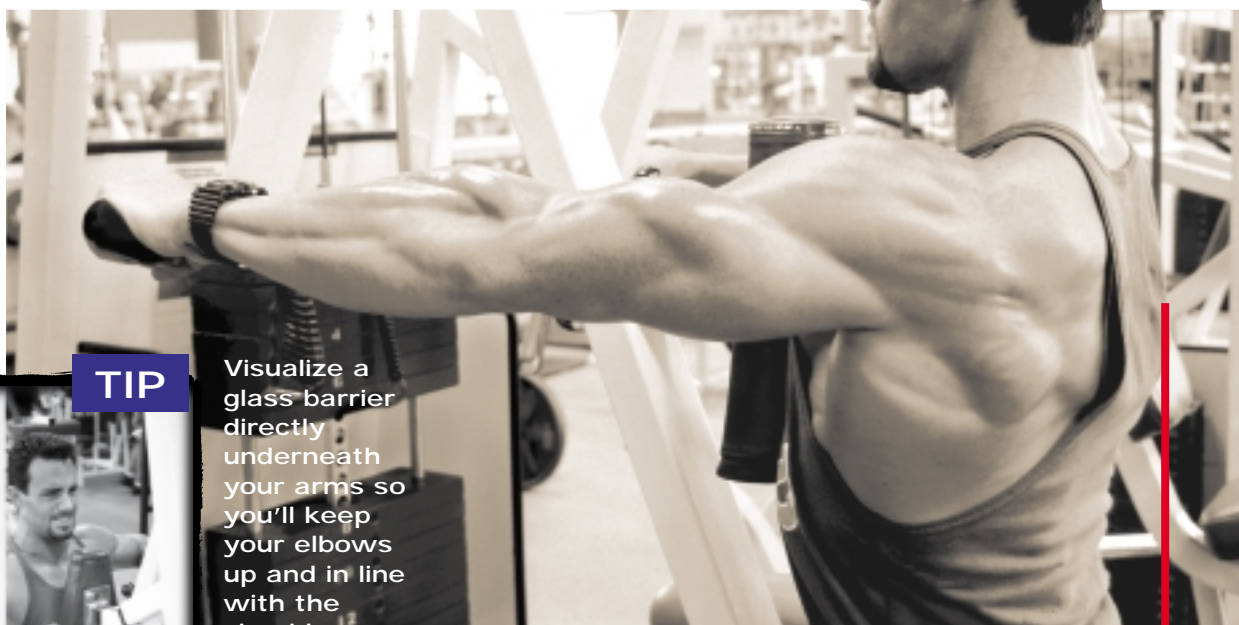
TIP

Focus on your elbows instead of the dumbbells, and pretend your hands weigh whatever the dumbbells weigh. This trick will allow you to focus on your arms and not on the dumbbells.

#4 seated rows (on a machine)

This exercise is designed to work the posterior (rear) head of the deltoids. In my opinion, it's probably one of the most efficient and effective rear-delt exercises. It differs from a conventional seated row in that you keep your arms very high, thereby targeting the posterior delts instead of working the lats.

Starting position: Position the seat height so your shoulders are in line with the handles. This is very important; if the resistance isn't in line with your shoulders, you'll turn this into more of a back exercise than a rear-delt exercise. Set the chest pad far enough away so when your chest is in contact with the pad, you can barely touch the handles with your fingers. Once you've made all the necessary adjustments, grab the handles, pull back the weight, and sit down on the pad. Bring your upper body into proper spinal alignment by sitting up straight. Place your feet firmly on the ground to stabilize yourself. Position your scapulas (shoulder blades) in a neutral position (don't shrug your shoulders), and keep them there throughout the exercise.



TIP

Visualize a glass barrier directly underneath your arms so you'll keep your elbows up and in line with the shoulder



joints, thus keeping the fibers of the posterior delts properly aligned with the resistance.

The exercise: Slowly row your elbows straight back while keeping them in line with your shoulders. In effect, your elbows will move directly out to the side of your shoulder joint when you row the weight back. Be sure to slowly contract the deltoids as much as possible. As you move through the eccentric portion, try to concentrate on activating the rear delts while relaxing the front delts. If the anterior heads are "frozen" or too tight, then your whole shoulder area will move.

As you pull the weight back, keep your wrists in a neutral position.

Do 3 sets of 10 to 12 reps at a 2-0-2 tempo.

You've probably realized there are a variety of methods to train a muscle. By variety, I mean using high reps, low reps, and different tempos. The point I'd like to make is you should try all the methods at some point. You want to keep the body guessing, so it won't be able to adapt to any one method or style. As mentioned previously, you should change your routine at least every six weeks and much sooner if you're a more advanced trainer.

On the other hand, if some of these exercises are new to you, or if you're trying to master form, I'd recommend using a lighter weight (and consequently, a higher number of reps) until you feel confident you're doing the exercise correctly.

Regardless of whether you choose to do all, some, or none of these exercises, I sincerely hope you take to heart the most important point of this book, and that's using proper form. I guarantee if you do your shoulder exercises in a controlled fashion, without all the herky-jerky motion so common to a lot of bonehead bodybuilders, you'll make twice the progress in half the time, and you can start your own collection of discarded shoulder pads.



Roger Applewhite and Tracy Katz

Building Strong, Muscular Legs!

Guys with big arms are a dime a dozen. So are guys with well-developed pecs. I give them credit because they've obviously spent some time in the gym. But, I reserve my real respect for guys with great quads, hams, and calves. These are the guys who took it a step further—the guys who experienced pain, noticed it, and downright *ignored* it. They said, "Pain, get out of here because I just ain't got the time or patience to deal with you." As a result, their legs grew and grew. You can take one look at the faces of guys with well-developed legs and know they're somehow different, kind of like guys who have been on the battlefield and had to dodge bullets. To put it a different way, they've been to hell and back.

There's another interesting thing I've noticed about working legs: if you work them, they'll grow. It may sound like I'm kidding, but I'm not. There are plenty of hardgainers out there who have trouble developing their arms, back, or chest, but for some reason, I've never met anybody who *can't* get their legs to grow—provided they want it bad enough. I'm going to assume you're one of the ones who wants it bad enough. If I'm right, let's get down to business...

The Leg Workout

- Free-weight squats
- Dumbbell lunges
- Leg presses
- Stiff-legged deadlifts
- Lying leg curls
- Seated calf raises
- Standing heel raises



#1 free-weight squats

THE LEG WORKOUT

I'm going to present you with a whole bunch of leg exercises. Some are primarily for quads, some are primarily for hamstrings, and some are primarily for calves. If, for some reason, you decide to do all the exercises I've listed in one workout, you might as well plan on spending the night at the gym because your legs won't function well enough to take you home.

Instead, I recommend choosing a select number of exercises from the "menu" I've provided and doing them until your body adjusts to them. In other words, you'll need to change the workout periodically if you want to keep on growing. How many exercises you do will depend on your conditioning, your goals, and how many sets and reps you do of each. I'll suggest a workout later, but let's talk about some specific exercises first.

This exercise is the most fundamental of all lower body exercises. It allows us to work the entire lower body, as well as conditioning our upper bodies. Because you have to balance the weight on your upper back, stabilizer and core muscle strength is important. I recommend you always incorporate a complete abdominal and lower back program into your training to prepare for squats. (See "Personal Trainer" in the July 1997 issue of *Muscle Media*.)

As well, I suggest you consult a physician prior to performing the squat if you have any existing abdominal or back injuries.



LEGS

Starting position: Position yourself under the bar, and place the bar on the upper portion of the trapezius muscles. Make sure you squeeze your shoulder blades together slightly, and place your hands on the bar. Tighten the abdominals, lift the weight off the rack, and step back. For most people, a shoulder-width stance is fine. However, you can use a wider stance. A wider stance allows you to squat deeper without bending too far forward and straining your lower back. Remember, no matter what stance you choose, you must always keep your spine neutral!



The exercise: In a slow, controlled fashion, squat as low as you can, stopping right before your pelvis begins to curl under. If you go any lower, you'll put too much stress on your lower back and spine. Once you have reached the bottom, slowly press the weight upwards while maintaining spinal alignment. Your knees and hips will move back in line with one another simultaneously as you move upwards. It is important to keep the abdominals tight and chest held high. Straighten the legs as much as possible without locking the knees.

Because the squat is so difficult and so darned efficient, you may find it becomes the backbone of your leg program. Sometimes, just for the sake of variety, I'll use squats as my only exercise. When I use this approach, I vary the set and rep scheme. I'll perform anywhere from 6 to 12 sets with reps ranging from low to high (anywhere from 4-6 to 12-15) at a 3-0-3 tempo. I recommend you take about three minutes to fully recuperate between sets if you're really working out hard.

This exercise is just one of many that works the legs, but it's very challenging because you use free weights, and it requires good balance. I often use this exercise with my clients to work on mental focus as well as strength and conditioning. I recommend that it be used for variety in one's leg program, especially if you don't have an ample amount of leg equipment to choose from.

TIP



Place the bar on the upper portion of the trapezius muscles. Keep your chest up, shoulders slightly back, and head up.

#2 dumbbell lunges

CAUTION



Don't allow your shoulders or upper back to round forward.

TIP

Make sure you keep your shoulders over your hips. Keep your chest up and shoulders back. Remember your back leg is for balance; it's not the primary mover in this exercise.

Starting position: Your feet should be pointing forward and positioned at least hip-width apart. Pick up a pair of dumbbells, being extremely cautious not to strain your back.

The exercise: Step one foot forward, about the same length as your quadriceps (from your hip to your knee). For example, if you step forward with your left leg, your left knee should be directly over your left ankle. Your right knee (which will end up inches from the floor) should be directly under your right hip, and your right thigh should be perpendicular to the floor. I often cue my clients to push through their heels, so they won't shift and push with their toes. This will generally keep the weight balanced. When coming back to the starting position, focus on straightening the knee and the hip. You may feel a bit of tension in the back leg, but remain focused on the front leg. The front leg is the primary mover, while the back leg is used only for balance. Keep your mind on the muscles you're working! You'll really feel this one in your butt and the quad of the front leg.

You can either do several sets, say 3 or 4 of 10 to 15 reps, or you can do one set to failure at the end of your leg routine for a burnout. I recommend you work one leg at a time rather than alternating between one leg and the other. Stick with a tempo of about 2-0-2.

Although the squat is the king of leg exercises, the leg press can serve as an occasional alternative.

Don't let the knee travel over the toes because this can place extreme tension on the tendons of the knee.

CAUTION



#3 leg presses

Starting position: Place your hips deep into the seat, and keep your back pressed against the back pad. Some of my clients prefer to hold the backside of the pad which enables them to keep their shoulders back. That works well for a lot of people. Always keep your abs tight throughout the entire exercise.

The exercise: I recommend you lower the weight only to the point just before your hips/pelvis begin to curl up. If you're one of the people who thinks deeper is better, you may want to reconsider. If the pelvis curls upward off the pad, you're putting a lot of pressure on your spine and greatly increasing the chances of injuring your back. That would definitely slow down your training or, even worse, end it! So if you find your hips "curl" easily, try widening your stance.

CAUTION



Push the platform back up to the starting position, stopping just short of locking out your knees.

As usual, your rep and set scheme may vary, depending on your goals. Lately, I've

been experimenting with changing the rep tempo on this exercise. Try using a weight that causes you to reach total positive failure at approximately 15 reps. Here's the trick, though: each rep should take about three to four seconds. This places the muscles under tension for a longer period of time, which, of course, is just one of the ways to increase muscle mass. I recommend you rest about three full minutes to allow the muscles to fully recuperate. I use this technique every third workout. You should also vary your exercises and their associated set scheme and rep tempo. For example, sometimes I'll just stick with this one exercise for quads and perform roughly 8 heavy sets with reps ranging from 8 to 15 with the previously mentioned tempo. I'll then finish off my legs with a hamstring exercise.

This is a great hamstring exercise. However, if you don't pay strict attention to form, it can easily change into a harmful back exercise.

Don't round the shoulders.

TIPS

Keep the knees in line over the toes each and every rep.

Focus on straightening the knee rather than pressing the weight.

CAUTION



Don't allow the hips to "curl up"!

#4 stiff-legged deadlifts

CAUTION

Starting position: Stand with your feet shoulder-width apart, balancing your weight on your heels. Grasp the bar with either a pronated grip (palms down) or a powerlifting grip (one palm up and one palm down) and place your hands about shoulder-width apart. Pull back your shoulder blades, and tighten your lats. You want to keep your back straight throughout the exercise; don't bend forward at the shoulders or lower back. Tighten the

abdominals, and maintain this throughout each and every cautious rep; this will help stabilize the pelvis and lessen the risk of lower back injury. Tighten the hamstrings and quads to stabilize the semi-locked knee. You will want to keep the knees in this position to get the full effect of this exercise on the hamstrings.

TIPS Visualize letting the bar drop straight down as your hips move backwards simultaneously.

Remember the "yardstick" cue.

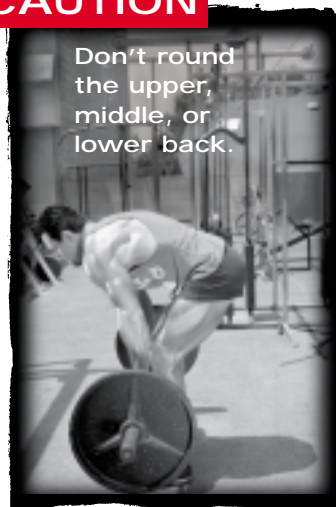
The exercise: This may be a dangerous exercise if performed with *improper* form. However, the stiff-legged deadlift is one of the most popular among lifters. Here's the trick to mastering this exercise. First, imagine you have a yardstick that runs from the back of your head to your lower back, and if you round your back, the yardstick will break. Bend at the hips, and as you lower the weight, move the hips backwards slightly. I instruct my clients to visualize one of those silly mechanical birds that peck the ground and move back up in a perfectly balanced manner. Lower the weight until you get a good stretch of the hamstrings, but don't start bending at the shoulders or lower back. Remember the yardstick example. I'd also recommend you don't fixate your vision on one spot; instead, let your head and line of vision move in line with your spine.

It's imperative that the knee joints stay in a semi-locked position, held tight by the quads. This will allow you to fully stretch the hamstrings as you lower the weight. If there is motion in the knees at the same time the weight is being lowered, the hamstrings will have less tension on them. There will be what I call

"slack" in the hamstrings. Try not to hold the chin up with the head fully cranked backwards as you descend through the exercise. Practice keeping the neck in line with the rest of your spine as much as you can. You might

want to practice this form with a lighter weight before you move on to training poundages.

Once you have reached the bottom of the exercise, return to the starting vertical position by slowly and simultaneously moving the hips and bar towards each other while keeping perfect spinal



alignment. It is important to remember that the abdominals, the erector muscles in the low to mid back, and the upper back muscles stay tight throughout each and every rep to maintain perfect form.

As far as sets go, I usually find 3 to 4 sets ranging in reps from 8 to 15 adequate for working the hamstrings. Remember: using a heavy weight that compromises your form will most likely compromise your spinal integrity, as well as the efficiency of this exercise. A rep tempo of 3-0-3 works really well. This means, for this exercise, take three seconds to perform the eccentric phase (lower the weight) and three seconds to perform the concentric phase (raise the weight), with no pause at the bottom. You may, however, use a slight pause at the starting position to recheck your form.



Try not to arch your back or use momentum for assistance.

CAUTION

TIP

Keep your abs tight.

#5 lying leg curls

Starting position: Lie on the machine, and line the knee joints up with the cam of the machine. These two points of axis should be in line for this exercise to be performed with maximum efficiency. Press the hips down onto the pad, and hold on to the handles below. To further emphasize the hamstrings, point your toes away from your knees. Tighten the abdominal muscles, and keep them tight through every rep. If your abdominals aren't kept tight, your hips will rise upwards as you contract your hamstrings and will rotate backwards during the eccentric phase. Any excessive and uncontrolled hip motion will only reduce the amount of tension placed on the hamstrings. Also, put a bit of tension on your hamstrings before you actually begin the exercise.

If possible, do lying leg curls on a "hump-shaped" bench to improve their effectiveness.

The exercise: Slowly contract the hamstrings as much as possible until your lower back begins to arch or your hips begin to rise. At that point, slowly lower the weight in a controlled fashion back down to your starting position. Keep your abdominals tight throughout the concentric and eccentric phases, so you can minimize most of the pelvic motion and keep more tension on the hamstrings.

I usually incorporate this exercise into all of my clients' routines. Depending on your goal and program, try performing anywhere from three to six sets with the reps ranging from eight to ten. I've read that the hamstrings respond better to heavier weight, but don't use an amount that will cause you to throw form out the window. I usually recommend a tempo of 2-0-2 to 4-0-4.

CALVES

Obviously, calves are part of the legs, but you wouldn't always think so based on the number of piano-leg calves you see walking around these days. Having awesome thighs and no calves just doesn't cut it, unless you work in a rice paddy and are never seen from the knees down. Besides, having great calves makes your thighs look bigger. So don't neglect 'em!

This exercise primarily works the soleus muscle, which is one of the two main calf muscles. The soleus is a single joint muscle and is responsible for motion in only one joint, the ankle.

Starting position: Sit erect on the machine with the balls of your feet firmly positioned on the plate. Adjust the knee pad, so it's snug against the end of your thigh. Place your hands on the handles to keep the pads from sliding off your knees.



#1 seated calf raises



TIP

Focus on relaxing the ankle to ensure a full eccentric stretch on the soleus muscle.

The exercise: Allow the muscle to go through a controlled range of motion. Go as deep as you can until your feet almost start sliding off the plate; then proceed to contract the muscles completely, pressing the weight back up.

The soleus is composed largely of slow-twitch muscle fibers and therefore responds better to higher reps and longer time under tension. Coach Poliquin thinks that to be effective, soleus sets should not be completed in less than 40 seconds. Therefore, your rep range will be based largely on the tempo you choose. As an example, you might want to do 3-4 sets of 12 reps, using a 3-0-1 tempo.

#2 standing heel raises

TIP

This exercise allows us to work the other main calf muscle, the gastrocnemius. It is called a "biarticular muscle" because it crosses the knee joint and the ankle joint.

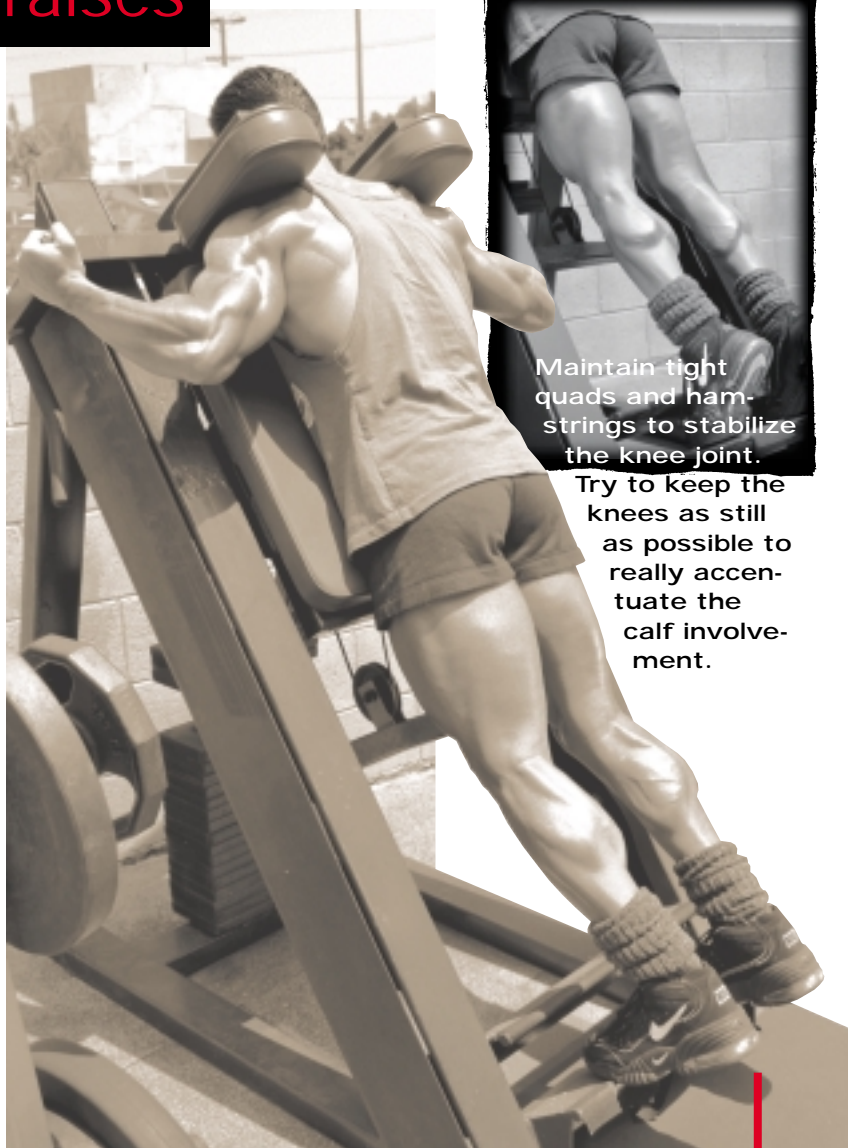
Starting position: Adjust the shoulder pad height to an appropriate position to allow for a full range of motion in the ankle. Place the balls of your feet on the foot plate roughly shoulder-width apart. Tighten the abdominals to stabilize the pelvis and straighten the legs. Make sure your quads and hamstrings remain tight throughout the exercise.

The exercise: Lower the heels as far down as you can eccentrically control. Be careful not to let the feet slide. Once you have reached a full eccentric stretch, contract the calves as much as possible, raising the weight back up. Maintain control with each and every rep.

The gastrocnemius is composed of a higher percentage of fast-twitch fibers, so it will respond better to a lower number of reps and less time under tension. Again, according to Coach Poliquin, your calves respond best to sets that can be completed in 20 to 40 seconds. For example, you might want to try doing 3 to 4 sets of 8 reps, using a 3-0-1 tempo.

TIP

It's extremely important for your calves to be warmed up and stretched out before you increase the intensity. I usually rest approximately 1 to 1.5 minutes between sets. Depending on your training intensity, try to give your calves at least 48 to 72 hours to recover before training them again.



Okay, as promised, I've given you a rather large selection of exercises to try. Again, I don't necessarily recommend you try all of them during the same workout. Instead, you might want to try the following routine. Remember, though, the effects of any routine, regardless of how good it is, won't last forever. Change your routines often!

	Sets	Reps	Tempo*
1) Squats	4	10	3-0-1
2) Lunges	3	8-10	3-0-1
3) Stiff-legged deadlifts	3	8-10	3-0-1
4) Seated calf raises	3	12	3-0-1
5) Standing heel raises	3	8	3-0-1

*eccentric, pause, concentric

I can't tell you how strongly I feel that great legs are yours for the asking. All it takes is a little willpower, a little courage, and a little know-how. Hopefully, I've helped you with the last item on the list—know-how. The rest is up to you.



Conclusion

Now that you've read this book, you probably have a lot of new ideas about weight training. I encourage you to reread this guide and even take it to the gym with you! There are a few tips you should commit to memory, though. Call them Roger's "bodybuilding essentials." If you learn them and *live* by them, you'll virtually be guaranteed to make progress, regardless of what specific routine you happen to adopt.

"Essential" Number 1: You must change your routines often. The human body adapts to almost anything, and workouts are no exception. If you continue to do the same exercises, sets, rep schemes, and rep tempos, your body will become marvelously efficient at performing those particular exercises, sets, rep schemes, etc. You won't necessarily grow more muscle, but you'll be damn good at that particular workout. Change your workouts a minimum of once every six weeks.

"Essential" Number 2: You must allow your body enough time to rest and heal. Years ago, bodybuilders, largely because of bad advice from some bodybuilding magazines, trained six or seven days a week, for as long as two or three hours at a time. No one but the most drug-enhanced athlete can cope with such a rigorous, demanding workout schedule. If you try it, your muscles will wither away.

You don't need to train for longer than an hour per workout, and in most cases, four days a week is plenty.

"Essential" Number 3: Proper nutrition is a must. How can you possibly expect your body to grow if you don't give it the proper fuel? I know people who train hard for an hour and then don't eat at all for several hours. You can't build matter out of plain old air; it defies the laws of physics! In other words, in order to grow muscle, you have to supply the body with the "raw materials" to build muscle. Eat six small meals a day, ensuring that you get plenty of protein first thing in the morning, right after a workout, and before you go to bed.

"Essential" Number 4: This one's almost a no brainer, and I'm hesitant about even saying it, but *you must be consistent!* If you miss, say, on the average of 2 or 3 workouts a month, you're missing anywhere from 24 to 36 workouts a year. And, had you not missed those workouts, I guarantee you'd be so much further ahead, physique-wise, you wouldn't believe it. It's easy to find something else to do other than workout. Make training a priority!

Work hard, follow the advice in this book, and you'll soon have the lean, muscular body you've always wanted! I promise!

Here's an example of how you might structure your own training program:

Monday

Workout #1:

CHEST

Incline Dumbbell Presses

1 set x 15 reps

2-3 sets x 10 reps 3-0-2 tempo

(take 3 seconds to lower the weight, no pause, and two seconds to raise the weight.)

Flat Dumbbell Presses

4-5 x 10-15 (increase weight each set)

3-0-2 tempo

Incline Dumbbell Flyes

3 x 15-20 3-0-2 tempo

Cable Crossovers

3 x 12-15 3-0-2 tempo

ABS

Cable Crunches

3-4 x 30-50 3-0-3 tempo

Crunches

4 x 25

fairly slow tempo, but don't obsess about counting

Hanging Leg Raises

2 x 15-20 2-0-2 tempo

Reverse Crunches

3 x 10-20 3-0-3 tempo

Spinal Extensions

3-4 to failure 3-0-3 tempo

BICEPS

Standing Barbell Curls

3 x 15 3-0-2 tempo

Preacher Curls

3-4 x 10-12 4-0-3 tempo

Incline Dumbbell Curls

2-3 x 8-12 (each arm) 2-0-2 tempo

TRICEPS

Straight Bar Cable Pushdowns

3 x 15 or to total failure 4-1-2 tempo

Lying Overhead Triceps Extensions

(a.k.a. "skull crushers")

4-6 x 15 4-1-4 tempo

Cable Rope Extensions

3 x 10-15 reps 3-2-3 tempo

Wednesday

Workout #2

BACK

Pull-Ups

3-4 to failure 3-0-2 tempo

Cable Pulldowns

3-4 x 10-12 2-0-3 tempo

One-Arm Dumbbell Rows

3 x 12-15 2-0-2 tempo

Straight-Arm Pulldowns

3 x 15-20 1-1-2 tempo

SHOULDERS

Overhead Dumbbell Presses

3-4 to failure 3-1-2 tempo

Wide-Grip Upright Rows

3 x 8-10 2-0-3 tempo

Lateral Dumbbell Raises

3 x 8-10 2-1-2 tempo

Seated Rows (on a machine)

3 x 10-12 2-0-2 tempo

Friday

Workout #3

LEGS

Free-Weight Squats

Sometimes, just for the sake of variety, I'll use squats as my only exercise.

6-12 x 4-6 to 12-15 3-0-3 tempo

(Take about three minutes to fully recuperate between sets if you're really working out hard)

Or Leg Presses

(I recommend using this exercise every third workout instead of squatting)

4-8 x 8-15 2-0-2 or 2-0-1 tempo

(Again, take about three minutes to fully recuperate between sets)

Dumbbell Lunges

3-4 x 10-15

Or 1 to failure (for a burnout at the end of the leg workout)

2-0-2 tempo

Stiff-Legged Deadlifts

3-4 x 8-15 3-0-3 tempo

Or Lying Leg Curls

3-6 x 8-10 2-0-2 to 4-0-4 tempo

Seated Calf Raises

3-4 x 12 3-0-1 tempo

Or Standing Heel Raises

3-4 x 8 3-0-1 tempo



TIP

Remember to rest one to two minutes between each set.

This routine involves three workouts a week, with at least a full day of rest between workouts. Some of my clients train four times a week. They do Workout #1 on Monday, Workout #2 on Tuesday, rest on Wednesday, perform Workout #3 on Thursday, then start over with Workout #1 on Friday. And, after resting Saturday and Sunday, they continue with Workout #2 on Monday, Workout #3 on Tuesday, etc.

I generally recommend you don't train with weights more than two days in a row and that you train each muscle group only one or two times a week.

Remember, the goal of weight-training exercise is to stimulate (not annihilate) muscles. Your muscles actually grow bigger, stronger, and healthier while they're resting, not while you're training!

The proper combination of weight-training exercise, optimal nutrition, smart supplementation, and rest is a surefire formula for building a lean, muscular, healthy, and strong physique!

