



THE MUSCLES OF THE ARMS

There are three major muscle groups in the arms:

The **biceps brachii**, a two-headed muscle with point of origin under the deltoid and point of insertion below the elbow

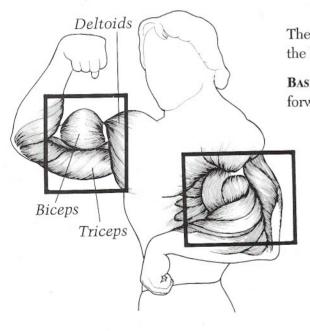
BASIC FUNCTION: To lift and curl the arm, to pronate (twist downward) the wrist

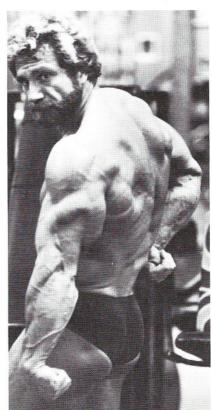
The **triceps brachii**, a three-headed muscle that works in opposition to the biceps, also attaching under the deltoid and below the elbow.

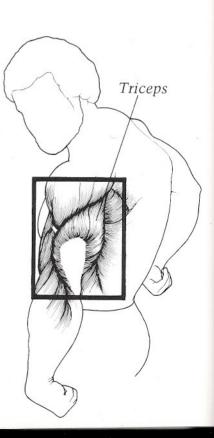
Basic function: To straighten the arm and supinate (twist upward) the wrist

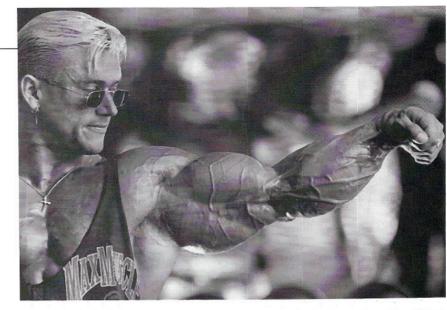
The **forearm**, involving a variety of muscles on the outside and inside of the lower arm that control the actions of hand and wrist

BASIC FUNCTION: The forearm flexor muscles curl the palm down and forward; the forearm extensor muscles curl the knuckles back and up.

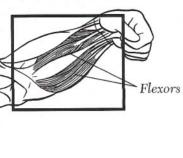


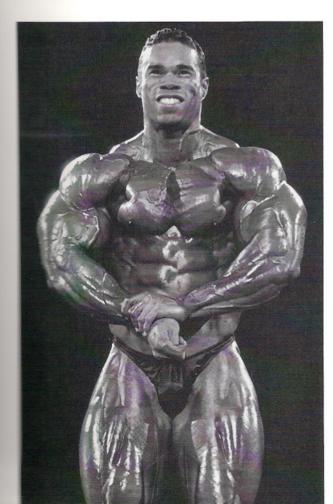


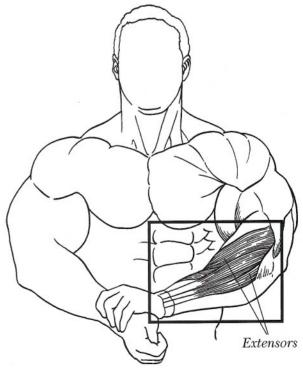




Lee Priest

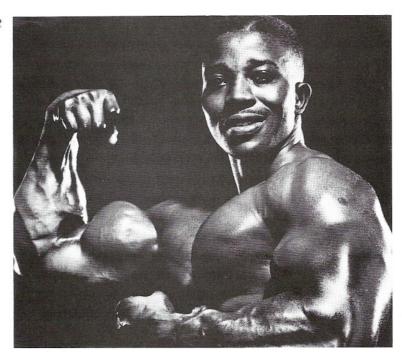






Kevin Levrone

Leroy Colbert



TRAINING THE ARMS

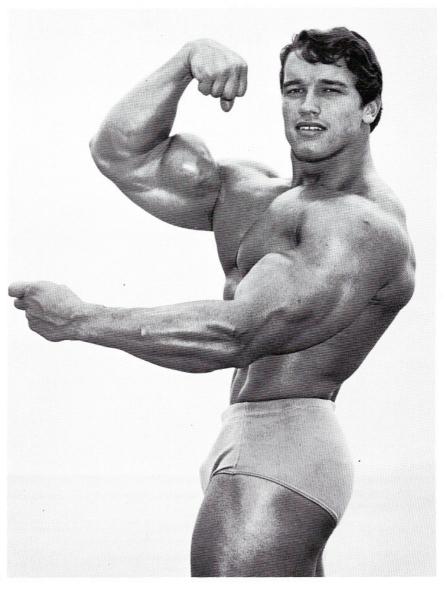
Along with the chest and back, bodybuilders have always considered massive arms the most impressive body part, an indicator of truly outstanding size and strength. When I began training I would study photographs of bodybuilders, and what drew my attention most was the huge biceps. Leroy Colbert, for example, could hit fantastic biceps poses. Reg Park, Bill Pearl, and Serge Nubret were all known for tremendous arm development. I would go through the magazines, page by page, looking for examples of outstanding biceps and vow that someday my arms would look like that, too.

Eventually I did become known for my huge, high-peaked biceps. My arms measured over 20 inches when I was still only nineteen years old, and continued to develop until, at their largest, they measured 22½ inches pumped. There are few things as thrilling on a bodybuilding stage as true 19-or 20-inch arms.

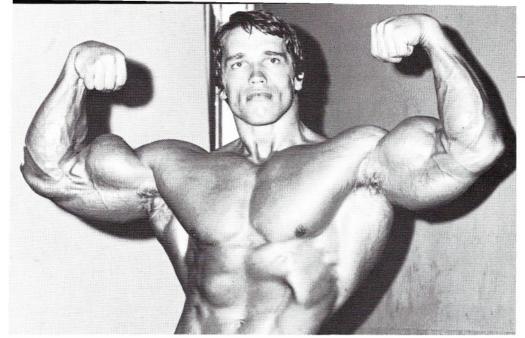
There is one great advantage when it comes to training arms. Because muscles and big arms are so closely associated, it is not difficult to get yourself mentally into arm training. If you go into any serious gym around the country you will probably see young bodybuilders who are just beginning to show overall signs of competition potential, but who already have made great strides in arm development.

One of the reasons this happens is that bodybuilders, especially when starting out, train the arms according to the Priority Principle, whether they know it or not. They train arms first, with great concentration and energy. They flex and pose them all the time, measuring them constantly to see if they have made any progress, so naturally they grow. If they thought the same way about their other body parts, we no doubt would see a lot of them walking around with 20-inch calves as well as huge arms.

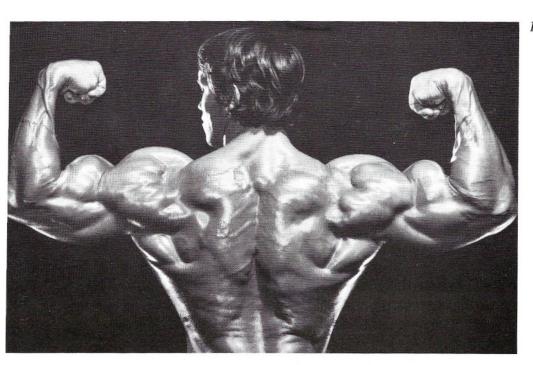
But developing top-quality arms for competition is more than just a matter of size. They need to look good in a lot of poses and from a number of different angles. This means that every part of the arm muscles, every contour and angle, must be fully brought out. This takes a lot of thought and planning. You don't develop championship-level arms simply by throwing around a heavy barbell doing Curls and blasting out some reps for triceps.



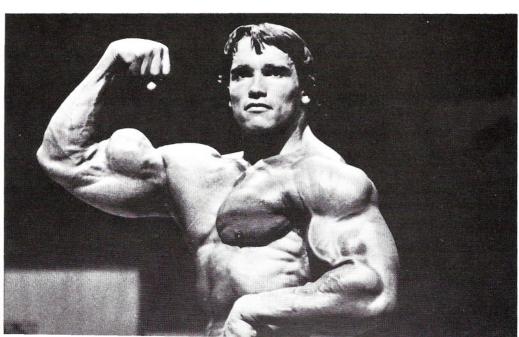
Me at nineteen



Front double-biceps pose



Back double-biceps pose

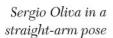


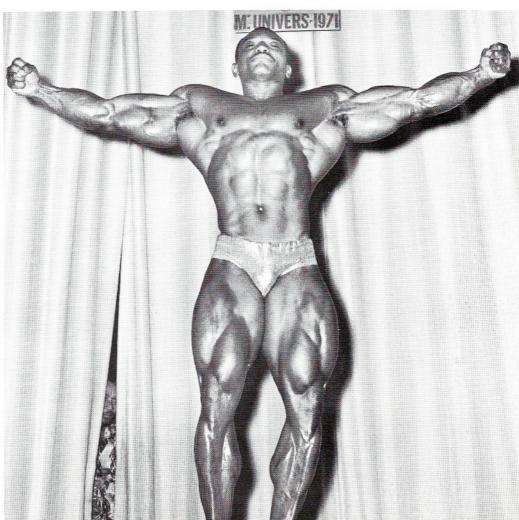
Two aspects of the biceps. In the right arm, a high peak, great shape, and clear definition and separation; in the left, the biceps provides the mass and separation that helps make the arm look huge.

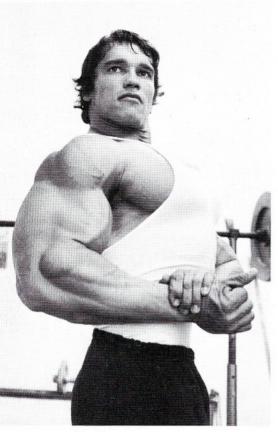
For a front double-biceps pose, for example, you need high-peaked biceps, triceps that hang impressively below the arm, and a well-defined separation between biceps and triceps. For the same pose from the back, you need forearm development at the elbow, good development of the outside head of the biceps, and a clear, visible tie-in between the deltoid and the muscles of the upper arm.

Along with biceps and triceps development, you need to build and shape your forearms so that they are in proportion to the muscles of the upper arm. When you look at the arms of Flex Wheeler or Kevin Levrone—or in the past, Frank Zane, Dave Draper, Bill Pearl, Larry Scott, or Sergio Oliva—you see biceps, triceps, and forearms all developed in proportion to one another.

These various aspects of development do not come about by accident. You need to work at it, which means breaking the muscles of the arms down into separate categories and making sure that each gets its share of hard training.



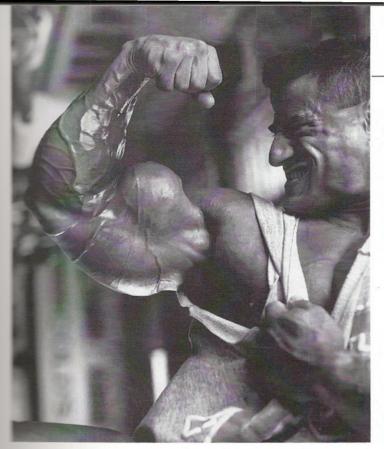


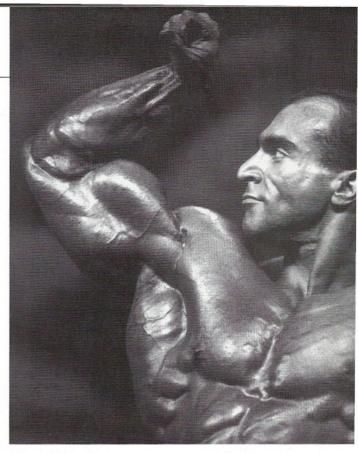


Side chest pose



 $Another\ straight-arm\ pose$





Nasser El Sonbaty



Scott, the first Mr. Olympia, was one of the first modern bodybuilders would call perfect arms.

Having big arms isn't enough.

The shape of the biceps and triceps is also important, as are the proportions of the entire upper arm.

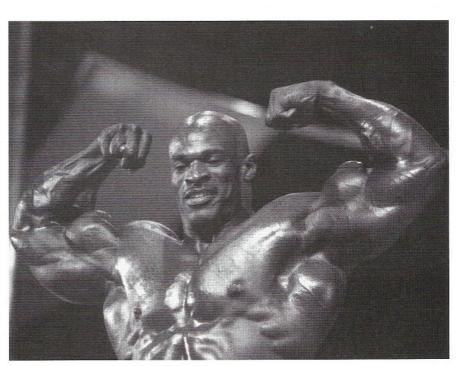


When it comes to total arm development, Mike Matarazzo is able to hold his own with just about anybody.

DEVELOPING PERFECT ARMS

The front double-biceps pose is one of the hardest to do well. Flex Wheeler carries it off because he has everything: proper proportion, good biceps, triceps, deltoids, and pecs, a full rib cage, sweeping lats, and a small waist.

Though we tend to think of giant, bulging biceps when we think of well-developed arms, in point of fact the triceps are the larger, more complex muscle group. The biceps have two heads, the triceps have three. The ideally proportioned arm is usually one-third biceps and two-thirds triceps.

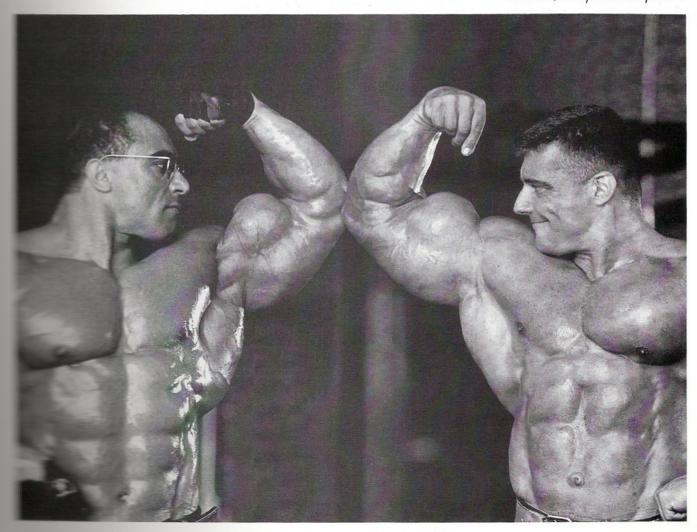


Ronnie Coleman



Lee Priest proves that impressive muscularity—and tremendous arm development—is possible for competitors of all statures.

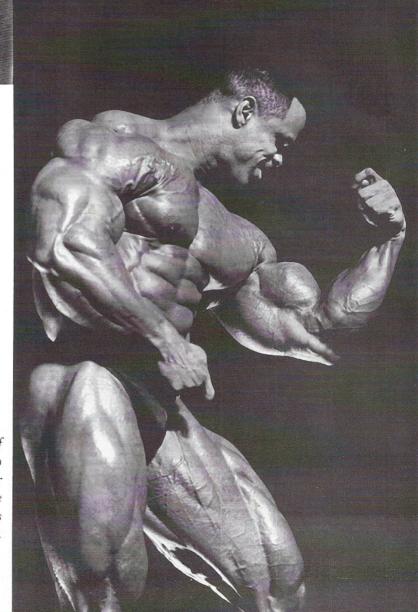
Nasser El Sonbaty and Jean-Pierre Fux don't rely solely on incredible mass when they step onstage to compete. They have complete physiques, including proper forearm proportion, outstanding biceps, triceps, deltoids, and pec development.





Albert Beckles displays one of the best peaked biceps in bodybuilding history.

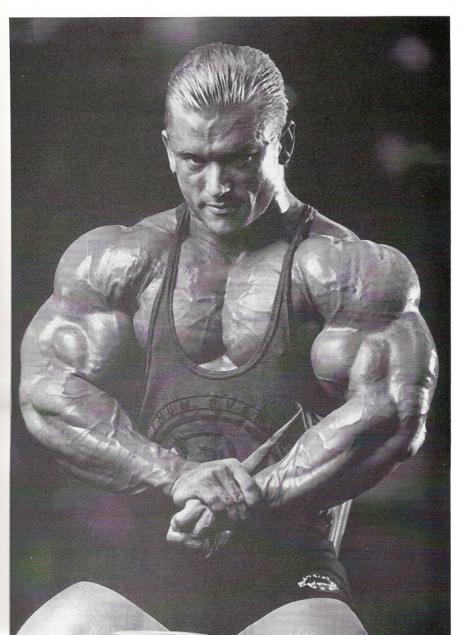
Paul Dillett shows the importance of proportion in creating a championship physique. It isn't enough for a bodybuilder this big to build big arms. They have to be big in proportion to the rest of his body, as is the case here.



Achieving arm perfection means knowing which muscles to train, with which exercises, and what amount of effort to give to each. There are different ways of approaching arm training. You can train the whole arm in one workout, either finishing each muscle group before going on to the next or alternating sets for biceps and triceps, getting the whole arm pumped at one time. Or you can break up your training so that you train triceps one day, biceps the next, and forearms whenever it suits you.

As with other body parts, total development comes about only when you are able to shock the arms into responding, no matter how big they become. Employing variety, change, and as many of the Shocking Principles as possible will all help give you the kind of quality arms you are training for.

Lee Priest is a "giant killer" in the tradition of Danny Padilla and Franco Columbu, and this view of the outstanding development of his upper arms and forearms shows why.



Biceps Training

Biceps have always been one of my best body parts. When I was young, building up my biceps was especially important to me, so I worked very hard and soon they blew up like balloons.

However, as hard as I may have worked, I now realize that my outstanding biceps development is largely hereditary. My biceps are like Tom Platz's thighs—once subjected to the hard work to *make* them develop, they possessed the genetic potential to be among the best in the world.

Hard work and proper training technique will bring out the full potential of any muscle, but not everybody has the same degree of potential. Some bodybuilders have longer biceps, some shorter; some with a higher or lower peak; some that develop enormous thickness and others that do not. You can work on each of these aspects of your development, bring up weak points with intelligent planning, but it certainly helps if you have a predisposition to great shape and proportion in the first place.

Actually, there are many different-shaped biceps that can still be considered first-rate. Among the bodybuilders against whom I competed, Larry Scott was noted for long biceps, both thick and full at the same time. My own were noted for an extremely high peak. Franco Columbu's biceps were high, but short. Sergio Oliva had long biceps, but not particularly high. Boyer Coe had high, long biceps, but narrow. Despite these different arm structures, each of these bodybuilders won impressive titles. The same is true today—you will see bodybuilders with different proportions, different genetic gifts, but each can be a champion if he or she possesses a certain "package," a balancing set of characteristics.

The underlying bone structure and physical proportions have a lot to do with how the arm will ultimately look. Because Franco has short arms, it was not difficult for him to develop biceps that looked proportionately massive. But Lou Ferrigno, with his very long arms, needed 22-inch biceps just to have them look in proportion to his 260-pound body. If he had had 20-inch arms, even though they might be the biggest onstage, he would have looked proportionately underdeveloped.

Proportion and the relative strength of various other muscles can also make a difference in how the biceps are trained and developed. For example, when watching Franco Columbu and Ken Waller doing Barbell Curls, it seemed to me that because the front delts were so powerful, these muscles were taking over a lot of the lifting effort from the biceps. Therefore, they had to make a special effort to isolate the biceps, or else they would never have gotten the training they required. One way they did this was by using the "Arm Blaster" to lock their elbows in place while doing Curls. (You can see me using this apparatus on page 429.) Another was by doing a lot of biceps training using a preacher bench to further isolate the arm muscles.

If you have a similar problem but don't have this kind of specialized equipment, you can simply do your Curls standing with your back against a wall in order to minimize cheating.

Since my front delts were not so proportionately strong, I didn't have that problem. Therefore, I found doing regular Barbell Curls very beneficial. I did not have to make the special effort to isolate the biceps, which was just as well since I didn't know that much about the physiology of training in my early years.

Nonetheless, you can't use other muscles to help with the lift and expect to develop great biceps. You also need to find the right groove—doing any Curl movement through the longest range of motion. When you do a Curl, you must bring your hand directly up to your shoulder. If you change that line an inch to the inside or the outside, you are taking stress off the biceps and you won't get the same results.

Another mistake I see all the time—Sergio Oliva used to do this—is starting off a Curl movement with a Wrist Curl—bending the wrist back, then curling it up just before engaging the biceps. All this does is take stress away from the biceps by using forearm strength rather than biceps strength, and the result will be huge forearms and mediocre biceps.

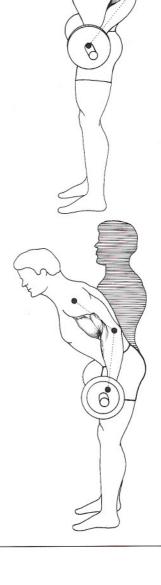
But one Curl movement is not enough to work the entire biceps. The biceps not only lift and curl the arm, they also rotate the wrist. Lifting with a bar produces biceps mass, but it locks the wrists and keeps them from moving. So I always include a number of dumbbell exercises that let me twist the wrist to the outside as I lift the weight, giving me a more complete biceps contraction. Working with dumbbells, I'm able to get a better brachialis development at the elbow, and that creates a much sharper separation between the biceps and triceps in a rear double-biceps pose.

Biceps length is also important. Many people do Reverse Curls as a forearm exercise, but I have noticed this exercise also increases the apparent biceps length. The muscle should extend all the way down almost to the elbow and then swoop into a full and powerful-looking curve.

I also like to change my hand position as much as possible when doing Curls in order to completely stimulate all the different areas of the biceps. The Barbell Curl locks the hand, the Dumbbell Curl lets you rotate the hand, the Reverse Curl brings the hand up in a palm-down position, and lifting a dumbbell with the thumb on top, a kind of Hammer Curl, hits the brachialis directly and is necessary for complete biceps development. And I add variety to my biceps workouts by using different kinds of equipment—the Arm Blaster, a straight bar, an E-Z curl bar, a preacher bench, a prone bench, barbells, dumbbells, cables, and machines. Again, the major mistake I see in biceps training is lack of a full movement. There is probably no body part in which training for a full range of motion is so important. You will restrict the range of motion if you do things like lifting your elbows up or holding them too far back and therefore not getting a wide enough arc in the exercise.

This is an incorrect beginning position for Barbell Curls. The arms are bent and elbows back, which prevents the biceps from being fully extended and drastically shortens the range of motion. Since the arms never get stretched out using this technique, you never fully stress the lower part of the biceps.

Starting the lift from a bentover position is one of the most common mistakes made when doing Barbell Curls. If you begin the lift and straighten up at the same time, the lower back becomes involved. This produces extra momentum during the movement that causes you to swing the weight up instead of lifting it with an intense contraction of the biceps, so the lower part of the biceps never gets properly stimulated. For the correct approach to this exercise, see page 428.



Some bodybuilders don't want to lower the weight to full extension, with their arms locked out, because they can't lift as much weight that way. But they forget that it is this lower area of the range of motion that creates the real thickness in the lower biceps and makes the muscle appear to come right out of the forearm—an important look when you do poses with your arms extended. This part of the muscle also rolls up and helps create height when you flex.

You see bodybuilders locking out their arms on Curls, but then they ruin the movement by not doing a strict curling motion right from the beginning. Instead, they lift the weight up, using a little shoulders and some back, so the first few inches of the movement are wasted because the biceps are simply not involved.

Another mistake is to bring the weight all the way up and then neglect to flex and contract the muscle. When the weight is up at your chin, the bones and joints are taking most of the strain. To keep the muscle working, you have to really flex it hard or it remains soft because you are not keeping it under stress. You are never going to have full, hard, and thick biceps with which to impress judges if you get lazy at the top of your Curl movements.

CHEAT CURLS

Curls are one of the exercises where cheating can be used effectively. Curls are essentially a rotary movement, yet the resistance of the weight works vertically. In other words, you are lifting with a circular motion but gravity continues to pull the weight straight down. Sometimes during the movement you are lifting out, other times lifting up, but the resistance is always up and down. So you are not continuously lifting in direct opposition to the weight. This makes the exercise less effective in certain parts of the movement.

The designers of Curl machines state that their equipment, which acts with a rotary rather than linear motion, is better for doing Curls than barbells or dumbbells. However, you don't need a complicated machine to overcome this difficulty. Instead, you can do some of your Curls using a weight that is too heavy for a strict movement. So even though you are using your back and shoulders to help "force" the weight up, you are also forcing the biceps to work to the maximum at every point along the movement.

The barbell or dumbbell is harder to lift at the point where your forearms are parallel to the floor than at the beginning of a Curl when your arms are pointed more toward the floor. Doing Cheat Curls, you can use a weight that feels very heavy in the "easy" part of the movement and then cheat a little to get you past the "hard" part where the resistance is too great to overcome using strict technique.

Doing exhibitions for Reg Park in South Africa I would do 5 repetitions of Barbell Cheat Curls with 275 pounds. Handling this amount of weight does not help create great biceps shape or give the muscle a high peak, but it certainly is effective as a mass builder. However, Cheat Curls should be no more than 10 percent of your biceps program. You also need a variety of strict movements to develop the complete quality of the muscle.

BEGINNING PROGRAM

The Barbell Curl, done strictly for beginners, is the fundamental exercise for building mass in the biceps. The Barbell Curl remains in the program all the way through, from Beginning to Competition Training. This is the only way to continue to build and maintain maximum muscle mass and thickness. But I also recommend including Dumbbell Curls from the very start because this exercise allows you to supinate your wrist, which gives you a more complete contraction and helps develop the full shape of the muscles.

I also recommend One-Arm Curls almost from the beginning. When doing these, I hold on to something with one hand to steady myself, lean a little to the side to give myself a free range of motion, and concentrate totally on each biceps in turn—something you can't do when you are working both arms at the same time.

ADVANCED PROGRAM

When you get into Advanced Training, you continue trying to build additional mass, but you must also be concerned with creating separation and shaping the entire biceps structure. If your biceps lacks peak, work on height. If it's not thick enough, make it thick.

Incline Dumbbell Curls are the best exercise for developing the shape and quality of the biceps and getting an even greater stretch in the muscle. Along with this, the Concentration Curl can help add biceps height.

As you progress, you will begin to superset your exercises, creating more intensity by cutting down the time interval. I like the idea of supersetting biceps and triceps, which gives an enormous pump to your arms and makes you feel gigantic. Also, you can handle heavier weights for tri-

ceps when your biceps are pumped like a pillow, giving you a kind of cushion you can bounce off with each triceps repetition.

Supersetting different muscles is also valuable in preparing you for competition, when you will need to pump your whole body at the same time. If you aren't used to this, you will not be able to show yourself at your best when you step out onstage.

The closer you get to competition, the more you have to be certain that you do enough additional exercises to fully develop every aspect of the biceps. Besides the mass-building Barbell Curls, you need to do more Incline Curls, which help develop the lower part of the muscle. I often would go even further and actually lie on a flat bench to do Dumbbell Curls, stretching the biceps even more. You also need additional cable and dumbbell work which allows you to twist your wrist and more fully shape the muscle.

COMPETITION PROGRAM

At each level, you are required to do something extra, to continue to overload and demand more of the muscles. This principle is even more important when you are training your arms for competition. One good way of increasing the intensity of your training is by doing Alternate Dumbbell Curls instead of Barbell Curls. In this way you are able to isolate each biceps, and concentrate all your energy on each arm in turn. Because of the way this exercise is done—with one arm coming up as the other is going down—you are able to achieve a much stricter movement with very little cheating. You can increase intensity by going farther and locking in the elbows by doing Preacher Curls, which force you to work in a stricter manner while hitting the lower biceps to a greater degree.

The degree of time-intensive training you need for competition preparation is greater than ever before, involving trisets—three exercises in a row without any stopping to rest in between. This will be difficult at first, but as your conditioning increases you will find this accelerated program gives you a tremendous pump and allows you to do an enormous amount of training in a very short time.

Above all, you need to employ as many techniques as possible to shock the biceps into further development. I always liked, for example, to do Barbell Curls with a partner: I would do a set, hand the weight immediately to him to do his set, have him hand it back to me immediately for my next set, and so on until exhaustion.

For total competition development, I made sure I did a lot of single sets, supersets, and trisets with a large variety of exercises—a set of biceps

once an hour every hour the day before a contest; cheating reps; partial reps; forced reps; negative reps; Curls to the inside, Curls to the outside—nothing left out, nothing left to chance.

I attacked my biceps for competition with the Stripping Method, but also with 21s, combining a lot of partial reps and full reps, and supersetting one biceps exercise with another as well as supersetting biceps with triceps, or biceps with whatever.

I also used a lot of visualization in biceps training. In my mind I saw my biceps as mountains, enormously huge, and I pictured myself lifting tremendous amounts of weight with these superhuman masses of muscle.

This kind of intense training will ensure that you build enough mass in the biceps; that you gain biceps length, thickness, and height; that you develop the inside and outside of the biceps and the separation between biceps and deltoids and between biceps and triceps—all of which you have to have if you want to build a championship physique.

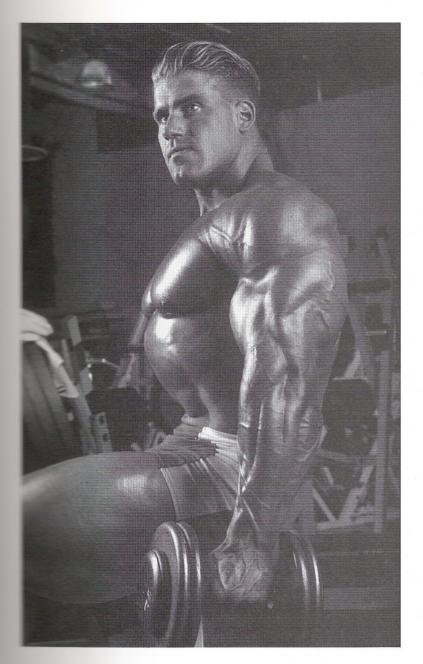
WEAK POINT TRAINING

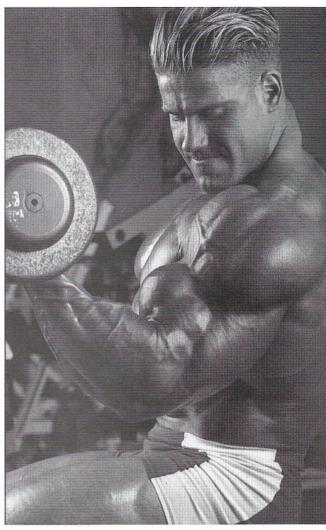
But even if you do everything I have just outlined, and more, you may still find that certain areas of the biceps are relatively less well developed than others.

In general, when you are trying to build up a weak area of the biceps, the best technique you can employ is one-arm dumbbell exercises. Doing an entire set with just one arm at a time allows for maximum concentration and intensity, and ensures that each arm works to its maximum. This keeps a stronger biceps from overshadowing the weaker, which can result in asymmetrical arm development. Also, be sure to twist the wrist during the movement for total biceps contraction.

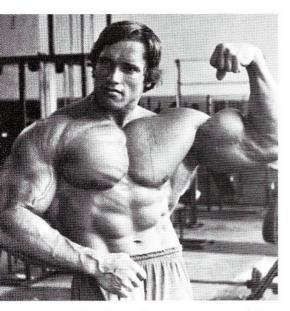
However, I believe one major reason bodybuilders show weak points in the biceps is that they do the exercises incorrectly. You need to master proper technique—keeping the elbows steady, lowering the weight rather than dropping it, employing as many Shocking Principles as possible—and then you will be much less likely to have problems in this area.

For example, I see a lot of bodybuilders using their forearms when they do Curls, starting the motion with a kind of Wrist Curl which takes away from the effectiveness of the exercise. Or they will do a Curl and, at the top, instead of flexing their biceps—to maintain maximal tension—they will just throw the weight back toward their shoulders, leaving the biceps loose and not working at all. I recommend instead using the peak contraction principle—flexing the biceps as hard as possible when you get to the top of the Curl.





 $One\hbox{-}Arm\ Dumbbell\ Curl\ (Jay\ Cutler)$



This photo shows my arms at their most massive, when I weighed 245 pounds and relied heavily on Barbell and Cheat Curls using very heavy poundage. Notice how thick and huge the unflexed arm looks.

But sometimes biceps development lags behind simply because they aren't being trained hard enough, the bodybuilder feeling that 5 sets of biceps is plenty and ending up with big but relatively shapeless masses of muscle where he should have beautifully sculpted biceps.

To correct specific weak points in the biceps, I recommend the following exercises:

FOR MASS

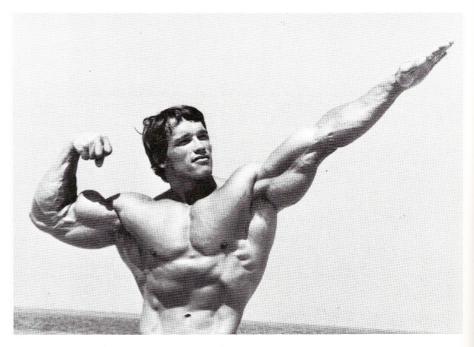
Heavy Barbell Curls and Cheat Curls. Muscle size comes from lifting heavy weights. If you can curl 110 pounds and you train up to the point where you can curl 130 pounds, your biceps are going to get bigger. Try using my visualization technique to imagine your biceps growing to superhuman size.

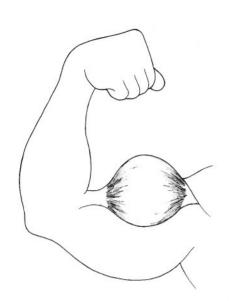
FOR LENGTH AND THICKNESS

Curls that concentrate on the lower third of the range of motion Incline or Prone Curls to stretch the biceps to their maximum Strict movements, like Preacher Curls or Curls with the Arm Blaster, to lock your elbows and allow you to get the fullest extension of the biceps

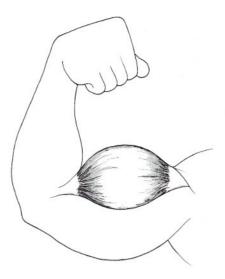
After completion of each set of my Dumbbell Curl exercise, rotate the wrists 180 degrees 5 or 6 times.

The longer and thicker your biceps, the better they will look when you hold your arm straight out, and the bigger and higher they will be when you curl and flex your arm in a biceps shot.



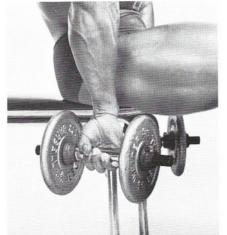


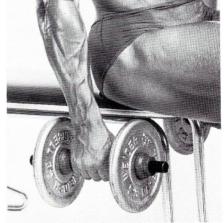
This is a biceps with a high peak but a short head. The muscle belly does not extend completely down to the elbow, which leaves a gap.



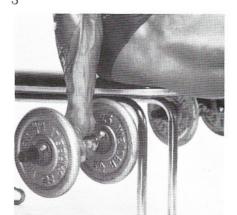
This biceps has a long head, but it lacks height.

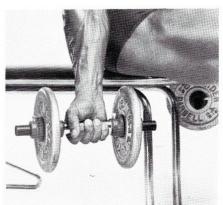
Many bodybuilders don't realize that the function of the biceps is to twist the wrist as well as lift and curl. This is why I always started a curling movement as shown in pictures 1 and 2.

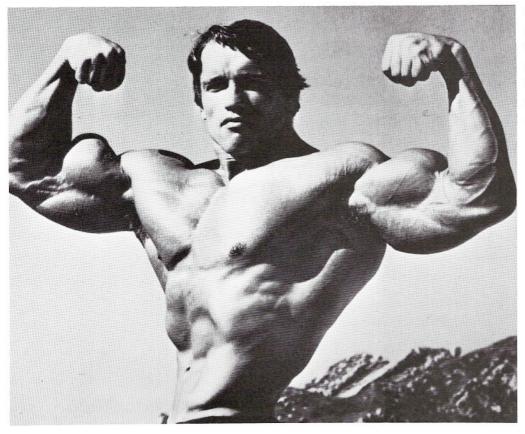




The hand positions in pictures 3 and 4 are good if you want to eliminate wrist rotation while doing Dumbbell Curls.







Thickness in the biceps is important, but height is a quality that is often overlooked. I have always worked hard on developing peaks, and I feel that I won a lot of competitions because of my high biceps.

FOR HEIGHT

Concentration Curls with a dumbbell or cable

Dumbbell movements emphasizing a twist of the wrist (turning the thumb outward) as you raise the weight, making certain you concentrate on the top third of the range of motion

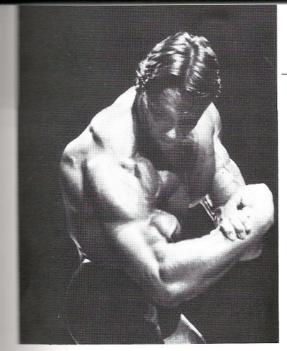
Use the peak contraction principle—flexing the biceps as hard as possible at the top of the movement—and do a series of contractions and relaxation.

Keep going until you get a tremendous pump.

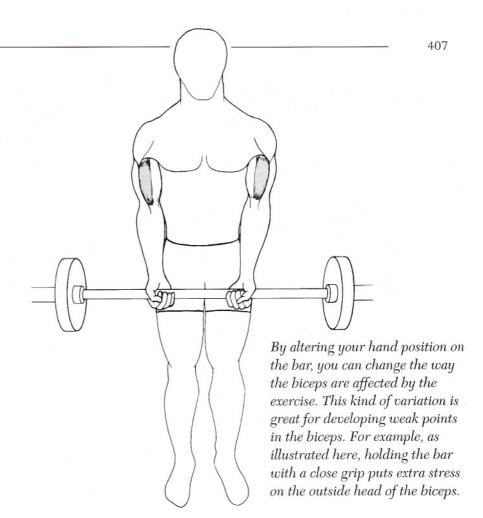
Include burns in your workout—finishing off by bringing up the weight and fully contracting the biceps, then bringing the weight down a third of the way, then back up to another full contraction. Do 3 or 4 reps of this movement and then put the weight down and pose and flex your biceps.

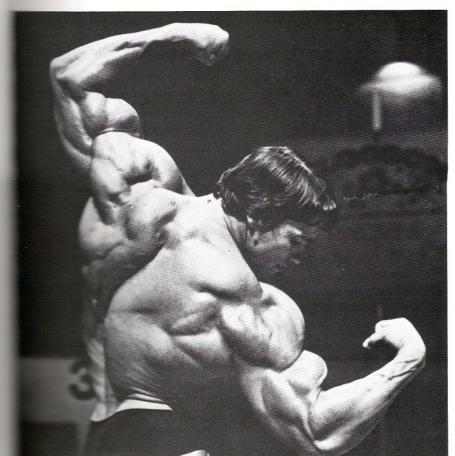
FOR BICEPS MASS AND OUTER THICKNESS

Curls done inward toward the center of the body, such as Close-Grip Barbell Curls or Close-Grip Preacher Bench Curls Concentration Curls that bring the weight into your chest



Well-developed outer biceps allow you to hit a number of poses effectively. For example, one of my favorite biceps poses is where I simply flex my arm and show the judges the outer biceps. But to get this kind of development you need to work the biceps.from all angles.



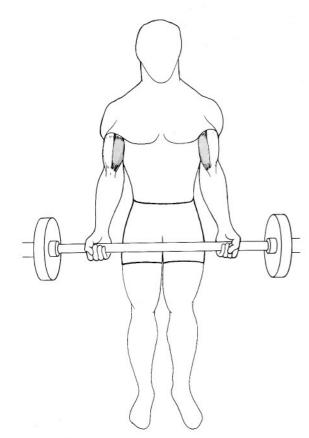


In order to make back poses like this twisting three-quarters back shot work, you have to have good outer biceps and brachialis development (at the elbow) in order to separate the biceps and triceps.





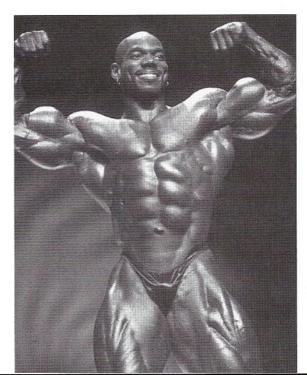
David Hughes



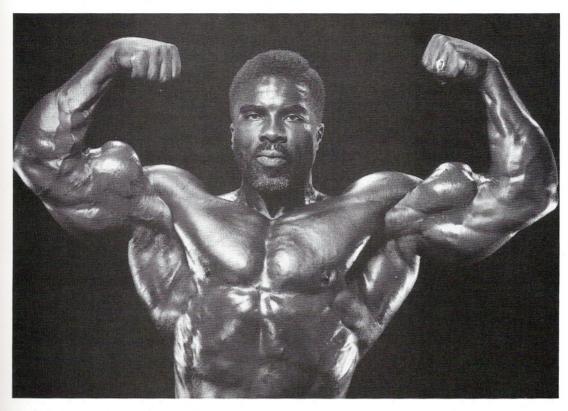
If your weak point is the inner region of the biceps, you can put more stress on this area by holding your hands in a wide grip for Barbell Curls.



Lee Priest



Flex Wheeler



Robby Robinson's arms are one of the best examples of biceps definition and separation.
Looking at Robby in this photo is like examining an anatomy chart.

FOR BICEPS MASS AND INNER THICKNESS

Hold dumbbells in a "hammer" position—palm turned toward the inside rather than facing upward. You can feel how this changes the stress on the biceps.

Standing Barbell Curls

Barbell Preacher Curls done with a wide grip

Seated or Standing Dumbbell Curls

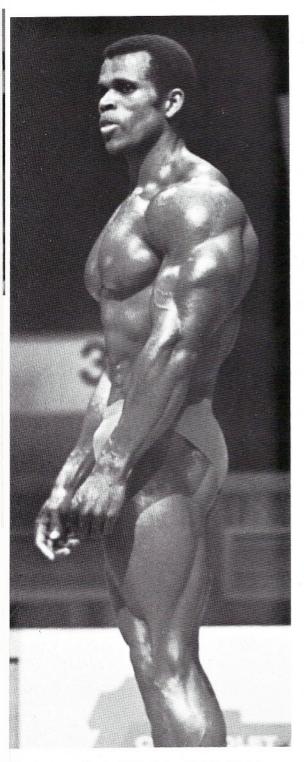
Incline Dumbbell Curls

Standing Alternate Dumbbell Curls in which your arms are kept wide, angling away from the body. If you curl out and downward and turn wrists slightly outward, dropping your thumbs slightly, you will feel the exercise much more specifically in the inner biceps.

FOR SEPARATION AND DEFINITION

High set training, supersets, and trisets. Try to use as many different biceps exercises as possible, especially dumbbell movements that allow you to train at the greatest variety of angles and lots of one-arm movements to create maximum isolation.

Reverse Curls, to develop brachio radialis and biceps that look so good when you do a rear double-biceps shot. Remember to keep your elbows steady as a pivot point and your wrists steady throughout the movement.



Serge Nubret has full, thick triceps, so his arms still look massive even when he is standing relaxed.

Triceps Training

The triceps is a larger muscle mass than the biceps, and it needs training from more angles. Like the biceps, the triceps have to look good from any view. But unlike the biceps, the triceps need to make your arm look big, massive, and impressive when your arms are not flexed as well. When somebody says, "Wow, look at the size of that guy's arms!" you can be sure it is the triceps that are creating that effect. They are visible 90 percent of the time you are onstage, whether you are standing relaxed or hitting poses.

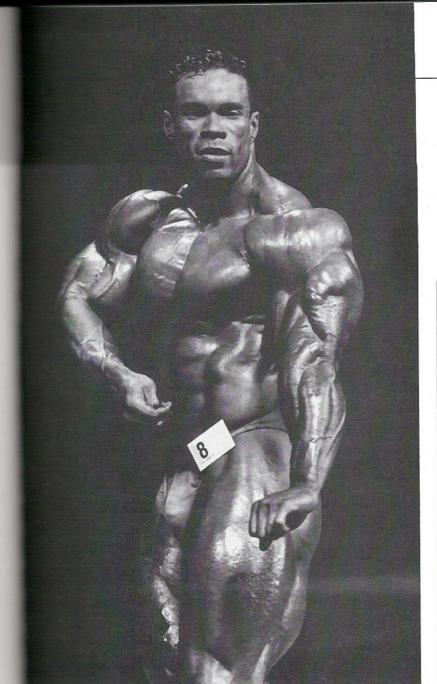
Bill Pearl, Serge Nubret, Sergio Oliva, Albert Beckles, Freddy Ortiz, Casey Viator, Jusup Wilkosz, and Frank Zane are all good examples of bodybuilders who have great triceps. The triceps need to be developed in such a way that they look good when you do a side triceps shot, a front or rear biceps shot, or pose with your arms raised overhead or held straight out (a pose Larry Scott, Dave Draper, and I were noted for and which requires outstanding triceps). Imagine doing a rear lat shot and how effective good triceps can be from that angle. Or a most-muscular pose, with the triceps sticking out right from the elbow and continuing on to the rear deltoid. Or a front abdominal shot where your hands are behind your head.

While it is possible to hide weak biceps to some extent, weak triceps are obvious in almost any pose. When the judges look at you standing relaxed in round one they will know immediately if you have good triceps or not. Sergio Oliva, for example, could just stand there, his triceps looking huge and powerful, and make an impression on the judges, even though his biceps were not that outstanding.

However, just as with other body parts, there is a difference between big triceps and good triceps. Every part of this relatively complex muscle needs to be fully developed. When your arms hang, the triceps need to be evident all the way from the elbow to the rear deltoid. When they are flexed, each of the heads must be fully shaped, separated, and distinct.

BEGINNING AND ADVANCED PROGRAMS

The first step in training triceps is to build up the mass and strength of the muscle structure. This means doing the basic triceps press and extension movements, gradually adding more and more weight until the area begins to respond. Different kinds of presses and extensions are designed to develop specific areas of the triceps. But there are also techniques you can use to maximize your triceps training. Remember that anytime you straighten your arm against resistance—whether you are specifically doing triceps training or not—you will involve the triceps muscles.



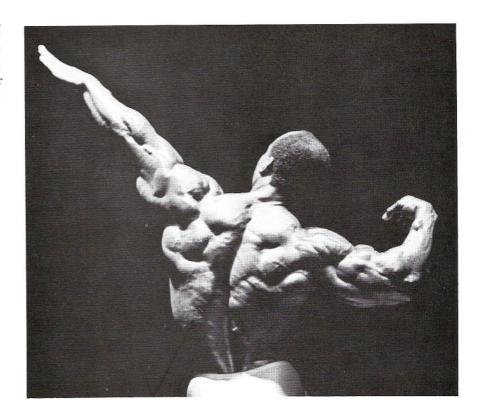
Kevin Levrone

A well-developed triceps looks like a horseshoe at the back of the upper arm.

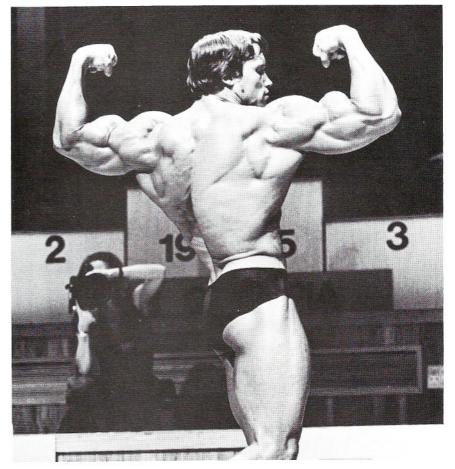


Lee Priest

The mass of the flexed triceps and the great shape of the triceps of the straight arm blend in perfectly with the outstanding muscularity of Albert Beckles's back.



Triceps are just as important in any back double-biceps shot as when you are doing specific triceps poses. Here you can see the way the triceps hang below the arm, and the separation between triceps, deltoids, biceps, and forearms.



In most cases, muscle mass and strength are enhanced by employing a cheating technique, but you don't need to cheat in order to put extra stress on the triceps. With all the effort you expend doing power training with Bench Presses, Dumbbell Presses, and Shoulder Presses, you are already putting an enormous strain on the triceps area.

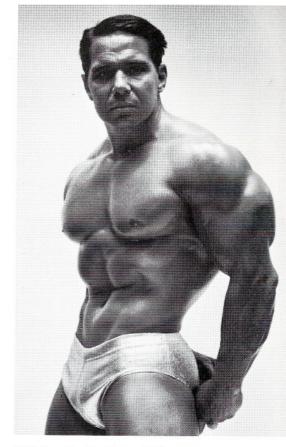
Even though the triceps are involved in a wide range of different exercises, it is also necessary, especially as you become more advanced, to isolate the heads and put the stress on each part directly to make certain you get full development of the muscle structure. For this, I recommend a number of different Triceps Extension movements, using barbells, dumbbells, and cables, each of which tends to hit a different area of the triceps.

Proportions and bone structure of individual bodybuilders will make it easier for some to develop good triceps. When doing Triceps Pressdowns, for example, it is easy for some to isolate the triceps, while others with different proportions and muscle attachments will find themselves involving the pectorals or even the lats instead of just the triceps. You see this a lot when some bodybuilders try to do Triceps Pressdowns and end up with a good chest pump. In a case like this, learning to totally isolate the triceps becomes extremely important, and can be accomplished by doing One-Arm Triceps Extensions or Barbell Triceps Extensions.

Lying Triceps Extensions work the muscle from the elbow to the rear deltoid, and are also great for developing the triceps for straight-arm poses. One-Arm Triceps Extensions help develop the triceps so that they look good when you are doing biceps shots, with the fullness of the triceps offsetting the peak of the biceps. Lying Dumbbell Extensions work the outer head of the triceps to a greater degree, giving you the shape and thickness you need for total triceps development.

Your hand position makes a difference in how an exercise affects the triceps. If you hold your hand so that the thumb is up, palm facing the inside, you work the outside of the triceps, to a slightly greater degree, as when doing Triceps Pressdowns holding on to a rope rather than pressing down on a bar or performing Dumbbell Kickbacks. If you turn your hand so that the palm is facedown, as in a Triceps Pressdown, you put more stress on the inner part of the triceps. If you twist your wrist, thumbs in and down, which is easiest when doing One-Arm Cable Triceps Pressdowns, you really hit the muscle a little bit differently.

Advanced training also involves supersetting, hitting the muscle with one exercise after another to develop size, strength, shape, and endurance. You need to work the upper and lower long, lateral, and medial heads. Adding on exercises is important only if you pursue them with the kind of intensity that forces the muscles to continue to grow, no matter how advanced you become.



Bill Pearl is the king of this particular triceps pose, which is a great way of showing the development of the upper triceps.

Lee Haney displays the ultimate in triceps mass. He doesn't have to squeeze his arm in against his lats to make the triceps appear huge; all he has to do is extend the arm



COMPETITION PROGRAM

Until you have seen a top-rated bodybuilder in shape for competition hitting a triceps shot, you probably have no idea what the muscle structure is supposed to look like. It is, in fact, almost like a horseshoe that curves up from the elbow, separated clearly from the deltoids above it and the biceps on the other side of the arm. In a bodybuilder, this muscle can be awesome.

The Competition Program, which will help you achieve this kind of look in your own physique, uses additional exercises besides those you have already learned, and a lot of time-intensive supersets to create the maximum training intensity.

Exercises like Cable Pressdowns, Kickbacks, Close-Grip Presses, and Dips tend to fully work the triceps. Almost any triceps exercise will help develop the lower part of the muscle if you work only the lower range of motion. Take hold of the weight and bend your elbows, stretching the triceps as fully as possible. Then start to straighten out your arms, but stop after going through only about a third of the range of motion. Go back and forth just through this partial range and you effectively work the lower area.

For upper triceps, completely lock out your arms on any triceps exercise and hold this contraction for 3 or 4 seconds, tensing the muscle isometrically. Following your set, pose and tense the muscle while your training partner does his set and you will get even more response from the upper triceps.

Remember, too, that the triceps rotates the wrist in opposition to the biceps. Just as you twisted the wrist outward in biceps exercises, you should do some triceps exercises in which you twist the wrist in the opposite direction. This will give you complete contraction of the triceps muscle. Behind-the-Neck Dumbbell Extensions and One-Arm Cable Pressdowns are exercises for this purpose.

WEAK POINT TRAINING

If you have a real problem with the triceps, I recommend training them according to the Priority Principle, working them first, when you are fresh. I did this myself years ago when I realized that my biceps had developed out of proportion to my triceps. I began to concentrate on this area, using the Priority Principle, and soon they began to respond so I had an Olympia-quality arm rather than just Olympia-quality biceps.

I also found that supersetting triceps exercises, going right from one to the other, was another way of getting extra triceps development. I would first do a few sets to pump up the biceps, which creates a "cushioning" effect, and then really blast the triceps. After the superset I would continue to flex and pose the triceps, never giving them any relief.

If triceps are an especially weak point for you, I recommend changing your program so that you train them by themselves from time to time, allowing you to concentrate only on the back of the arms to totally shock and stimulate the triceps. To overcome specific weak points, I recommend the following exercises:

FOR MASS

Use a heavy weight in each exercise:

Close-Grip Barbell Presses Weighted Dips Dips Behind the Back



Dorian Yates

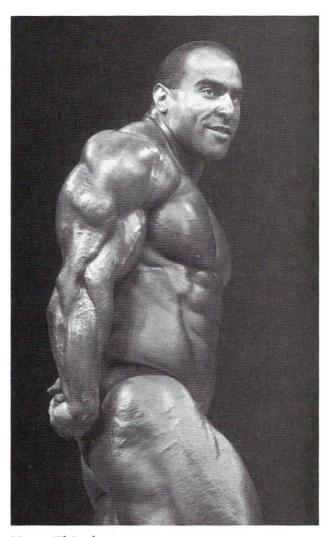
FOR MASS AND UPPER TRICEPS

Cable Pressdowns and One-Arm Cable Pressdowns (regular and reverse grip)

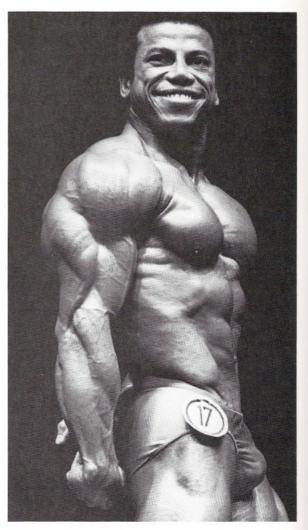
Kickbacks

Dips

Do all triceps exercises strictly so that you really flex them totally, concentrating on locking out on each movement. Use the peak contraction principle, holding the full contraction for a few moments at the top of each repetition.



Nasser El Sonbaty



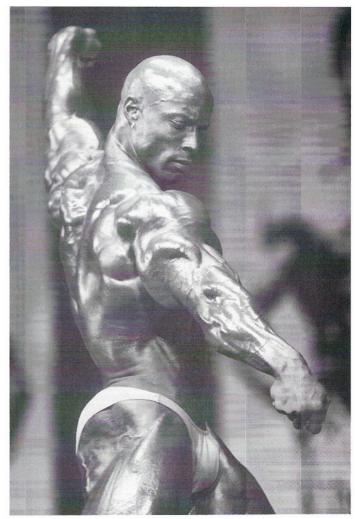
Chris Dickerson is not known for having huge arms, but his triceps—particularly his upper triceps—are so well developed that his arms look really massive in this pose. Notice also the kind of superb separation between triceps and deltoid that helped Chris win the 1982 Mr. Olympia title.

FOR MASS AND LOWER TRICEPS

Weighted Dips

Dips Behind the Back—doing partial reps in which you go all the way down, but come up only about three-quarters of the way (and not locking out) to keep the lower area of the triceps under stress the whole time (the more your arm is bent, the more your lower triceps takes up the stress)





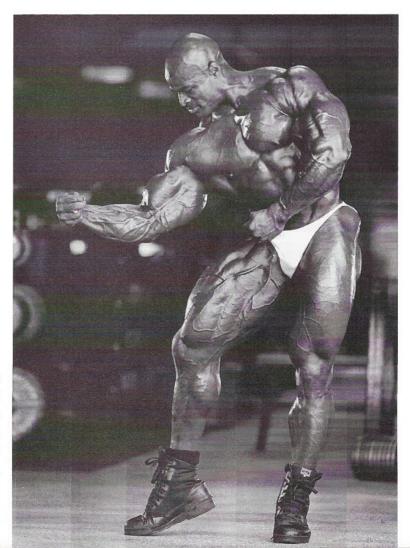
Here Shawn Ray demonstrates two different and effective ways to display outstanding triceps development.

Forearm Training

Forearms should be taken just as seriously as any other body part if you want to develop a truly quality physique. They are involved in nearly every exercise for the upper body, either by helping you grip a piece of equipment or by being a part of all pushing and pulling actions. So they get a lot of incidental training even when you are not specifically doing forearm exercises. In fact, anytime you flex the elbows or wrists, you put stress on the forearm muscles.

Good forearm development is necessary to create a championship physique, but forearm strength is just as important. Strong forearms allow you to train with heavier weights and, in exercises such as Chins and Cable Rows, in which the hand and wrist are generally the "weak link," give you the capacity to train hard and put more stress on other muscles.

As with other muscles, genetic structure is a factor in determining the potential size and strength of the forearms. The reason some forearm muscles seem to extend all the way to the hand, with almost no tendon intervening, is that that person has an extremely long "muscle belly"—the



Ronnie Coleman's arm development is a perfect example of how inner biceps development helps create the necessary separation between the biceps and triceps, as well as between the biceps and forearms.

actual contractile part of the muscle-tendon structure. Muscle size is affected by the length of the muscle belly because mass is a product of *volume*—that is, three dimensions rather than just one. So having two inches more length in the forearm actually translates into a lot of extra potential when you consider what the increase in cubic measurement can be. Many bodybuilders constructed like this claim they do not need to do forearm training but get adequate results with exercises like heavy Barbell Curls. However, when I trained with Casey Viator, who had incredible forearm development, I saw him doing Barbell Wrist Curls with 155 pounds and Reverse Curls with 135 pounds. Sergio Oliva did endless sets of Reverse Curls on a preacher bench to get that enormous upper forearm development. Dave Draper did a lot of forearm training. So, even if you are genetically gifted with good forearms, this doesn't mean you don't have to train them.

It is also possible to have high forearms—that is, to have a relatively short muscle belly and a long tendon, limiting the cubic volume of the muscle mass. Most bodybuilders, myself included, are somewhere in between, with neither the full forearm structure of a Sergio Oliva nor impossibly high forearms. With this kind of forearm, it is possible to build the muscles up to where they are proportionate to the upper arm, but you have to train them hard to do so.

BEGINNING PROGRAM

Forearm training should be included as a part of your regular workout schedule right from the beginning, but these workouts will differ somewhat from those for other body parts. Because forearms are involved in so



Casey Viator demonstrates a basic forearm pose.

These poses by Lee Labrada require great forearm development to balance the mass and separation of the upper arm.





many other exercises, you will not need very many forearm exercises to start with—Barbell Wrist Curls and Reverse Wrist Curls will suffice. I do not recommend doing as many sets for forearms as for legs, back, or other body parts, but I have found that doing sets of relatively high reps gives the best results.

One mistake many bodybuilders make with forearm training is that they don't use enough weight. Forearms are somewhat like calves in that they are accustomed to continual use and heavy stress. So you need to use a fairly heavy weight in order to really stimulate the muscles.

Strict technique is also necessary to totally isolate the forearms and not let the biceps do the work. This is done by laying your forearms firmly on a bench, elbows close together and locked in between your knees.

It may seem to some that concentrating on forearms right from the beginning is not that important, but I disagree—forearm and grip strength are so essential to being able to train hard and heavy that you need to develop the forearms right from day one. And since forearm growth comes slowly to some people, the sooner you get started working on it the better.

ADVANCED PROGRAM

In the Advanced Training Program I have added One-Arm Wrist Curls to isolate and increase the intensity on each forearm, and constructed the workout so that you superset Wrist Curls and Reverse Wrist Curls, giving you a total forearm pump.

Of course, just the fact that you are training the rest of the body so much more intensely at this point will in itself force the arms to work harder. Your total workout will tend to exhaust forearms so that, once you get to training them specifically, it will take a great deal of concentration and dedication to work these tired and worn-out muscles.

Remember that forearm size, more than almost any other part, depends on genetics. If you have a short forearm muscle belly and therefore have trouble gaining the kind of size you'd like to have, begin thinking about extra forearm work early. Because forearms gain in size slowly, you need time to make the changes you are looking for.

But you might be surprised just how quickly you can develop forearms if you really make the effort. Often, the reason bodybuilders have problems developing forearms is simply that they don't train them hard enough. They tack forearm training onto the end of their workout and do a few halfhearted sets. Believe me, if you want any body part to develop to its maximum you have to take it seriously. Forearm training is no less important than training the chest or biceps—if you truly want to become a champion.

COMPETITION PROGRAM

Once you begin training for competition, I recommend that you make sure you have hit every one of the fourteen muscles by adding Preacher Bench Reverse Curls and Behind-the-Back Wrist Curls to your forearm program.

When you do Reverse Curls for the upper part of the forearms, use a straight bar rather than an E-Z curl bar. As you lift the bar in an upward arc from the area of your thighs, you curl the wrists back and fully involve the upper forearms. Incidentally, many bodybuilders lean back as they do Reverse Curls, but you should actually lean slightly forward. This further isolates the arms, puts continuous stress on the forearms, and gives you a much stricter movement.

Reverse Curls also work well on certain kinds of curl machines and a preacher bench. But no matter which way you do this exercise, always remember to get a full range of movement—all the way down, all the way up, and keep it slow and under control. Remember, too, that your wrists and forearms will also be affected by heavy Barbell Curls and Cheat Curls, Triceps Extensions, and a number of other exercises throughout all the various levels of training.

I recommend doing forearm training at the end of your workout. If you try doing other upper body exercises when your wrists and forearms are already fatigued, you will severely limit your ability to train intensely.

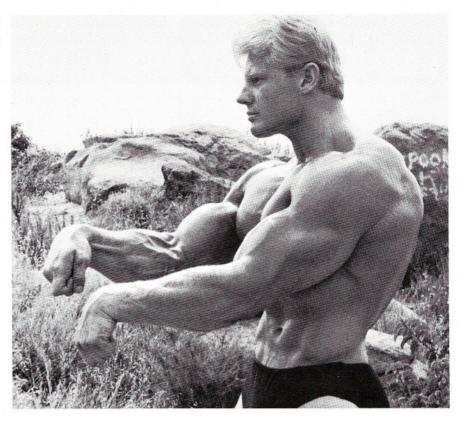
One good method for totally stimulating your forearms is after you do your Wrist Curls—when you are too tired to do any more reps—simply let the bar hang in your fingers and then flex your fingers by opening and closing your hands and getting to those last few available muscle fibers.

POSING THE FOREARMS

There are two different kinds of forearm poses: direct, in which you are deliberately calling attention to these muscles; and indirect, in which you are primarily posing other body parts but the forearms play a part nonetheless. Often when you hit a pose, people watching don't specifically notice forearm development, but they would certainly notice if it wasn't there.

Since forearms are a third of the total arm, without proper forearm development the whole arm looks out of proportion. In a front double-biceps pose, the forearm must look full enough to balance off the development of the biceps. From the rear, in a back double-biceps, the muscularity of the forearm is part of the total effect.

Impressive forearms help you in every pose from side chest to mostmuscular and are extremely important when you have your arms exDave Draper showing a direct forearm pose



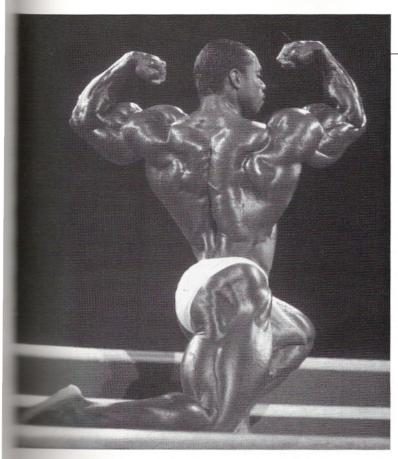
tended, as in the classic javelin-thrower pose in which one arm is flexed, the other extended.

Certain poses are virtually impossible to carry off without exceptional forearm development. One that comes to mind is Sergio Oliva's famous pose where he lifts both hands overhead, flexes his forearms, and flares out his fantastic lats. In spite of Sergio's enormous back, if he didn't have such large and powerful forearms this pose would be much less impressive.

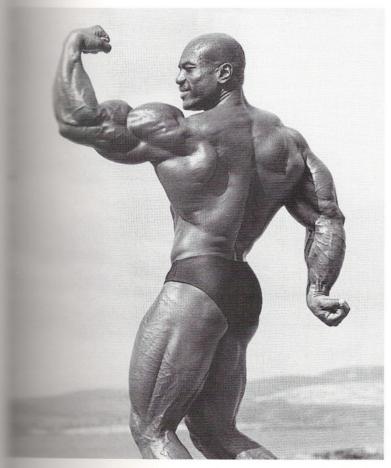
Some bodybuilders have such well-developed forearms that they can turn non-forearm poses into forearm showcases. Casey Viator is one of these. When he stands onstage and simply lifts his arms out to either side, it is impossible not to notice these huge forearms sticking out below the massive upper arms.

Another pose in which good forearms are absolutely essential is one Dave Draper and I both liked so much, in which the arms are held straight out, parallel to the floor. It takes both fully developed biceps and forearms to do this pose effectively.

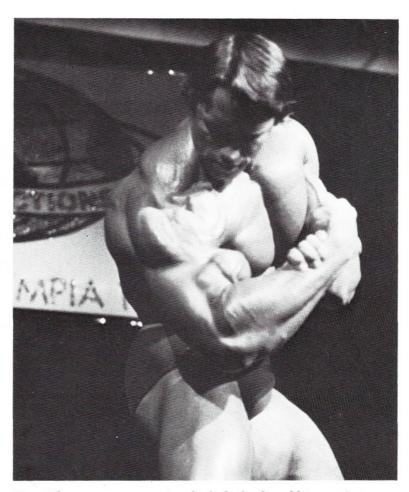
Larry Scott was another bodybuilder who was able to pose his forearms to great advantage. When he won the very first Mr. Olympia contest in 1965, he had a thickness and muscularity that very few bodybuilders had ever attained. But he had also spent a lot of time in detail training, so his forearm development matched the rest of his physique, making many of his other poses that much more effective.



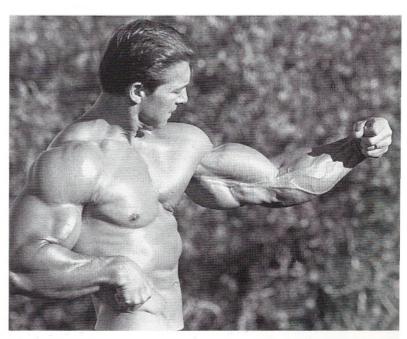
Flex Wheeler



Sergio Oliva



Here I demonstrate a pose in which the back and biceps are featured but well-developed forearms are necessary to make the pose complete.



Larry Scott

WEAK POINT TRAINING

Many bodybuilders end up with a weakness in forearm development simply because they don't train forearms right from the beginning. Another reason for forearms lagging behind, aside from the obvious one of bone structure, is failing to execute the exercises correctly and in a strict enough manner. The more you isolate the forearms and force them to do the movements without any help from the upper arms, the more they will respond. This means being very, very strict in your execution.

It is also important to work the forearms through a long range of motion. You need to lower the weight as far as possible, getting the maximum stretch, then come all the way back up to get a total contraction of the muscles. Working through only three-quarters of the range of motion is not that beneficial because you already use this part of the muscle in a variety of other exercises.

If you want to drastically increase your forearm development, you can use the Priority Principle in a special way: train forearms by themselves when you are rested and strong, or train your forearms on leg days when your arms are rested. You can also keep a barbell or dumbbells at home and do a couple of sets of Wrist Curls and Reverse Wrist Curls as often as you like, even once an hour every hour.

Many bodybuilders forget that you can use the Shocking Principle to help develop your forearms, just as you can other body parts. Every shock method that works with Curls will also work for Wrist Curls—forced reps, supersets, the Stripping Method, partial reps, and so on.

An important technique for bringing up lagging forearms is one-arm training. Forearms that are used to working together to curl a barbell will often be shocked into accelerated development when you force them to lift and control a weight on their own. Dumbbell Wrist Curls and Dumbbell Reverse Wrist curls are two of the primary exercises for accomplishing this. Additionally, doing cable work one arm at a time not only forces each forearm to work independently, but to work against a different kind of resistance as well. For this kind of movement, I recommend One-Arm Cable Reverse Curls.

It is also necessary to pose and flex your forearms as often as possible—not just when you are training them, but between sets of arms, chest, back, and shoulders as well. Your forearms will have to be flexed every time you hit any kind of pose in competition, so you might as well get them used to it. And the effort of contracting them like this will also accelerate their development.

To sum up, the exercises I recommend for forearm weak point training are:



Here is a pose by Dave Draper in which inner forearm development is extremely important.

FOR UPPER FOREARMS/WRIST EXTENSOR MUSCLES

Reverse Curls with a barbell, dumbbells, and on a preacher bench One-Arm Cable Reverse Curls Hammer Curls Reverse Wrist Curls

FOR INNER FOREARMS/WRIST FLEXOR MUSCLES

One-Arm Wrist Curls Barbell Wrist Curls Behind-the-Back Wrist Curls

In this side chest shot, Shawn Ray shows the importance of good upper forearm development as well as long forearm muscle that inserts all the way to the wrist.

