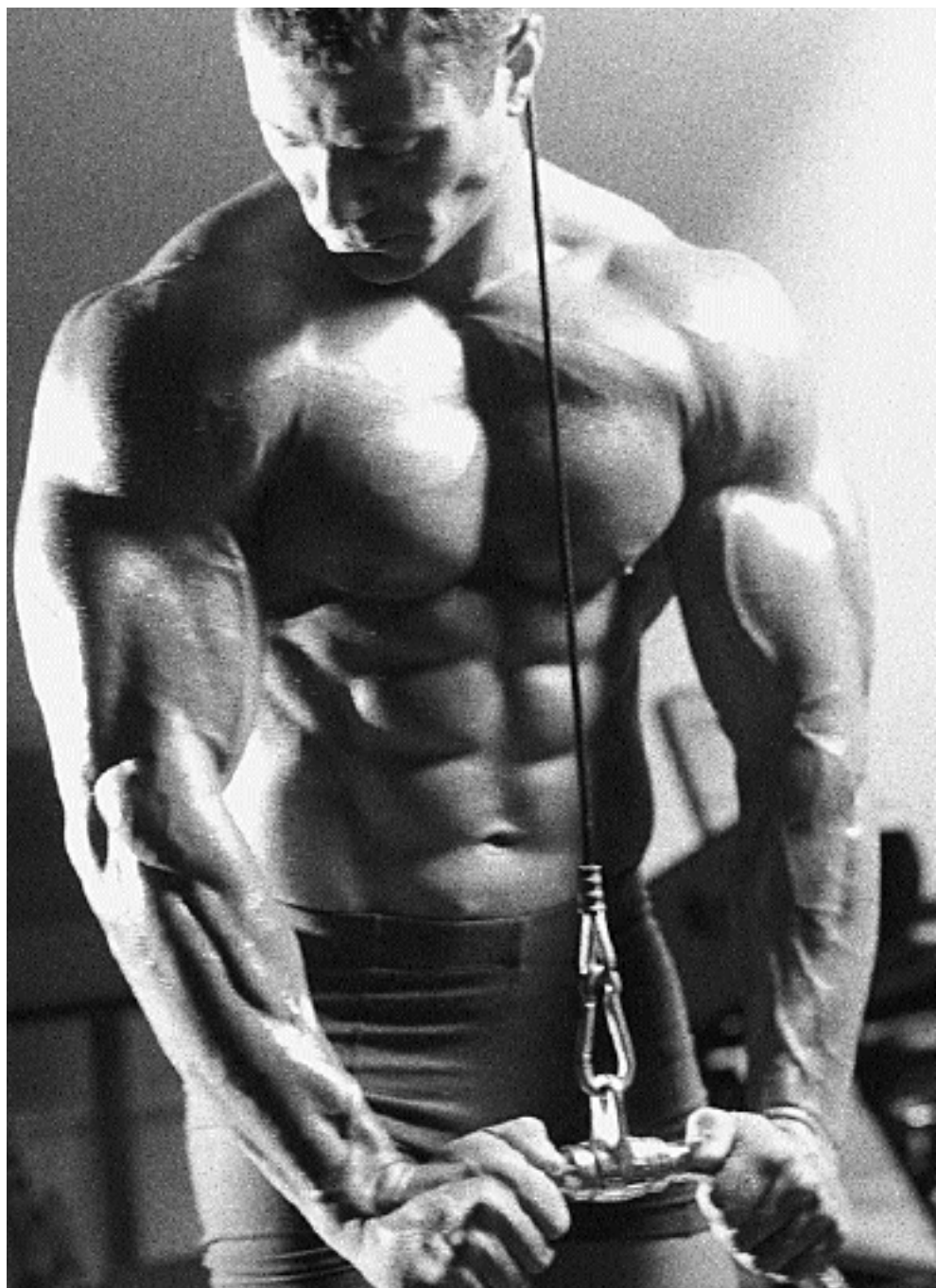




# ***Afterword***



# Training for Muscle Size

by Steve Holman

**A**s John Balik said in the Introduction, "Sweat is the only true magic bullet." In other words, no supplement program is going to build appreciable muscle size without some serious work in the gym—and that work should be specific in a number of areas to trigger the fastest hypertrophic response possible.

Here are the growth mechanisms that are most important in changing the size of the muscle structures. The training routine that follows incorporates all of them into a scientific training strategy that will help you maximize your results and get the most from your supplement and nutrition schedules.

## Capillarization

Scientists don't really know how much a venous network expansion in each muscle contributes to overall size; however, they do know that it contributes not only to the sheer size of a muscle but also to its function. So a pump can build more capillaries in a muscle, which in turn can give it more girth and make it more efficient at removing waste products and pumping in needed growth nutrients and fuel, such as creatine. On the surface, new vascularity will be a sure indication to everyone that you're in phenomenal shape. You'll be amazed at the way a few new veins running down your forearms and crisscrossing your quads can inspire such comments as, "Man, you're looking a helluva lot bigger these days"—even if you haven't gained an ounce.

## GH Release

Studies have shown that changing the pH of the blood due to muscle burn and lactic acid release can create intense surges in growth hormone. European researcher Michael Gündill and American researcher Jerry Brainum have both written about that phenomenon in *IRONMAN*. Supersetting two exercises for the same bodypart is one of the best

ways to achieve muscle burn and set the stage for a significant increase in GH release.

## Fiber Recruitment

There are a number of fiber types in every muscle. To get the maximum growth stimulation, you must achieve hypertrophy in as many fibers as possible, even the slow-twitch, aerobic fibers. (By the way, growth hormone has been shown to stimulate growth in those fibers as well as the anaerobic fibers.) That means you need a variety of rep ranges to attack the various fiber types. Pyramiding is one way. For your first set you use a weight that allows around 10 strict reps, and you add weight at each subsequent set so that the reps decrease; for example, eight, six, three. You can get a similar effect with supersets.

When you superset two exercises, you essentially get the benefits of a low-rep set with the first exercise—you should hit failure at around rep seven—and a high-rep set as you finish the second, which essentially extends the first set with medium-intensity reps that build to a high-intensity climax as you hit failure at around rep six or seven. What you do in that short time is attack the lower-rep type 2 fibers with the first exercise and then exhaust the higher-rep type 2s with the second set. Plus, you no doubt involve some type 1 (aerobic) fibers as well. That's essential training efficiency at its best.

You can get even more fiber recruitment if you use stretch-position movements as one of the exercises in your superset. When a muscle is put in an elongated state prior to contracting, it can trigger an emergency neuromuscular response. The body senses danger—a possibility that muscle damage may occur—so it recruits more fibers to contract in order to prevent injury. If you do decide to use stretch-position exercises as part of a superset, it's probably best to make them the first exercise, as doing them second, when the target muscle is already fatigued, can cause you to have less control, so there's more potential for injury.

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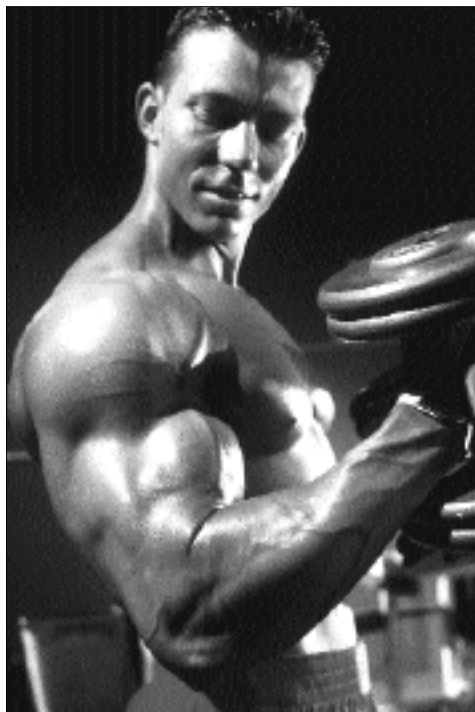
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Incidentally, Gündill recommends stretching and stretch-position movements because they “increase the muscle’s sensitivity to testosterone by increasing the number of androgen receptors inside the stretched muscle.” Remember, you’re looking for efficiency of effort, so you don’t want to waste time and deplete too much of your recovery ability doing set after endless set. Stimulating the target muscles’ androgen receptors via stretch exercises while also training the gamut of muscle fibers with resistance can be a key mechanism in the efficient-muscle-building equation.

In the routine that follows you’ll use stretch-position exercises as the first part of a superset. Once you execute a perfect set of a stretch exercise, you move immediately to a second exercise for the target bodypart. For that you choose a contracted-position movement to squeeze out the last bit of effort from the target muscle with maximum contraction. This is known as Isolation Aftershock training and is more thoroughly discussed in the book *Compound Aftershock*.

Notice in the routine that you begin with a compound, or midrange, movement for each bodypart, where applicable, pyramiding the weight. That’s one of the best ways to train the mass of the muscle fibers for big size gains. Once you do that, you follow up with a stretch-position exercise, supersetting it with a contracted-position movement. That finishes off the muscle and triggers many of the growth mechanisms explained earlier. With that strategy you not only maximize many of the aforementioned growth mechanisms, but you

also train each muscle through its full range of motion via Positions-of-Flexions training, working the midrange, stretch and contracted positions for full, complete development. For those reasons the following is one of the best routines for building new muscle size and strength. Use it with a scientific supplementation and diet program similar to the one in this book, and you’ll make outstanding progress—perhaps some of the best gains of your life.



### Muscle-Size-Building Training Tips

- Go easy your first week. Use the first week on your new GH-boosting routine as a break-in. Don’t go to failure on any exercise. Concentrate on perfecting your form, and take it very easy on your stretch-position movements, as they can induce extreme soreness.

- After week 1 go to failure, the point at which another rep is impossible, on all work sets.

- Your rep cadence should be two seconds up and two seconds down on all exercises. Think “one-thousand-one, one-thousand-two.”

- The workouts listed do not include warmups sets. Do one to two warmup sets with 50 percent of your work weight on each exercise you pyramid. A warm muscle contracts more efficiently than a cold muscle, so if you’re training in a chilly room, make sure you do two warmup sets.

- Whenever you can get 10 reps on the first work set of your power pyramid, up the weight on all sets at your next workout.

- Go to at least positive failure on all of your sets other than warmups. If you start losing your enthusiasm, try a moderate-intensity week—don’t go to failure for four straight workouts. Then during the following week go back to all-out intensity

- Rest one to 1 1/2 minutes between sets.

- Do not rest between exercises listed in the Aftershock Superset; however, rest 1 1/2 minutes after you complete both exercises in the superset.

- Don’t overtrain. If you feel the workouts listed are too long, you can split your body over three days instead of two and train on a three-days-on/one-off program. For example, workout 1: chest, delts, triceps; workout 2: quads, hamstrings, calves, abs; workout 3: back, biceps, forearms. You may also want to include two Aftershock Supersets instead of one for lagging bodyparts. Extreme hardgainers can use the above split but train only on Monday, Wednesday and Friday, with weekends off—working each bodypart once a week.

- After eight weeks on this routine, start a new program. (The books *Underground Mass-Boosting Methods*, *Compound Aftershock* and *Critical Mass* include quite a few appropriate programs; they’re available from Home Gym Warehouse, 1-800-447-0008, ext. 1. See the back pages of this book for more details.)

Notice in the routine that you begin with a compound, or midrange, movement for each bodypart, where applicable, pyramiding the weight. That’s one of the best ways to train the mass of the muscle fibers for big size gains.

## Positions-of-Flexion Power-Pyramid/Isolation-Aftershock Program

### Monday & Thursday

#### •Quads

Midrange: Squats*	3 x 8, 6, 3-4
Aftershock Superset	
Stretch: Sissy squats	
or feet-forward Smith-machine squats	1 x 6-8
Contracted: Leg extensions	1 x 6-8

#### •Hamstrings

Midrange: worked during squats	
Aftershock Superset	
Contracted: Lying leg curls	2 x 6-8
Stretch: Stiff-legged deadlifts	2 x 6-8

#### •Calves

Midrange: worked during quad and hamstring training	
Aftershock Superset	
Stretch: Donkey calf raises	2 x 10-12
Contracted: Standing calf raises	2 x 10-12

#### •Lower chest

Midrange: Barbell bench presses*	3 x 8, 6, 3-4
Aftershock Superset	
Stretch: Flat-bench flyes	1 x 6-8
Contracted: Cable crossovers	1 x 6-8

#### •Upper chest

Midrange: Incline Smith-machine presses*	2 x 8, 6
Aftershock Superset	
Stretch: Incline flyes	1 x 6-8
Contracted: Incline cable flyes	1 x 6-8

#### •Triceps

Midrange: Close-grip bench presses*	3 x 8, 6, 3-4
Aftershock Superset	
Stretch: Overhead extensions	1 x 6-8
Contracted: Dumbbell kickbacks	1 x 6-8

\*Add weight, or pyramid, on each successive set.

### Tuesday & Friday

#### •Lats

Midrange: Front pulldowns or chins*	3 x 8, 6, 3-4
Aftershock Superset	
Stretch: Pullovers	1 x 6-8
Contracted: Stiff-arm pulldowns	1 x 6-8

#### •Midback

Midrange: Behind-the-neck pulldowns*	2 x 8, 6
Aftershock Superset	
Stretch: V-handle cable rows	1 x 6-8
Contracted: Bent-over bent-arm lateral raises	1 x 6-8

#### •Upper traps

Stretch & Contracted: Dumbbell shrugs*	2 x 8, 6
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#### •Delts

Midrange: Behind-the-neck presses*	3 x 8, 6, 3-4
Aftershock Superset	
Stretch: Incline one-arm lateral raises	1 x 6-8
Contracted: One-arm lateral raises	1 x 6-8

#### •Biceps

Midrange: Barbell curls*	3 x 8, 6, 3-4
Aftershock Superset	
Stretch: Incline dumbbell curls	1 x 6-8
Contracted: Barbell concentration curls	
or spider curls	1 x 6-8

#### •Abs

Midrange & Lower Contracted: Reverse crunches, hanging kneeups or incline kneeups	2 x 8-12
Aftershock Superset	
Stretch: Cable crunches	1 x 10-15
Upper Contracted: Crunches	1 x 10-15

#### •Soleus

Contracted: Seated calf raises	2 x 12-15
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\*Add weight, or pyramid, on each successive set.