

Gain One Inch in One Day

**Try it for yourself -- the most amazing arm program ever printed in M&F**

*Story by: David Sandler, MS, CSCS, CCS*

A little more than 10 years ago, when I was in the prime of my lifting career, I tried an arm program that purported to add an inch in size in 24 hours. Being young, ambitious and looking for every possible way to get huge, my lifting partner and I set out to tackle this insane nine-hour, 90-set workout.

In short, we performed three triceps/biceps supersets every hour on the hour and two supersets on the half-hour, from 9 a.m. till 6 p.m. Combined with an elaborate eating plan, serious muscle soreness, nausea, light-headedness and overall malaise, we proceeded to train like maniacs to gain that inch. And we did! In fact, two weeks later, we still had nearly three-quarters of an inch remaining.

A few thousand hours of schooling, research and training later, I decided it was time to ask why, and more importantly, to see if we could replicate the results in a lab setting while using a less-intensive program. We decided that to do this routine in about half the time, we'd need to do two-thirds of the original volume to produce a similar effect. I and four other men, regular lifters ages 22-35, took on the daunting task of doing 60 sets in five hours. This is our journey.

### **LET THE MADNESS BEGIN**

We exercised at 20-minute intervals, manipulating the number of sets and the muscles' time under tension each workout within each hour of the program. We chose only barbell and dumbbell exercises; since no one except the extremely dedicated (or insane) wants to hang out in a gym for five hours, this bad boy -- still five hours long -- is built for home. You'll need a bench, a set of dumbbells, a barbell and assorted weight plates.

Each workout is a superset (see "The 1-Inch-in-a-Day Arm Routine"). Don't rest between exercises for more than the time it takes to put one weight down and pick another up; take about 90 seconds of rest between supersets. It's critical that you move quickly so you have time to rest between workouts. The first group of exercises takes nearly nine minutes to complete, allowing only 11 minutes to prep for the second group of exercises; by the end of the day, those 11 minutes will feel like 11 seconds!

Control your rep speed as much as possible, and employ cheating for only the last rep or two. Choosing the amount of weight to use can be tricky, but follow these general rules of thumb: For each exercise, choose a weight with which you can get the prescribed number of reps and maybe one or two more, but no more than that. As a starting point, you could use 70% of your one-rep max for each move. Also realize that you may have to drop your poundages as the day progresses, but don't ever go so light that the lift is no longer challenging.

After the first hour, we were all up three-quarters of an inch relaxed, a half-inch flexed. Each hour, we re-recorded measurements. After our final sets, we were up an average of three-quarters of an inch flexed and 1 full inch relaxed. Of course, by the end of the program, brushing our teeth, scratching our backs and anything requiring the arms to flex less than 90 degrees was next to impossible. In fact, our arms were basically stuck at an isometric hold of about 120 degrees for the rest of the day.

Twenty-four hours later we measured again. Results for most had not changed, as we averaged a half- to three-quarters of an inch across the board both flexed and un-flexed. Good news, though: We'd all returned to almost full range of motion. By the end of the week, with no workouts in between, the group averaged between a quarter- to half-inch gain.

## **SCIENCE WEIGHS IN**

Other scientific studies regarding this kind of workout simply don't exist. In the scientific community, the only people crazy enough to try this were in the lab with me that day. Yet some explanations could theoretically be responsible for the gains.

Let's first look at mechanisms for muscle hypertrophy. We know that muscle size increases by increasing the thickness of the myofilaments, or protein strands, within the contractile portion of the muscle. We also know that the number of myofibrils, the contractile structure made up of myofilaments, increase with training. Some research has shown that it may also be possible for muscle fibers themselves to split, known as hyperplasia, after which the new fibers increase in size, although this hasn't been well documented in human beings. Lastly, the entire cellular structure -- all the proteins, cell walls and other material that supports and anchors the contractile machine itself -- increases in overall size and thickness via training.

So we know we can increase fiber thickness, but can it be done as quickly as on this program? Technically, no.

## **SWELL GAINS**

The most logical explanation for our gains lies in the way the body handles injury to a cell. When a muscle is damaged, it's swarmed with new satellite cells that go to work rebuilding the tissue. At the same time, swelling begins to occur from increased water retention by the muscle fiber itself. This water retention appears to stay for a few days or more with very heavy resistance training. In fact, participants in a 1998 training study were reported to maintain tissue swelling for up to seven days post-exercise! Over a long enough period, however, the cell would surely return to normal size.

Thus, swelling seems to be the culprit, but the story doesn't end there. The permanent effect -- the reason we seem to have been able to hold part of our gains (one-quarter- to a half an inch) for several months at the time of this writing -- is from our continued training. Since returning to our normal training programs, we've maintained the size,

meaning we've maintained the overall volume of the tissue simply because we began another breakdown process before the muscle fibers completely returned to normal. In the long run, this may pose a problem, as effects of the swelling-repairing process can overcome your gains if you don't strike the proper balance of training and recuperation. That's a matter of ongoing scientific discovery.

In the meantime, I would suggest attempting this program only at three-month intervals, taking a full week off before resuming any exercise in which the arms play a significant role. Needless to say, don't train if you still feel pain or tenderness or show marked bruising or swelling.

An inch in a day? As farfetched as it may seem, it actually is possible. I lived it -- and now it's your turn to try it for yourself. M&F

*David Sandler, MS, CSCS, CCS, is a professor of exercise physiology and strength and conditioning at Florida International University, where he directs the strength and conditioning curriculum. Sandler is also a founding partner in StrengthPro, a Miami-based strength-consulting firm: [www.strengthpro.com](http://www.strengthpro.com)*

### **The 1-Inch-in-a-Day Arm Routine**

<b>Time*</b>	<b>Exercise</b>	<b>Sets</b>	<b>Reps</b>
0	Standing Barbell Curl	3	8
	-- superset with --		
	Seated Two-Hand Overhead Dumbbell Extension**	3	8
20	Seated Alternating Dumbbell Curl	2	12
	-- superset with --		
	Two-Arm Dumbbell Kickback	2	12
40	"Crazy 6's" Barbell Curl***	1	6
	-- superset with --		
	"Crazy 6's" Lying Barbell French Press	1	6

Repeat this every hour for five hours total.

Rest 90 seconds between supersets.

\* Time refers to the part of each hour the listed exercises are performed. For instance, "0" could be 2 p.m., "20" would be 2:20 p.m. and "40" would be 2:40 p.m.

\*\* Use a low-back bench or chair if you have one; otherwise sit at the end of a flat bench.

\*\*\* Crazy 6's use a six-second positive and six-second negative for six reps (total of 72 seconds of tension on the muscles).

### **Nutritional Support**

As for the eating plan we followed during our insane five-hour, 60-set workout, it was just as crazy. We ate once per hour, and these were our five meals:

Meal 1: 1 banana, plus mix together: 8 oz. ground turkey, white rice, garlic-basil tomato sauce and your choice of spices

Meal 2: Same as Meal 1

Meal 3: 4 hard-boiled egg whites + 1 banana

Meal 4: 6 oz. fat-free cottage cheese mixed with your choice of fruit

Meal 5: 40 g whey protein + 6 fat-free Oreo cookies (a reward for the effort!)