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Dips: The Forgotten Shoulder Exercise

Want to build serious upper-body strength? Bill Starr says you should be dipping—regularly.

By Bill Starr

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When I first began training with weights, I used magazines like *Strength & Health* and *Muscle Builder* to help me put together my programs. For the first three years that I trained, I never met anyone else who shared my interest in getting bigger and stronger, and so I was totally dependent on the magazines for direction.

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As it turns out, this wasn't really a bad way to learn. I was forced to decide what exercises I wanted to do to aid my cause, and without anyone to teach me how to do those exercises, I did so on my own. And as everyone knows, when you learn in this fashion, it sticks with you much better than when you have an able instructor. It's just the way the human brain works.

One of the exercises nearly all the bodybuilders and Olympic lifters did was dips. The photos in the magazines showed both groups of athletes doing the movement on parallel bars that were either freestanding or attached to the wall. According to the articles that accompanied the photos, dips, especially when done with weight, built strong deltoids and triceps. I desperately wanted strong deltoids and triceps and longed to add dips to my routine. My problem was that the base gyms where I was training had no dip bars of any sort, nor was there any way to make them.

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So it wasn't until my third year of training that I came across dip bars, in the weight room at the Wichita Falls, Texas, YMCA. From that day on, dips have been a part of all my programs for Olympic lifting, powerlifting and strength training in general, and they are even in my current routine in which I do really high reps.

Everyone who trained at the Y in Wichita Falls did dips, although I have to confess that the place was never crowded. In fact, I usually trained alone. This was in 1958, and weight training was not really a popular physical activity. The truth of the matter back then was that lifting weights was frowned upon by those in the athletic community. Not that I cared. I knew without any doubt that lifting weights could bring results because because I had seen them in myself. Soon after I started training, I put on 50 lb. of body weight, and none of it was fat. I



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Dips are a gymnastics movement that can build brutally strong deltoids and triceps.

was an avid believer. Right away, I felt the influence of the dips on my shoulder strength. My primary interest was Olympic lifting, and the dips quickly helped me in both my overhead press and jerk.

At first, I only dipped with body weight, but once I was able to do 40 reps, I decided I needed to add resistance. Because a dip belt wasn't available, I used dumbbells. I could lock a dumbbell between my legs, as I had seen models do in the magazines, and knock out my reps. I discovered using a weight made the movement easier to do in that the resistance helped steady me while I dipped.

When I was able to do 20 with a given poundage, I moved on to a heavier one.

Eventually, I persuaded the athletic director to purchase a dip belt. Then I was able to really lean into the dips. From the time I started on my quest for greater strength in the mid-'50s till the early '70s, dips were considered a primary shoulder-girdle exercise for anyone who lifted weights—competitive lifters, bodybuilders, strength athletes and those who trained for overall fitness. Then they dropped out of favor, and rarely do I see anyone dipping with any weight. If they do them at all, it's just with body weight, and even then they never push to max.

I encourage all my strength athletes to dip.

There are several reasons why this occurred. While everyone did dips in the time frame I presented, they also did lots and lots of overhead pressing. The overhead press was considered the greatest test of upper-body strength and was a part of Olympic lifting. All the top bodybuilders also competed in Olympic meets, so they did heavy presses. Field athletes in track were strong pressers and dippers as well. Dips and overhead presses went hand in hand because they complement one another. When the numbers on the dips went up, so did the numbers on the overhead press, and vice versa.

Things changed the early '70s. The press was dropped from official competition, so it was also dropped from Olympic-lifter programs for the most part. Weider took over physique

competition and dropped the athletic points. Now there was no reason for bodybuilders to overhead press. The sport of powerlifting grew, as did strength training for athletes, and both of these used the bench press as their primary shoulder-girdle exercise.

In addition, machines of all type flooded the market, and many people began using them instead of free weights. Dip bars were removed and replaced by a machine. When the overhead press fell out of favor, so did dips. Except with a few diehards like myself. I continued to press and dip, and when I started coaching, I included both of those exercises into my athletes' programs; that is, if dip bars were available. Few fitness facilities had them. Those that did exist were in hardcore, black-iron gyms. Now I'm pushing to restore overhead presses and dips back to their rightful place in strength training.

Dipping for Amazing Strength

Whenever I'm talking about the value of dips, or writing about them, the Brooklyn-born strongman and physique star Marvin Eder comes to mind. Those who follow the history of physical culture are well aware of Eder, yet not many others are, mostly because he got caught up in the politics of the day. The best example of this was at the 1951 Jr. Mr. America contest. Even though Eder won best back, best arms, and best chest, he came in second. At the Mr. America show, he was relegated to third. By the time he was 23, he was fed up with the situation and retired. Many believed he was on his way to becoming the greatest bodybuilder since John Grimek.

But even more amazing than his herculean physique were his feats of strength, especially his dipping prowess. His accomplishments are so mind-boggling and beyond the scope of reality that I am in awe every time I present them. Even more impressive is the fact that all were done way before anabolic steroids came along. Eder is often considered to be, pound for pound, the strongest man ever to walk the earth. Naturally, some think differently and believe Doug Hepburn, Ken Patera or Paul Anderson should hold that lofty title. But Eder is most certainly in that group.

When it came to dipping, however, he was in a class all by himself. The second strongest dipper was miles behind him. At a body weight of 198, he did 7 reps with 400 lb. around his waist. He did a single with 434 lb. Add in his body weight and you have a dip with 633 lb. Freehand, he did 100, and at one session, and he did 1,000 dips in



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You'll find some way to dip in many gyms, and if yours doesn't have bars, use the rings for a real challenge.

17 minutes to break Jack LaLanne's record. Eder used dips to improve his overhead press and clean and pressed 355. His shoulder strength allowed him to bench press 515 when only one other person, Hepburn, had done over 500. There's much, much more, but you get the idea.

Eder said many times that it was the strength he derived from dipping that allowed him to do so many amazing feats with the barbell and dumbbell. I encourage all my strength athletes to dip. It's a great way to strengthen the shoulder girdle, and the strength gained is very convertible to every sport under the sun because every sport demands powerful shoulders and arms.

In addition, when dips are added to a routine, the shoulder girdle becomes more stable right away. Of all the areas of the body, the shoulder girdle is the one that has the greatest range of motion. The actions of the arms range from extending them straight down to straight overhead, plus hitting all the positions in between. All aspects of that arc have to be included in a strength program to ensure the arms and shoulders can be utilized in a certain physical activity.

Overhead presses and jerks take care of the overhead part, and the incline and flat benches handle the middle range, but in most routines nothing is done for when the

arms are extended straight down, which means that the lower—and very important—part of the arc goes wanting. Improve strength in that range of motion and the entire shoulder girdle benefits.

As soon as someone starts on a serious dipping program, he notices that his deltoids and triceps get sore in new areas. That's because dips work those groups in a slightly different manner than any other exercise. And dips, when done correctly, are much safer to the shoulder joints, elbows and wrists than are other upper-body movements.

The most dedicated dipper I ever coached was Steve Dussla at the University of Hawaii. A transplanted Pennsylvanian, he was the best 181-lb. Olympic lifter in the state. I had purchased a dip belt for the weight room, and Steve put it to use more than anyone else, except for me. We usually dipped together, and every session was a contest. I was 20 lb. heavier, but he made sure he matched me set for set. When he started using more than 150 lb., things got awkward. Holding enough plates to add up to that amount between the legs was a burden and started to interfere with doing the exercise correctly.

Steve, who had some experience in making weight equipment, designed and had someone make a small platform on which to place the plates. It consisted of a thin,

flat oval of metal about the size of a saucer with an upright round rod about 15 inches high with a hook at the top. He would stack 25-lb. plates on the apparatus until he had the poundage he wanted, then attach the chain of the dip belt to the hook, and he was good to go. With the weight dangling directly under him, he was able to control it nicely, even with heavy weights. His little Invention allowed him to handle 200 for 5 and 250 lb. for a single.

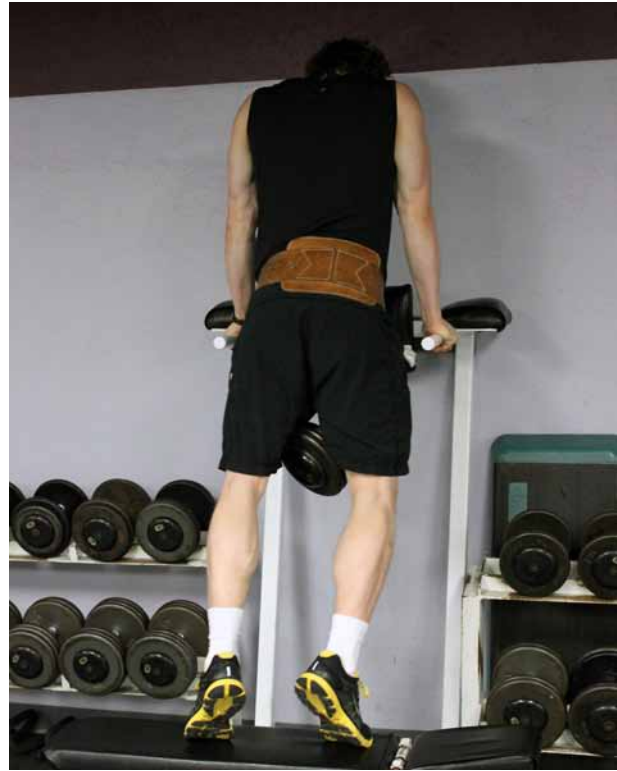
And Steve built some Impressively strong shoulders with those heavy dips. Although the press was no longer part of the Olympic format, his jerks really improved. He would also enter power meets just for fun and would bench 350 even though he never did that exercise in his training. The reason I mention Steve is to give readers something to shoot for when they start dipping. Steve was drug-free and wasn't exceptionally athletic. What he did possess, however, was the capacity to work very hard in the weight room. So if you have the same desire as Steve did, there's no reason why you can't dip with 200-plus lb. Not right away, of course, but eventually.

Starting With Body Weight

If you've never done dips or haven't done them for a long time, start off by using just body weight. Do 4 sets of as many as you can a couple of times a week. Concentrate on form—which I'll go into—and try to add a few reps at every dip session. Learn to go as low as possible from the very beginning. The lower you go, the more muscles and attachments you hit, which means those groups will get stronger as the numbers move upward.

Once you're able to do 4 sets of 20, you need to add some resistance. Not much, through, because you need to proceed slowly on these. A 20-lb. dumbbell will suffice. Lock the dumbbell between your thighs and, once again, do 4 sets of as many as you can. When you reach 4 sets of 20, use a heavier dumbbell and proceed on up the ladder in this manner. I could use a 100-lb. dumbbell, but anything heavier was just too hard to keep in place while I dipped. At that juncture, you're going to need a dip belt. So while you're working your way up to the century mark on dips, start looking around for a belt. Most stores that handle weight equipment carry them, and they're also available through mail order from a number of companies that specialize in fitness goods.

On occasion I have looped a second lifting belt through the belt I wore around my waist and placed heavy dumbbells in it. But this doesn't work nearly as well as the



Greg Barre

When dealing with heavier weights, you can use a dip belt and a bench to help you perform the movement. When the weight gets really heavy, you might have to get more creative.

belt that is specifically designed for dipping. It's no more than a leather lifting belt with a chain and a hook at the end. The chain is threaded through the hole in a metal plate, or plates. Then the hook is attached to one of the higher links in the chain, or even to the buckle of the belt, and you're ready to dip.

Naturally, if you have a belt in the beginning, you can use it and plates instead of using dumbbells. But go through the same procedure as I indicated for the dumbbells. Make haste slowly to ensure that all the muscles and attachments involved in the movement are getting strong at the same pace.

When you get to 150 lb. or more, it's often more difficult to get into position and down from it than it is to do the dips themselves.

But even with the dip belt, once you start handling in excess of 100 lb., climbing up to the dip bars and getting down with that much dangling around your waist can be a bit hairy. And when you get to 150 lb. or more, it's often more difficult to get into position and down from it than it is to do the dips themselves.

Here's what I did and have my athletes do: pull a bench in close to the dip bars—not so close that your feet will hit it when dipping, but close enough so that you can lean forward and grip the dip bars. Load the plates onto the dip belt around your waist and place the weight on the bench. Stand on the bench and lean over and grip the dip bars firmly. With control, ease your feet off the bench and get in a solid set position for doing a dip.

Take a moment to make sure you're not swinging, and to help with this lock your legs tightly around the dangling weight. Even a tiny bit of swinging is a no-no, so make sure you're absolutely steady before doing that first rep. And the same thing applies for all the reps. Should you, for whatever reason, start to swing, step back on the

bench and start over. Swinging in that manner with heavy weights attached to your lower body is an invitation to injury, so never do it, and if you do, stop right away.

Get set and look straight ahead or slightly upward. Don't look down, because that will carry your upper body forward and out of the proper alignment. Once you're set, lower your body in a controlled fashion to the lowest position you can manage. When you hit the bottom, punch out of the hole with determination, making sure your torso is perfectly erect and you're not swinging at all. As you complete the dip, pause just a brief moment to make sure your body is still and in the right position, then do the next rep.

Sooner or later, you'll hit a sticking point, generally right in the middle of the movement or near the finish. Here's what to do: lean back and look up while pushing against the dip bars with all your might. You'll float right through that sticking point, unless your muscles are fatigued or you've bitten off more than you can chew. But don't worry about missing a dip. No one ever got away with making every rep if he's pushing hard to increase the numbers. Failure is just a part of progress. Just make sure you maintain correct technique even when you miss an attempt and you'll be fine.

When you finish the set, simply step back on the bench, and place the weights on it. This is so much safer than trying to find a step to get down from the racks after a grueling set. Plus, it saves a lot of energy that can be used on the next set and, of course, allows you to handle more weight in the exercise.

Sample Programs

I find that altering the set and rep sequence at every dip session helps for faster improvement. I use a three-week cycle for my athletes, and it brings results because the lower reps hit the attachments while the higher ones do a good job of strengthening the muscles.

Week 1: 5 sets of 5 with weights, plus a warm-up set done with body weight.

Week 2: a warm-up set and 5 sets of 8.

Week 3: a warm-up set, then 2 sets of 5 followed by 3 sets of 3.

After you've gone through this cycle a couple of times, start adding in a back-off set. The weight used for the back-off set will be 50 lb. less than you handled for your top-end set

that day, and you should go to failure. The back-off set will really boost your overall workload and help you move up the numbers.

Make certain that you put technique ahead of numbers. The movement, both up and down, needs to be done in a smooth, completely under-control fashion.

Here's a sample routine for anyone currently using 100 lb. for 3 reps.

Week 1: a warm-up set of 15 or 20 with body weight. Then 25, 50, 60, 70, and 80 lb. for five, plus one back-off set with 30 to failure.

Week 2: a warm-up set with body weight for 15 or 20, followed by 8 reps with 25, 45, 55, 55, 55 lb. The back-off set is optional at this session. If you feel like you've tapped into the well, don't do one, but if you still have some gas left, max out with 25 lb.

Week 3: same warm-up, then 25 and 50 for 5, followed by 75, 90 and 100 for 3 with a back-off set of 50 for as many as you can do. Nearly everyone is pleasantly surprised to find how light the back-off sets feel. Many who handled the back-off weight on the way up for 5 reps suddenly find that they can do three times that number on the back-off set.

Keep in mind that these numbers are just suggested guidelines. Your purpose at every dip session is to handle as much weight as you possibly can for the prescribed number of reps. So if you planned on using 80 for your final set of 5s but discover that you're feeling strong that day, move to 85 or 90.

Once a month, go after a max single. Singles force you to utilize precise form. They also enable you to identify weak points and work the tendons and ligaments even more so than triples. They also elevate your confidence and expectations. Always do a back-off set when you max out on singles to ensure you get in a solid workload that day.

Form First

Make certain that you put technique ahead of numbers. The movement, both up and down, needs to be done in a smooth, completely under-control fashion. Your frontal deltoids must stay directly over your wrists and hands throughout the exercise. No leaning or allowing the weights or your legs to start swinging. If either starts moving around like a pendulum, you're not going to be able to use much weight, and you put your wrists, elbows and shoulders at risk. When you dip correctly, you will appear to be doing them in a machine.

Dips are absolutely one of the very best exercises for developing upper-body strength, particularly in the deltoids and triceps. The biceps and upper back also play an important role in dipping. If anyone doubts this, try and dip with injured biceps or traps. The strength gained from dipping can be utilized in every other upper-body exercise and is a valuable asset in all sports. If dips aren't currently a part of your strength program, it's time they are.



About the Author

*Bill Starr coached at the 1968 Olympics in Mexico City, the 1970 Olympic Weightlifting World Championship in Columbus, Ohio, and the 1975 World Powerlifting Championships in Birmingham, England. He was selected as head coach of the 1969 team that competed in the Tournament of Americas in Mayaguez, Puerto Rico, where the United States won the team title, making him the first active lifter to be head coach of an international Olympic weightlifting team. Starr is the author of the books **The Strongest Shall Survive: Strength Training for Football** and **Defying Gravity**, which can be found at [The Aasgaard Company Bookstore](http://TheAasgaardCompanyBookstore.com).*