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## The Role of the Bench Press in Strength Training

Bill Starr on what bench pressing can do for athletes  
in any sport—even Olympic weightlifting.

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The bench press has always been a part of the routine for bodybuilders and strength athletes. It's an easy exercise to learn and do and takes a minimum of equipment.

When I first embarked on my quest for greater size and strength, I wanted to include bench presses in my routine, but I had a problem. There were benches available at the first two weight rooms that I trained in once I finished basic training. They were no more than flat benches used for sitting in locker rooms. The trouble was there was no one else using the weight rooms to assist me in getting the bar from the floor, then lying down on the bench, doing my set, then getting it back to the floor.

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But I was determined to do benches, so I would power-clean the weight, straddle the bench, sit down, lie back, and proceed to do my reps. When I finished, I would either stand back up with the bar or lower it over the end of the bench to the floor.

This worked—to some degree. I was only able to use light weights. A couple of times, I tried to use more than usual and had difficulty standing back up with the weight after I had done a set. And when I lowered it back over the end of the bench to the floor, I could feel undue stress all through my arms and shoulders. I decided to give up on the idea of doing bench presses until I was in a better situation, which finally occurred at my third duty station in Keflavik, Iceland. Actually, it was on a radar site about 20 minutes from Keflavik.

There, I had both a bench and several training mates. They would hand me the weight, I'd do my set, and then they would relieve me of the bar and plates. It worked out well.

By this time, I had become interested in the three Olympic lifts: press, snatch, and clean and jerk. I believed the benches would help me improve my overhead lifts, and they did almost right away.

While I put much more emphasis on the press and jerk than I did on the bench, the exercise continued to be a part of my routine all through my Olympic-lifting career. I was in a minority in terms of benching; most Olympic lifters in the '60s shunned benches. They didn't want any additional body weight to be laid down on their chests because the pectoral muscles do very little in overhead lifting. They preferred to spend their time doing more overhead work and weighted dips, as well as doing isotonic-isometric contractions in the power rack when isometrics were the craze in the early part of that decade.

There was also the general opinion that the bench press tended to tighten up the shoulders, making them less flexible, and flexibility is crucial to success in the Olympic lifts. The standard of strength from the time I first got interested in physical culture up until the early '70s was the overhead press.

"How much can you press?" was the question you were asked when someone wanted to know how strong you were.

### How Much Ya Bench?

Then several things happened that changed things dramatically. First, there was the emergence of the sport of powerlifting. Competitive weightlifters who were having difficulty mastering the quick lifts found that they could utilize their strength much more readily by doing less dynamic lifts: bench press, deadlift and back squat. Nearly every pioneer in powerlifting was a former Olympic lifter. Except for a few rare exceptions, these athletes stopped doing overhead presses completely and spent more time improving their benches.

The next event that influenced strength training's shift away from the overhead press to the flat bench came in 1972, when the International Olympic Committee dropped the press from official competition.

Finally, this is when strength training for athletes really began to grow. High schools and colleges across the country soon had strength programs, usually run by an assistant football coach. Because the overhead press had gotten some bad press when it was eliminated from Olympic competition (it was supposedly a high-risk exercise for the lower back) coaches opted to go with the much safer flat bench.

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For the record, it was never proven that overhead presses were, in fact, risky to the lower back. The real reason the Olympic Committee dropped the lift was because the judging had gotten completely out of control. The press became a political tool, and instead of cleaning up the officiating, they took the easy way out.

In a few short years, the standard of strength shifted from the overhead press to the bench press.



*The bottom position should be near the end of the breastbone, and the bar will sweep back slightly as you press it up.*

"How much can you bench?" is the question now asked to find out how strong a person might be. Personally, I believe knowing a person's incline, front-squat or deadlift numbers are more important when I want to know a person's level of strength.

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There's no doubt that the bench press is king. It's the lift used to test athletes in nearly every sport. In football, when a player is being recruited, how much he can bench is listed right next to his 40-yard-dash time. That makes the bench very important. Getting a free ride to a D1 school is worth a small fortune.

Because the bench press carries such significance to college recruiters, there is a great deal of pressure on high school athletes to record a high number on that lift. And sadly, that means anything goes: just get it to arms' length and lock it out. Form is not a factor. Excessive bridging, rebounding the bar off the chest, squirming, twisting ... all

are game. Many coaches and parents actually encourage this sloppy technique, even to the point where an athlete is almost standing on his head to move the weight through the sticking point.

However, here is a truism in strength training: if you constantly utilize bad form, sooner or later you're going to pay the price. Whenever improper technique is practiced regularly, the athlete is placing his wrists, elbows, shoulders and rotator cuffs in jeopardy. If the lifter bangs the bar off his chest in order to get a jump-start on the exercise, eventually he will do damage to his pecs and most likely also irritate his elbows and shoulders in the process.

Also, the rash of rotator-cuff injuries can be traced to the emergence of popularity of the bench press in the '70s. Before that time, rotator-cuff injuries were unheard of. That's because heavy overhead pressing strengthens those delicate groups. One of the most popular kinesiology and applied anatomy texts of the '60s, written by Philip Rasch and Roger Burke, does not even mention the rotator cuffs. The muscle group only gained prominence after the bench press became the upper-body lift of choice.

Yet, the bench press is not the true villain. When done precisely it is an excellent exercise to strengthen the arms, shoulders and pecs. It's only when form is thrown out the window and when it's severely overworked that problems arise. It needs to be understood that the wrists, elbows and shoulder joints are rather delicate, and whenever they are repeatedly abused with improper technique, often with heavy weights, those areas will become traumatized.

Should the athlete continue to ignore the warning signs and keep pounding away using ugly form, he may injure himself so severely that he will be forced to stop benching altogether. And in some cases, he will have to cease doing any strength training. It's hard to do much in the weight room with a torn pec or a serious elbow injury.

### **Bridging and Bouncing Are Banned**

One reason so many athletes utilize poor technique on the bench is that the lift is thought to be so easy to perform. You lie down on a bench, take the bar from the uprights, lower it to your chest, then press it to lockout. Nothing complicated about that. So coaches let the players figure out what to do on the bench by themselves, while they spend their times teaching the power clean and back squat, because those lifts are much more complicated.

But proper technique on the bench press is equally important as it is for the other exercises in the program. In truth, every exercise should be done perfectly, even those seemingly tame ones like curls and straight-arm pullovers. If any movement is done incorrectly, eventually trouble will arise.



***The false grip (top) is dangerous and puts the wrists in a bad position. Wrap the thumb and keep the wrists straight.***

Another reason why every athlete needs to know how to bench correctly is because it's the most dangerous exercise in all of strength training. During the execution of the bench press, the bar is suspended directly over the athlete's face and chest, which means a major mistake can be disastrous. Every year, a number of young men seriously hurt themselves doing bench presses, usually by allowing the bar to slip out of their hands or by getting stuck with a weight on their chest when no one is around to assist them.

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### **While a wide grip may indeed result in a higher bench, it also has a higher risk factor.**

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It's important for a young athlete to learn the proper technique on the bench press from the get-go. Then no bad habits need changing. I've found that once a person has been benching in a certain style for a long time, he will never change it very much.

I'll go over the form points for the bench press. Follow them and you will not only end up benching more weight, but you'll also greatly reduce any risk of injury.

I'll start with the grip. First and foremost, always use a secure grip with your thumbs around the bar. In other words, no "false grip," where the thumbs are not around the bar. The false grip is far too dangerous. Those athletes who had the bar slip from their grasp were all using a false grip. I know the argument exists that the false grip helps the lifter get more upward thrust, but the risk factor is much too great to even consider that type of grip. Besides, with a secure grip, the lifter is able to guide a bar back slightly to keep it in the correct groove much better than with the false grip. It's better to be safe than sorry.

Where to grip the bar depends to some degree on your shoulder width, but the best guideline that I have found is this: grip the bar so that your wrists are directly above your elbows. This means that your forearms will always be vertical. The reasoning behind this is basic. If your grip is too close or too wide, you're giving away some power because you're pressing the weight laterally rather than vertically.

## Bench Press ... (continued)

I'm aware that many coaches teach their lifters to use a very wide grip so that they work their outer pecs more. However, I much prefer to use a closer grip so that the deltoids and triceps handle the bulk of the effort. Pecs come into play in very few athletic endeavors; triceps and deltoids are utilized in every sport. And while a wide grip may indeed result in a higher bench, it also has a higher risk factor. The only athlete who ever got injured on the bench in my 11 years at Hopkins was one who used a wide grip. And he had torn his pecs twice, once with a max single attempt and the other time with high reps.

The grip that I have every lifter try at first, regardless of his size is this: grip an Olympic bar and extend your thumbs until they barely touch the smooth center in the middle of the bar. If you then find that your forearms aren't vertical, make the necessary adjustments.

Another form point that is often overlooked: your wrists must remain absolutely straight throughout the exercise. Many get in the habit of twisting or cocking their wrists during the execution of the lift, but this is incorrect on two counts. First, all the twisting and cocking of the wrists diminishes the power generated by the chest, shoulders and arms. Second, the unnecessary movement of the wrists can easily ding the small joints, and an injured wrist can take forever to heal because it's so small and is utilized in so many ways.

Should you find you're cocking your wrists or they are moving around when you bench, start taping them. Trainer's tape works well. Make the tape tight enough to hold your wrists firmly but not so tight that you cut off circulation. A bit of trial and error will allow you to figure out just how to tape your own wrists. The tape will help keep your wrists from moving about and protect them from being hurt.

Speaking of safety, always use a spotter when benching. However, I realize that there will be times when a spotter isn't available. I've benched frequently without any spotters, and I've also gotten stuck, so one of the things I teach everyone learning how to bench is what to do if you do get trapped under the bar.

Rule No. 1: do not hesitate. Once you know your goose is cooked, react. If you wait, even just a few seconds, you'll deplete your energy. Immediately tip one side of the bar so that the plates fall off. That will cause the bar to flip and unload the other end of the bar. It's noisy and not particularly pleasant, but it's a far cry from the alternative.



***It's not pretty, but learning how to dump the weight will save you from getting trapped if you're benching without a spotter.***

The first time I got pinned under a weight, I lay there wondering what I should do. Finally, thinking of nothing better, I rolled the bar down off my chest and over my abs until I was able to sit up and place the bar on the floor. My chest and abs were black and blue for a week. But that's how I learned most of my lessons in the weight room: hard experience.

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Back to the spotter. His job is to assist the lifter in taking the bar off the uprights, assist him in putting it back safely when the set is finished, and help the lifter in case he gets stuck. His job does not include aiding the lifter in moving the weight through the sticking point. This is what I call the "All-You Syndrome." Whenever I hear someone shouting, "It's all you! All you!" in a gym, I know for certain that the lifter is getting help. To me, it's like helping a runner make it to the finish line in a footrace. My rule in a weight room is this: if the spotter touches the bar, no matter how slightly, before it's completely locked out, that rep does not count. It's as simple as that. Strength training is not a team sport.

### Set Up Right

Next, your feet. Benching starts with the feet. Many are not aware of this and let their legs dangle or merely let their feet land wherever they choose. When the weights get demanding, their feet move around, sometimes even leaving the floor.

Your feet provide the foundation for the bench press. When the bar hits the sticking point, which it will sooner or later, power can be brought up from that solid base into the chest, arms and shoulders. However, without a strong foundation, no source of additional power is available.

What typically happens is the lifter begins to squirm and bridge to set the bar in motion again, but these are major form breaks and very much against the rules should they be done in competition.

In this same vein, instead of just lying back down on the bench, squirm down into the bench until you become part of it. Lock your shoulder blades and glutes into the fabric, and squeeze your feet tightly to the floor. And keep them that way throughout the exercise.

Once you have a firm grip, your body is locked into the bench, and your feet are planted on the floor, have the spotter help you take the bar off the uprights. I've found that it goes more smoothly to have a prearranged signal, such as, "Give me the weight on three. One, two, three. Got it." And when you finish, make absolutely sure the spotter has full control of the bar before you let go. I advise that you keep pressure on the bar until you see it placed in the uprights.

### Lower, Pause, Explode

With your wrists locked, lower the bar in a controlled manner until it touches a point right at the end of your breastbone. When the bar touches your chest, pause for a 1-second count. If you learn to do this from the very beginning, you'll be way, way ahead when you start handling demanding poundages or decide to enter a powerlifting contest.



***Bridging is not acceptable. Keep your feet flat and your butt locked to the bench.***

After the brief pause, drive the bar upward forcefully. While learning how to guide the bar upward in the proper line, this thrust needs to be controlled. But once you are confident with the line, punch the bar like a boxing jab. What most do is drive hard into the bar, then they sort of hesitate, maybe to see if they pressed it high enough to finish before applying more power. What you want to do is blend the middle right into the start. As soon as you drive the bar off your chest, lean back down into the bench and stretch the bar higher. When you coordinate the start with the middle in a dynamic fashion, it will climb right to the finish. Never let up the pressure on the bar until it's completely locked out, then signal to your spotter to take it.

The bar should blast off your chest in a straight line. Then it will glide backward at the conclusion of the movement so that it ends up above your chin or neck. However, the bar should not travel any further back than that. It will move upward in an arc, but only a slight one.

You need to hold your breath during the execution of the bench press. Inhaling or exhaling while the bar is in motion forces your rib cage to relax, thereby preventing you from maintaining a rock-solid foundation. Here's the correct breathing procedure: take the bar from the rack, lock your arms, set yourself and take a deep breath. Lower the bar to your chest, pause, drive the bar to lockout and exhale. If you exhale too soon, that rep is going to be much harder to complete. Do the same thing for all the reps.



***Holding your breath during the entire bench press will help you maintain a solid foundation, essential when pressing big weight.***

It only takes a few seconds to bench-press a weight, so holding your breath is no big deal. This may not seem to be important, but it is. Holding your breath throughout the lift ensures that your diaphragm stays locked, creating positive intrathoracic pressure.

From the beginning, learn how to lower the bar in a controlled manner, more slow than fast. This control keeps the bar from crashing onto your chest and also helps you position it in the exact same spot every time. It also helps you keep your body extremely tight.

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### **When I first started doing bench presses, I noticed an instant improvement in my overhead lifts.**

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Doug Young, the great powerlifting world champion of the '70s, was a master at lowering the bar for the bench press. It would move in slow motion until it sat solidly on his chest. Then he'd get the signal to press and the weight shot up faster than the eye could follow.

#### **Sets and Reps**

Now I want to move on to programming the bench press. Because this lift is of more value to football than it is to any other sport—except powerlifting, of course—I have football players bench twice a week, on Mondays and Fridays. Mondays are heavy days, so they alternate 5 sets of 5 with a back-off set of 10 with 3 sets of 5, followed by 2 sets of 3 plus another back-off set of 10. On Fridays, I use this formula: 4 sets of 8, then 2 sets of 2. This helps them increase their overall workload while touching bases with more intensity.

This idea works well for throwers in track and field, wrestlers, rugby players and others who benefit from stronger pecs. But what about Olympic lifters? Should they avoid the bench press or does it have merit in that sport?

When I first started doing bench presses, I noticed an instant improvement in my overhead lifts: press and jerk. It makes sense. The bench press works the deltoids and triceps, and those muscle groups are certainly utilized in pressing and jerking. And the different angle hits all the muscles involved in a slightly different manner.

Bob Bednarski had not done any bench presses for a very long time. When there was a long break from contests in the fall, I would do benches once a week for six weeks, then only do them about once every month during season. One warm-up set of 5, then all singles to limit. Bednarski decided to do them with me. At that time he was still recovering from a dislocated elbow he had sustained at the Pan-Am Games in Winnipeg, Canada. We both added 5 lb. to our final lift each week, so he increased his benching strength by 30 lb. Doesn't seem like much, does it? But that little extra strength was enough to help him press a world record of 451.5 in Washington, D.C., in May of 1968. The next month he cleaned and jerked 486.5 for a world record at the Senior Nationals.

Two other York lifters used the bench press to help them set world records in the press. Russ Knipp broke the world mark several times in the middleweight division, and Ernie Pickett smashed the world record in the heavyweight class at the '68 YMCA Nationals in Chicago with a 445 effort in February.

Keep two things in mind about the bench press in regards to Olympic lifters and other strength athletes who are concerned about their shoulder flexibility and not adding any additional weight to their chests. First, keep the reps low. Singles and doubles will strengthen the muscles involved without making them any bigger. Doing higher reps will tend to increase the size of the pecs, so if you don't want that, stay with low reps. Second, spend time stretching out your shoulders. Stretch them after every set, and do more after the session is over and even more later on that night.

What it boils down to is the bench press is really no different from any other exercise in strength training. When it's done with perfect technique and utilized in your program to meet your overall goals, it's definitely a valuable asset.

Overwork it or use sloppy form and it will become a detriment. It's simply a matter of how you deal with the lift.



Jody Forster

### 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).*