



# You Gotta Overtrain

If You Want Big Gains

by Bill Starr - Photography by Michael Neveux

**O**vertaining is typically taboo in strength-training and bodybuilding circles. When athletes are overtrained, all progress grinds to a halt and they're much more susceptible to injury. If their program consists of several high-skill movements, such as full snatches or cleans, their form suffers. Pushing the body beyond its limits for an extended period can also lead to many kinds of illnesses.

So why do I say that you gotta overtrain? Insanity in my family history? The fact is, if you're trying to get stronger, you must extend your workload and intensity. If you always remain in a comfortable range, you may never overtrain, but you won't gain any significant strength either.

The only way to make your muscles and corresponding attachments—the tendons and ligaments—stronger is to work them harder than before. In other words, you only gain strength when you push your body beyond normal limits. That's how Lance Armstrong and Michael Phelps are able to perform at such superhuman levels. They can handle more work than their opponents. And that's what makes superior strength athletes—the ability to do more and more in the weight room and recover from the effort. *Recover* is the key word there. Unless you can recover sufficiently from your workouts, you'll fall into the trap called overtraining.

The point here is that it's okay to be overtrained for a short period. The only real way for you to know that you're doing too much is to push into uncharted territory. Otherwise, it's just guesswork. That's my reason for telling you to overtrain.

The trick to making the process work is to expand your workload continually, push the top-end num-

bers up until you move into a state of overtraining and then pull back. Experience will help you recognize when you're doing too much, as opposed to other factors that might be influencing your training.

Many athletes believe that they're overtrained when they're not. They're simply tired because they're not getting the rest they need. That occurs during midterms and finals at every college. Tiredness must be dealt with, of course, although not in the same manner as you'd deal with genuine overtraining. For example, with tired athletes you can simply shift them to a less demanding workout on the days they are dragging or drop all auxiliary exercises for those sessions.

Along the same lines, being stale is also not the same as being overtrained. Those who do the same routine and use the same poundages month after month fall into that category. They lack enthusiasm for their programs and gain very little benefit from the time spent in the weight room, not because they're doing too much work but because they're bored with their routines. The obvious remedy to that situation is some type of change.

Another point: Having a couple of crappy sessions back to back doesn't necessarily mean that you're overtrained. There may be other factors influencing your training, such as drastic shifts in the weather, low biorhythms or undue stress. Very few things affect athletic performance as much as worrying about a personal problem.

One of my hardest-working football players at Hopkins started regressing on all of his lifts, and his form went from near perfect to terrible. I asked him if he was getting enough rest and eating right. He assured me he was but elaborated no further. From his som-



Model: Jaimo Nezzar

“How can I tell for sure whether I’m overtrained or just in a temporary rut?” When I was training at York Barbell Club, I learned from a contact I had in the USSR that the European weightlifters were having their blood tested after each day of training to help determine if they were overworking. The test was primarily to show if the lactic acid produced during the workout—or, in some cases, workouts—was being dispelled or was building up in the body. If it was accumulating, changes were made and the workload lowered to prevent overtraining.

Since no one I know has the capacity to test his or her blood after a workout, we have to resort to less-scientific methods to determine whether we might be doing a tad too much.

The signs I believe to be valid include inability to rest properly, loss of appetite, lack of energy and a sudden emergence of joint pain. Other signs occur when athletes remain sore after a workout for much longer than normal or are unusually grouchy. Yes, I know that some people are always grouchy, but note that I said unusually so.

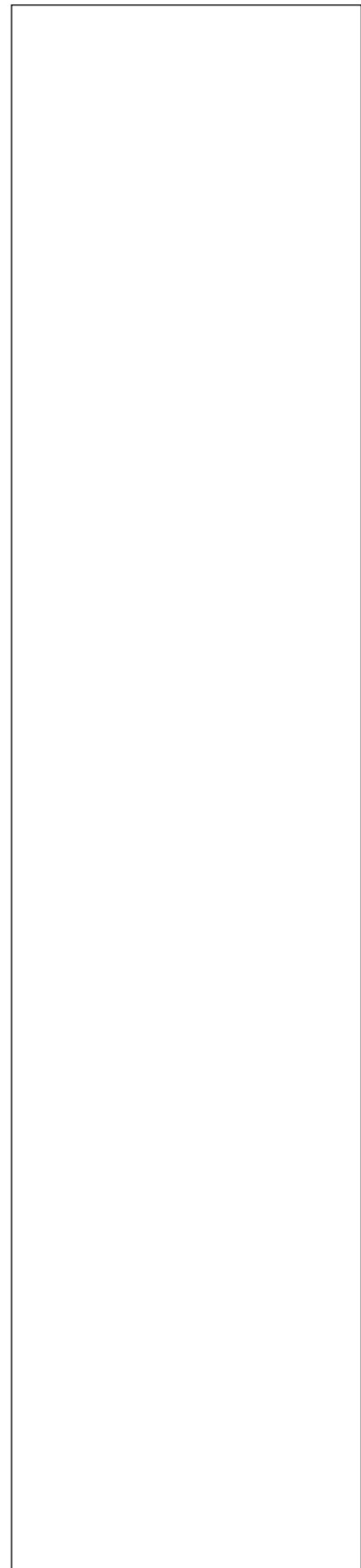
For me the very best indicator that I’m doing too much for certain muscles is joint pain, particularly in my upper body, which can’t take nearly as much work as my back and legs. Whenever I get overly ambitious or start experimenting, I end up overworking my shoulders or arms. Those two muscle groups report in quickly, and should I be foolish and ignore the first warning signs, I’m set straight during or immediately after my next session. Then I’m forced to alter my program drastically. Had I been smart enough to pull back when the pain in my elbows started, I’d have been way ahead. Instead, it takes me three to four weeks to regain my former level of strength due to a setback.

ber mood it was clear that something was amiss that he didn’t want to talk about, so I went to the team captain to find out what was going

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on. “His mother’s dying of cancer,” I was told. I had recently lost my mother and understood the toll it takes on a mind and body, especially in a young man. Knowing that exercise was excellent therapy during such a stressful time, I gave him a new program. It still required him to work diligently—but not with heavy weights—and I eliminated all complicated movements. His training began to improve once again. It wasn’t his physical plant that was overtrained; it was his mental one, and the result was the same.

The question often comes up:





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Model: Mike Morris \ Equipment: PowerBlock selectized dumbbells, 1-800-447-9008

and thicker chests. That quickly results in those bodyparts becoming overtrained. Their legs and back may be fine, however, and they can continue to hit them hard while making the necessary adjustments to their upper-body routine.

If you're easing up on your upper body, you can spend more energy on other bodyparts, especially those that are relatively weak. It's a perfect way to turn a potential negative into a positive. I've known some who stopped training altogether because their shoulders and elbows were aching due to all the pressing and specialized triceps work they'd been doing. The result was that they lost all of their hard-earned gains. They missed a golden opportunity to spend that time improving strength in other areas. It's no different from the strategy of continuing to train while injured. Working your lower back and legs while you're mending from a shoulder injury will pay huge dividends in the long run. What you do during those trying periods says a great deal about your overall motivation.

Keep in mind that the various bodyparts handle stress in different ways, and it varies from individual to individual. That's the reason you should never compare yourself to your training partner just because you're the same age and size. I've always been able to abuse my back and see it respond to the work, but when I attempt to do a similar amount of work with my legs or upper body, I run into trouble.

The key is to pay attention to

what you're doing for the three main parts of your body: shoulder girdle, back and hips and legs. That's one of the reasons I encourage my athletes to keep a written record of what they're doing each day in the gym. The numbers don't lie. If you don't have any hard numbers to look at and rely solely on memory, you're flying blind.

Recently, an older athlete wrote to me asking if I could look over his program. He believed he needed to make some changes because he had chronic pain in his right shoulder and both elbows. It had gotten so bad that he'd resorted to getting cortisone shots. The trouble was, they only helped for a short time. Despite the pain, though, he was determined to keep training.

He was my kind of guy, so I examined his workout. It only took a quick glance for me to understand why his shoulder and elbows hurt, but I waited until I did the math before being certain of my conclusions. I found two reasons for his aches: He was doing more work for his upper body than he was for his legs and back combined, and he was using French presses, a snappy triceps movement that's traumatic to the elbows and, consequently, is one of my taboo exercises.

I wrote to him and suggested that he eliminate French presses forever and do only one primary and one auxiliary exercise for his upper body at each workout for the next three or four weeks. That should allow enough time for the shoulder and elbows to heal, I said. I also told him I thought it would be helpful to add more exercises for his upper back and rear delts. I recommended bent-over rows with dumbbells, high pulls and shrugs. I explained that the traps and rear delts played an important role in every exercise that involves the shoulders, which, of course, includes all pressing movements.

A month later I received another message from him, and he was quite happy with the way things were going. He agreed that the French presses had been the cause of his elbow distress and that the combination of doing less upper-body work and adding those upper back and rear-delt exercises took care of his aching shoulder. To



Neveux / Model: Humberto Morandelli / Markus Reinhardt

Don't miss workouts because of injury.

his surprise and delight, he'd increased his bench and incline by five pounds each. Now he wanted to know how to improve his upper-body workload again without running into trouble.

I advised him to stick with his current routine for another few weeks to, keep accurate records so he could determine exactly how much total work he was doing and then to increase it by only 10 percent a month after that. I've received no response yet, but no news is usually good news in regards to training letters.

Those who read my articles know that I took the 10 percent a month idea from distance runners. What mileage is to runners, workload is to weight lifters. Both have to be increased slowly so that the body has ample opportunity to adapt

to the new stress. Any overzealous pursuit of making fast gains invariably leads to overtraining—and the older you are, the truer that is. Many younger athletes can get

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away with doing too much too fast, but in the end they'll pay the same price as their older counterparts.

So what's the best way to edge up the workload without getting stuck in an overtrained state for



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an extended period? One method I've found to be effective for almost everyone at any strength level is to follow an extremely heavy week with a lighter one. Overtrain for a week, and then pull back. I've known a few trainees who kept close track of their workouts and who extended that concept to heavy week, light week and then medium week. It's not that the exercises you perform in the lighter weeks are less demanding; it's that the poundages used are considerably lighter and your body can recuperate much more easily than with the heavier loads.

As an example, do push-presses in your heavy week and the following week substitute military presses or dumbbell presses. Another example: do deadlifts during your heavy week, bent-over rows during your light week and so on. In addition, during the lighter week you may want to drop one or two auxiliary movements, especially if you feel the groups they hit are a bit overtrained.

I've also had athletes who charted the workload for each of the three major groups. They'd run up the load on only one of them—the shoulder girdle, back or hips and legs—for two or three weeks, then shift the primary emphasis to an-

other area. That's what most of the Olympic lifters at York did when I trained there. They'd concentrate on the weakest of the three con-

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tested lifts—for a period of time while trying to hold their strength levels on the other two. Once that weaker lift had improved, they moved on to the one that needed more attention and in that manner made consistent gains on all their lifts, which meant they improved their totals, the most important number of all in that sport.

In order to get stronger, you have to increase the amount of physical work you do. That's true from infancy to old age. It's a physical law that no one has ever found a way around. Even those who tell me that they're only interested in maintaining the strength they now have still have to work harder every so

often. Otherwise they won't remain at that same strength level but will fall back.

The bottom line is that there's no way to know if you're working a certain muscle group or your entire body too hard unless you actually do so. Overtraining is a necessity and is only detrimental when you fail to recognize that you've really reached that state and continue to pound away.

That means you have to listen to your body. It's trite but true. If your body is sending clear signals that you're working it too hard, make adjustments. Otherwise, you'll pay the price for your neglect. When you're in the process of running up your workload, you can help your cause by making sure you eat plenty of protein, take extra vitamins and minerals and get the rest you need. Those things will aid in the recovery process so you'll be ready for the next session in the weight room. The rewards are well worth the effort.

**Editor's note:** Bill Starr was a strength and conditioning coach at Johns Hopkins University from 1989 to 2000. He's the author of *The Strongest Shall Survive* and *Defying Gravity*. **IM**