How to Build Pure Strength

by Bryan Krahn

I'm only 30 seconds into my interview with Jim Wendler, and things are already off to a rocky start.

I'd asked the author of 5/3/1: The Simplest and Most Effective Training System to Increase Raw Strength, to talk to T NATION readers about his program, and quickly learned that although Jim is passionate about 5/3/1, the last thing he wants to do is sell anyone on it.

"Just so we're clear," he says, "either people want to do 5/3/1, or they don't. I really want to help people, but if they won't take my advice there's nothing I can do. That's fine by me. I don't fight the battles. I just don't care."

A long pause follows, and I wonder if this has become the shortest interview in T NATION history.

Then he throws me a bone. "Look, arguing about strength training theory is stupid," he says. "And the reason I came up with 5/3/1 was that I wanted a program that eliminated stupid thoughts from my head and just let me go into the weight room and get it done. I've been training for 20 years, and this is what I've learned."

A Powerlifter's Progress

If you don't know who Jim Wendler is, you're probably not very strong.

He's senior editor and sales manager for Elite Fitness Systems, and Elite founder Dave Tate's right-hand man. He cut his teeth in the strength game on the college gridiron, first as a player with the University of Arizona and later as a strength and conditioning coach with the University of Kentucky. Then came years under the bar at Westside Barbell, which overlapped with his affiliation with Tate at Elite.

To mere mortals, his powerlifting accomplishments in the 275-pound weight class seem inhuman: a 1,000-pound squat, 675-pound bench press, 700-pound deadlift, and a 2,375 total.
Wendler disagrees. "I wasn't strong at all," he says. "I could waddle up to the monolift and squat, but I couldn't do anything else. Really, all I could do was squat, bench, and deadlift."

Now happily retired from powerlifting at age 34, and 50 pounds lighter, he has different aspirations: "I want be able to do a bunch of different activities and still kick butt in the weight room. I want to be as mobile, flexible, strong, and in as good a condition as I possibly can. That's how I came up with 5/3/1."

**Philosophy 531**

If you're searching for the next great training breakthrough, one that will completely change the way you look at weight lifting, 5/3/1 probably isn't the program for you. On the contrary, Wendler describes the core philosophy behind 5/3/1 as "the basic tenets of strength training that have stood the test of time."

Basic multi-joint lifts: "The bench press, parallel squat, deadlift, and standing press have been the staples of any strong man's repertoire. Those who ignore these lifts are generally the people who stink at them. If you get good at those, you'll get good at other stuff, as they have such a huge carryover."

Starting light: While it may seem counterintuitive to take weight off the bar when the goal is to add weight to it, Wendler asserts that starting lighter allows you more room to progress forward. "This is a very hard pill to swallow for most lifters," he says. "They want to start heavy and they want to start now. This is nothing more than ego, and nothing will destroy a lifter faster, or for longer, than ego."

Progress slowly: This ties in with starting light, and keeps lifters who want to get big and strong yesterday from sabotaging their own progress. "People want a program that will add 40 pounds to their bench in eight weeks," Wendler explains. "When I ask how much their bench went up in the last year, they hang their heads in shame."

Break personal records: 5/3/1 is set up to allow you to break a variety of repetition records throughout the year. Notice that it's "rep records," and not "one-rep max." "Most people live and die by their one-rep max. To me, this is foolish and short sighted. If your squat goes from 225 x 6 to 225 x 9, you've gotten stronger."

**5/3/1 by the Numbers**
In 5/3/1, you're expected to train three or four days a week. Each workout is centered around one core lift — the aforementioned parallel squat, bench press, deadlift, and standing shoulder press.

Each training cycle lasts four weeks, with these set-rep goals for each major lift:

Week 1: 3 x 5  
Week 2: 3 x 3  
Week 3: 3 x 5, 3, 1  
Week 4: deloading

Then you start the next cycle, using heavier weights on the core lifts. And that's where a seemingly simple system starts getting complicated.

You aren't just picking a weight to lift five times or three times or one time per set. You're using a specific percentage of your one-rep max. And not your full 1RM. The calculations are based on 90% of it.

So if your 1RM in the bench press is 315 pounds, you use 285 (90%) as the base number for your training-weight calculations. Here's how it works:

<table>
<thead>
<tr>
<th></th>
<th>Week 1</th>
<th>Week 2</th>
<th>Week 3</th>
<th>Week 4</th>
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</thead>
<tbody>
<tr>
<td>Set 1</td>
<td>65% x 5</td>
<td>70% x 3</td>
<td>75% x 5</td>
<td>40% x 5</td>
</tr>
<tr>
<td>Set 2</td>
<td>75% x 5</td>
<td>80% x 3</td>
<td>85% x 3</td>
<td>50% x 5</td>
</tr>
<tr>
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<td>85% x 5+</td>
<td>90% x 3+</td>
<td>95% x 1+</td>
<td>60% x 5</td>
</tr>
</tbody>
</table>

When you see 5+, 3+, or 1+, that means you do the max reps you can manage with that weight, with the goal of setting a rep record in each workout.

Let's walk through the Week 1 workout for bench press. Using the example above, if your 1RM is 315, you calculate all your percentages from 90% of that max, or 285 pounds.

So you're using 185 (65% of 285) x 5, 215 x 5, and 240 or 245 x 5 or more. (In his 5/3/1 ebook, available for $20 here, Wendler provides detailed lists of weights and percentages so you don't have to carry a calculator with you to the gym.

After you finish the first cycle, you add five pounds to your 1RM calculations for the two upper-body lifts and 10 pounds to your 1RM for the squat and deadlift.

To Wendler, these specific instructions for 1RM percentages and monthly progression are what set 5/3/1 apart from less useful systems. "When I see a program that says three sets of eight reps? That's the stupidest thing ever. If it doesn't have a specific percentage based on a specific max, it's useless," he says. "That's the hallmark of someone who doesn't understand basic programming."
"With 5/3/1, you accomplish a goal every workout. Some programs have no progression from one day to the other."

Another unique feature is that final all-out set in each workout. You don't have to go beyond the prescribed reps if you don't feel like it, but Wendler says there are real benefits to doing so.

"I've always thought of doing the prescribed reps as simply testing your strength," he says. "Anything over and above that builds strength, muscle, and character."

He does, however, want to dismiss any parallels you might see with HIT-type programs. Yes, that last set is the one that puts hair on your chest, but Wendler says the system doesn't work without the sets that precede it. "I tried cutting those out but I got smaller and weaker. There might be only one really hard set, but the other sets are still quality work."

Some Assistance, Please?

Along with the bench press, squat, shoulder press, and deadlift, 5/3/1 includes assistance exercises to build muscle, prevent injury, and create a balanced physique. Wendler's favorites are strength-training staples like chin-ups, dips, lunges, and back extensions. But he warns not to go crazy with these supplemental exercises:

"They should complement the training, not detract from it. You must have a very strong reason for doing an exercise. If you don't, scrap it and move on."

His 5/3/1 ebook includes a number of different ways to choose and implement assistance work, with memorable categories like Boring But Big (Wendler's version of a hypertrophy program), The Triumvirate (three lifts per workout; an example is shown below), Dave Tate's Periodization Bible, and Wendler's favorite, I'm Not Doing Jack, aptly named for those times when you only have time to hit the PR in your key lift and leave.

"People laugh and call me lazy, while they twit around in their three-hour workout making zero progress," he says. "Sometimes, instead of what you do in the weight room, it's what you don't do that will lead to success."

5/3/1 and its Discontents

Wendler has received a lot of positive feedback from trainees who used 5/3/1 to overcome plateaus in strength and size development. "And it's not just from
advanced guys," he says. "I received a thank-you from a guy who went from 135 for one on the bench to 135 for 17."

But the program has also received criticism from lifters on two fronts: that lifters are told to start too light, and build too slow.

"Start too light" refers to Wendler's insistence that the prescribed loads are calculated off of 90% of the lifter's 1RM. If your 1RM in the bench is 315, why calculate loads off a 1RM of 285?

Wendler has a characteristically blunt response: "People who freak out about the 90% thing are usually weak in the first place. You don't need to operate at your max to increase your max. Why people get so bent out of shape about taking two steps back if it means they'll be taking 10 steps forward is beyond me."

Then there's the veracity problem. Few lifters are willing to acknowledge their true 1RM.

"I do a seminar basically every week," Wendler says, his voice rising. "Every time, without fail, when I ask someone what their one-rep max is, I get this: 'Wellll, about three years ago I hit 365 for a triple, but that was when I was training heavier ...' Most guys just don't have a clue.

"By using the 90%, I account for this bull. By using weights they can actually handle, guys are building muscle, avoiding burnout, and most importantly, making progress every workout."

Wendler acknowledges that none of this is exactly revolutionary. "I learned this in my freshman year," he says. "I've always made my best gains when I left just a bit in the tank."

As you can imagine, he doesn't think much of the "build too slow" criticism, either. "People tell me that they don't want to take three months to build up their strength," he says. "Where are you going to be in a year? forget that, where are you going to be in five years, when you're still benching 205 with your butt halfway off the bench?

"The pursuit of strength is not a six-month or one-year pursuit. It's a 30-year pursuit for me. You gotta be smart about it. But everyone wants everything right now."

Countdown to 5/3/1
Ready to take 5/3/1 for a test drive? To ensure your success, Jim Wendler cautions to avoid these four common rookie mistakes.

Don't customize: This probably applies to any program published on this site, but it especially matters for 5/3/1. You must do the program the way it's written.

"People ask the craziest stuff," Wendler says, his voice getting louder again. "Can I combine 5/3/1 with Westside for Skinny Guys?" Why not just do one or the other and make progress?

"These same guys then whine three months later on some message board that the program didn't work."

Take it easy with the assistance work: "Some people look for the magic combination of assistance exercises, and completely under-rate the key lift," Wendler notes. "I call that majoring in the minors. Assistance work is just that — assistance. Do one or two exercises for five sets of 10, or maybe do a few more exercises for fewer sets. It's assistance. It doesn't matter.

"I sometimes just give people a rep number and let them make it up on their own. Say, 'push movement: 60 reps,' or 'pull: 100 reps.' It's all just working the muscle."

Start with the right weights: This was covered already, but Wendler says it bears repeating: "I don't know how many times people have blown away their PRs because they learn to train with some restraint and actually use weights that they can handle with good form."

Progress slowly: "I tell guys that the longer your stride, the quicker you'll tear a hamstring," says the former Division I football player. "But the problem is, people live for today's workout. No one seems to have the vision anymore to look beyond just what they are doing today.

"I plan my training for a year. I know exactly what I want to do, and what I want to accomplish 12 months in advance. And I know what five or 10 pounds a month adds up to over the course of a year.

"The game of lifting isn't an eight-week pursuit. It doesn't last as long as your latest program does. It's a lifetime pursuit."

Sample Workout: The Triumvirate

As mentioned earlier, The Triumvirate uses three exercises per workout, one of which is a core lift. Before each workout, do a warm-up that includes mobility,
flexibility, something to raise your core temperature and heart rate (like rope jumping), and foam rolling.

(Wendler recommends adding two or three conditioning sessions per week, using hill sprints, Prowler pushes, or whatever else works for you.)

In all workouts, rest 3 to 5 minutes between sets of the core lift (the first one in the workout), and 1 to 2 minutes between sets of the assistance exercises.

Remember that you're calculating percentages based on 90% of your current 1RM in each lift, not from the actual 1RM.

Workout 1

<table>
<thead>
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<th>Exercise</th>
<th>Sets</th>
<th>Reps</th>
<th>% 1RM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Standing shoulder press</td>
<td>3</td>
<td>5</td>
<td>65,75,85</td>
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<tr>
<td>Week 1</td>
<td></td>
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<tr>
<td>Week 2</td>
<td>3</td>
<td>70,80,90</td>
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<tr>
<td>Week 3</td>
<td>5/3/1</td>
<td>75,85,95</td>
<td></td>
</tr>
<tr>
<td>Week 4</td>
<td>5</td>
<td>40,50,60</td>
<td></td>
</tr>
<tr>
<td>2) Dip</td>
<td>5</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>3) Chin-up</td>
<td>5</td>
<td>10</td>
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Workout 2

<table>
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<tbody>
<tr>
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<td>5</td>
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<tr>
<td>Week 1</td>
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<tr>
<td>Week 2</td>
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<td>Week 3</td>
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<td>75,85,95</td>
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</tr>
<tr>
<td>Week 4</td>
<td>5</td>
<td>40,50,60</td>
<td></td>
</tr>
<tr>
<td>2) Good morning</td>
<td>5</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>3) Hanging leg raise</td>
<td>5</td>
<td>15</td>
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Workout 3

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<tbody>
<tr>
<td>1) Bench press</td>
<td>3</td>
<td>5</td>
<td>65,75,85</td>
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<tr>
<td>Week 1</td>
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<td>Week 2</td>
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<tr>
<td>Week 4</td>
<td>5</td>
<td>40,50,60</td>
<td></td>
</tr>
<tr>
<td>2) Dumbbell chest press</td>
<td>5</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>3) Dumbbell row</td>
<td>5</td>
<td>10</td>
<td></td>
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</tbody>
</table>

Workout 4
Exercise | Sets | Reps | % 1RM  
---|---|---|---  
1) Squat | 3 | |  
Week 1 | 5 | 65,75,85  
Week 2 | 3 | 70,80,90  
Week 3 | 5/3/1 | 75,85,95  
Week 4 | 5 | 40,50,60  
2) Leg press | 5 | 15 |  
3) Leg curl | 5 | 10 |  

Wrapping It Up

To look at 5/3/1 on your computer screen, it appears simple enough (unless you're intimidated by the math involved). That's exactly what Wendler says he was after. Getting big and strong just doesn't have to be complicated.

The keys to making it work:

• Start with a realistic idea of your one-rep max, and follow Wendler's instructions to base all training weights on 90% of that max. You can make it really easy on yourself by spending a couple of workouts working up to a four-rep-max set of each of the four core lifts. Your 4RM should be about 90% of your 1RM. Once you have that 4RM, you can skip a step in your calculations and just use it for all your subsequent percentages.

• The final set of your core lift in each workout is the one that produces mass and strength, so give it everything you have, and get as many reps as you can with that weight. (The exceptions are the deloading workouts in Week 4. You're giving your muscles a break, not trying to establish new PRs.)

• When you start a new four-week cycle, add five pounds to your 1RM for bench and shoulder presses and 10 pounds for squats and deadlifts, and recalculate training weights using the new numbers.

• It works best if you train four times a week, although three times a week could work as well, as long as you train all four core lifts before repeating. (In other words, don't skip one so you can do the other three once each week.) Don't train more than two days in a row.

• If you want to see the results of 5/3/1, you have to do the program as written. As soon as you start customizing it, it's no longer 5/3/1. You might like your own version of it better than Wendler's original, but you can't attribute your success or failure to the guy who wrote the program unless you're actually doing the program as he wrote it.
And remember, if you want more information about the program, along with a wider range of choices for assistance exercises, pick up Wendler's 5/3/1 ebook here.