

# 5/3/1 for the Masters Amateur Strongman/Strongwoman

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# Prerequisites

This program is for the amateur masters (natural) strongman. (I'm going to go ahead and use "strongman" throughout as the name of the sport, but it's for amateur masters strongwomen, too.)

Break that down: "amateur" here doesn't refer to pay. It's my shorthand for competing as a first-timer, novice or early intermediate. It might mean someone trying a weight class or opens for the first time. "Masters" here means aged 40+.

The older, less experienced and lower level in the sport you are, the more this program will help you. More accomplished athletes will have their own, more personalised approach to training. Athletes on gear will also need a different approach.

This program assumes you are already familiar with barbell strength training and with ["5/3/1: The Simplest and Most Effective Training System for Raw Strength"](#) by Jim Wendler. We also use the concepts of "3/5/1" and "first set last" found in other Wendler books but these will become self-explanatory. You should know your estimated 1RMs and TMs, as explained in the book.

# The training week

Strongman is a tough sport for the masters athlete to program. The loading and carrying events are particularly hard on the body and hard to recover from. Of course the same is true of more advanced athletes using heavier loads. There's a trick here; most masters athletes will want to program as though they're slightly more advanced than they really are. That means fewer training days and lower frequency per lift than they initially think they'll need.

The basic training week is similar to that proposed for strongman athletes by Mike Westerfield in his book "[Built By Mike: Proven Programming For The Strongman Athlete](#)" and borrowed from there by Alex Bromley in "[Base Strength: Program Design Blueprint](#)". It also matches Wendler's general recommendation for masters athletes in "5/3/1 for PL" (the Old Man Winter program).

**Table 1: the preferred training week**

Mon	Tue	Wed	Thu	Fri	Sat	Sun
Strength (upper)		Strength (lower)			Events	

If you're at the younger end of 40+, you might fit in an additional strength training day. It's not recommended but you could do it for the occasional stretch when life is easy:

**Table 2: the less preferred training week**

Mon	Tue	Wed	Thu	Fri	Sat	Sun
Strength		Strength		Strength	Events	

With this option, strength sessions would be upper - lower - upper the first week, lower - upper - lower the next week, continuing to alternate that way week to week.

It should be obvious that the Mon - Wed - Sat days are an example. You might train Tue - Thu - Sun or Wed - Fri - Mon. Just maintain the number of days off between sessions.

## Fit in conditioning

It's tempting to fit in a couple of weekly HIIT (high intensity interval training) conditioning sessions, on top of strength training and events, as a way to save time. This is a mistake. The strength and events days will often serve to provide high intensity cardiovascular (CV) work.

While these high intensity sessions will likely decrease harmful arterial stiffness in the long term<sup>1</sup>, they likely lead to short term arterial stiffening by inflammation<sup>2</sup>. This is fine so long as you're not doing it all the time, as your only CV work.

Try to include one or two low-to-moderate intensity sessions each week, on the off days. These are 45 minutes or more at a conversational pace. The easiest way is to find a gentle activity you enjoy (for example it's a karate club for me), or take a walk.

There's a whole, excellent book on this subject of fitting conditioning into a strength training program: "[Tactical Barbell II: Conditioning](#)" by K. Black.

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<sup>1</sup> Way et al., 2019, <https://doi.org/10.1016/j.jsams.2018.09.228>

<sup>2</sup> *Cells* **2022**, 11(22), 3544; <https://doi.org/10.3390/cells11223544>

# Training cycles and main exercise choice

We want to run three training cycles (mesocycles) of 5/3/1 before our comp (competition). The first two build general strength and muscle, the third is more comp-specific. This will take ~19 weeks including the week deload before competition.

## Cycle 1 and 2

- Monday: alternate OHP<sup>3</sup> and BP weekly
- Wednesday: alternate DL and SQ weekly
- Saturday: each Saturday do a floor to overhead or to the shoulder, a moving/carrying event, and a loading to height event.

## Cycle 3 (approaching competition)

- Monday: COH all Mondays.
- Wednesday: alternate DL and FSQ weekly
- Saturday: practice the upcoming competition events.

If prep must be shortened, we'd just do cycle 1, once and then cycle 3. This will take 13 weeks including the week deload before competition.

## Changes to improve grip strength

Most specialist grip work will happen on events day. However if your grip is weak, use the axle to DL and OHP, going to straps in the DL only when necessary.

Try the axle for the BP, but not everyone gets on with it. **Use a thumbs-around grip to bench the axle. The false grip bench is called "suicide grip" with good reason.**

Then also pick grip exercises as minor assistance, detailed below.

## Events day exercises

Events day training is where a coach is invaluable. There are lots of skills to master, and programming them is complex and individual. Training will cycle through a wide variety of

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<sup>3</sup> DL deadlift, SQ squat, OHP strict overhead press, BP flat bench press, FSQ front squat, COH competition overhead.

events to keep them up to scratch in the off-season. This will become more specific and repetitive as competition approaches.

Events day programming in detail is beyond our scope here. If you can afford it, hire a coach online; do what they say. If you can't afford that, buy Mike Westerling's book linked above.

If following the program set out in this book, we want to move some skills out of general strength training as major lifts. Events day, or as assistance work, is the place to practice them, for most of the time:

- Belt and continental cleans
- Push presses (unless chosen as an assistance)
- Specific overhead or pull varieties, e.g axle DL, log push-press, Ukrainian DL, parallel grip DL, etc.

This changes only in cycle 3, approaching competition. So if your upcoming competition has a log event, why not replace the OHP *and* the BP with a log throughout all cycles? Because I want to set out a general strength program that keeps underlying, widely-applicable strength high in the masters athlete, for whom it drops fast and recovers slowly if training is over-specialised.

# The strength program

This is 5/3/1 but also uses the first-set-last AMRAP set to prepare for reps-in-a-minute DL and OHP events. This genius idea comes from British strongman and writer Aaron Moody.

Note we're doing the usual 5/3/1 AMRAP *and* the reps-in-a-minute work. One pushes up our 1RM using submax loads, the other builds the special work capacity needed in training and in almost every competition. This is very hard, so we swap to the 3/5/1 format seen below to allow recovery across the mesocycle.

(Percentages are % of *training max*, per the 5/3/1 book.)

**Table3: cycle 1 & 2 strength program, main exercises programmed**

	Wk 1	Wk 2	Wk 3	Wk 4	Wk5	Wk6	Wk7
Mon	OHP 70% x3 80% x3 90% x3+ 70% amrap 60 secs	BP 70% x3 80% x3 90% x3+	OHP 65% x5 75% x5 85% x5 No amrap	BP 65% x5 75% x5 85% x5 No amrap	OHP 75% x5 85% x3 95% x1+ 75% amrap 60 secs	BP 75% x5 85% x3 95% x1+	Optional deload  Increase TM per 5/3/1 book
Wed	DL 70% x3 80% x3 90% x3+ 70% amrap 60 secs	SQ 70% x3 80% x3 90% x3+	DL 65% x5 75% x5 85% x5 No amrap	SQ 65% x5 75% x5 85% x5 No amrap	DL 75% x5 85% x3 95% x1+ 75% amrap 60 secs	SQ 75% x5 85% x3 95% x1+	Optional deload  Increase TM per 5/3/1 book

The deload is optional, per the guidance from Wendler in 5/3/1 two day a week programs. The program is designed to manage fatigue. At 40 you may not need a deload, at 60 you likely will. This differs from the usual "take it before you're forced to" approach; time is short. You'll need to exercise solid judgement here. If your desire to go train is blunted, if you're not excited to get into the gym, you need a deload.

In cycle 3 we swap to the front squat instead of squat, and the overhead press becomes your competition overhead (COH). E.g log push-press or axle split jerk. Every rep done as in the upcoming competition - from the floor usually. We keep 3/5/1 loads and reps. We keep the timed amrap, also from the floor if that's the upcoming event. The event might be a max not rep-in-a-minute, but keeping the amrap keeps our conditioning sharp and gives plenty of reps' technique practice.

If there's more than one OH event -- which is silly planning by the comp organisers -- you'd pick one to train and hope for good carry-over. For one-handed, e.g circus DB, you'd work both hands, but record the reps on your preferred side, and work that side first. This differs from usual single arm training, where we count lowest reps and focus on the weaker side.

Note that in cycle 3 we *don't usually* change the DL to the comp DL. The competition DL might be a variant like Ukranian, suited, 15", 18", silver dollar. The conventional DL is foundational to our all-over, widely transferable strength and there are 2 reasons we don't change it. First, practicing only the raised or suited pulls will weaken pull from the floor, and we'll lose some of the overall strength that comes from a conventional DL. Second, some variants are a pain to set up alone and are better done on events days. Sometimes this means DLing twice in a week; if this is too hard to recover from, do the events day DL on weeks where you squat on Monday. Lighter versions of the competition DL can also be used as assistance, this is detailed below.

**Table4: cycle 3 strength program, main exercises programmed**

	Wk 1	Wk 2	Wk 3	Wk 4	Wk5	Wk6	Wk7
Mon	COH 70% x3 80% x3 90% x3+ 70% amrap 60 secs	COH 65% x5 75% x5 85% x5 No amrap	COH 75% x5 85% x3 95% x1+ 75% amrap 60 secs	COH 70% x3 80% x3 90% x3+ 70% amrap 60 secs	COH 65% x5 75% x5 85% x5 No amrap	COH 75% x5 85% x3 95% x1+ 75% amrap 60 secs	Deload before comp.
Wed	DL 70% x3 80% x3 90% x3+ 70% amrap 60 secs	FSQ 70% x3 80% x3 90% x3+	DL 65% x5 75% x5 85% x5 No amrap	FSQ 65% x5 75% x5 85% x5 No amrap	DL 75% x5 85% x3 95% x1+ 75% amrap 60 secs	FSQ 75% x5 85% x3 95% x1+	Deload before comp.

Increase your **training max** of the OHP by 2.3kg (5lbs) between weeks 3 and 4.

Take a deload the week before the competition, or before starting the program over, if not competing. DL and OHP as they'll be in your comp, at something like 50%x5, 60%x5, 70%x5, no amraps.

## Assistance exercises

I was initially puzzled at Wendler's vexation with those asking about assistance. But I've come to understand it. He wrote simple guides and people want to overcomplicate and over-prioritise the minor work. (He didn't help himself by complicating everything in later books, of course...)

We'll make this as simple and flexible as possible. Just some rules to follow. If you have a question the answer is, "Does what you want to do fit the rules?". If so, you're good. If you want to ask more, you're overcomplicating this.

## Assistance selection

We do “opposite” style assistance. This keeps up the exercise frequency as we’re only training big movements every second week. There are two options. Go by preference; they’ll both work.

### Option 1 - less heavy rowing, less lumbar fatigue

This has vertical pulling, less rowing, less isolation work for the shoulders and triceps, but keeps the rowing off deadlift days for those who suffer lumbar fatigue.

1. On DL day, choose a squat variation, and vice-versa. The DL variation might be close to the competition variation, but not heavy.
2. On OHP day, choose a BP or other horizontal push variation, on BP day choose a OHP or vertical push variation. These should still be sizable compounds, e.g close grip bench, dumbbell OHP. For the overhead assist, choose a strict press close to the upcoming event, e.g strict log, strict axle.
  - a. In cycle 3 this means all upper days have a BP/horizontal push assistance. But insert your major comp overhead assist before it. E.g Log 3/5/1, Z-press, pushups or another example Axle 3/5/1, paused push-press, low incline bench
3. Put a horizontal pull variation (e.g Kroc row, barbell row) on OHP day and a vertical pull variation (e.g pullup) on BP day. This leaves the horizontal pull in place when we switch to all OHP in cycle 3, which is more useful for comp prep.
4. After squatting, while deloading the bar, do some calf raises
5. After deadlifting, while deloading the bar, do some shrugs
6. On any day where it fits, add a curl variation, change it each cycle. This is for bicep tendon health.
7. Add any further exercises you feel you need, or want, (for aesthetics or injury prevention or grip improvement or any other reason) **so long as they are not systemically taxing, and you can superset them with a main lift or one of the assists added so far.** We’ll call these the minor lifts. Direct ab work goes here; it’s not mandatory. E.g you can add band face pulls between OHP sets, you can add ab-wheel between squats or rows; you can add gripper closes between squats, but you can’t add a narrow grip bench between squats. I like direct neck work and do it between DL sets.
8. Superset<sup>4</sup> any or all of the above. The more you superset, the faster you’ll finish and the more CV work you’ll get.

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<sup>4</sup> Or giant set, or whatever you want to call doing the exercises you’ve chosen one after another without pause.

## Option 2 - more heavy rowing and bigger shoulders and triceps

This has more rowing, less vertical pulling, and more space for isolation work on upper days.

1. On DL day, choose a squat variation, and vice-versa. The DL variation might be close to the competition variation, but not heavy.
2. On both lower (squat and DL) days, add a bent barbell row. E.g Pendlay row, power row<sup>5</sup>
3. On OHP day, choose a BP or other horizontal push variation, on BP day choose a OHP or vertical push variation. These should still be sizable compounds, e.g close grip bench, dumbbell OHP. For the overhead assist, choose a strict press close to the upcoming event, e.g strict log, strict axle.
  - a. In cycle 3 this means all upper days have a BP/horizontal push assistance. But insert your major comp overhead assist before it. E.g Log 3/5/1, Z-press, pushups or another example Axle 3/5/1, paused push-press, low incline bench
4. On OHP days pick a delts or upper pec isolation exercise, e.g lateral raises. On BP days pick a triceps isolation exercise, e.g skull crushers..
5. After squatting, while deloading the bar, do some calf raises
6. After deadlifting, while deloading the bar, do some shrugs
7. On any day where it fits, add a curl variation, change it each cycle. This is for bicep tendon health.
8. Add any further exercises you feel you need, or want, (for aesthetics or injury prevention or grip improvement or any other reason) **so long as they are not systemically taxing, and you can superset them with a main lift or one of the assists added so far.** We'll call these the minor lifts. Direct ab work goes here; it's not mandatory. E.g you can add band face pulls between OHP sets, you can add ab-wheel between squats or rows; you can add gripper closes between squats, but you can't add a narrow grip bench between squats. I like direct neck work and do it between DL sets.
9. Superset any or all of the above. The more you superset, the faster you'll finish and the more CV work you'll get.

Where I say "choose a variation", choose a variation useful to you. E.g If you feel weak off the floor in the DL, a deficit DL is useful. If your upper back is weak, a snatch grip DL is great. Wendler has an extensive list of exercise variations fitting these categories in the

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<sup>5</sup> Not Yates. The sport already stresses bicep tendons.

book. I've added some I like in an Appendix. And if you want to call lateral raises a vertical push variation, or more curls a horizontal pull, or whatever, then nobody will stop you; to be honest, it'll be fine.

I'll only strongly suggest two assists. Barbell rows as a horizontal pull, and push-ups and a horizontal push. Both have a disproportionate whole-body effect while being kind to the shoulders.

In my opinion the front squat isn't as useful an assist as you'd suppose. Events day invariably has some gruelling carry, and in any event we swap to the front squat as a main lift in cycle three. It's very valuable, but not unmissable.

## Assistance load and reps

- Do 4 sets of 8 to 12 reps. Every set, reach reps-in-reserve = 1 or 2, or perceived effort = 8 or 9, within that rep range. If you don't hit those targets, adjust the load next session. For bodyweight movements, adjust the difficulty.
  - This can be 3 sets if you're genuinely too old to recover from 4.
- Record simple volume-load and increase it every session. That's total reps across all sets, x weight, (we end up doing a fairly simple double progression). E.g 3 sets of 10 at 70kg = 2100kg; sets of 10, 10, 9 at 75kg = 2175kg
- For calf raises, shrugs and other minor movements, rest-pause progress is fine. Take a first set to reps-in-reserve = 1 or 2, or perceived effort = 8 or 9, then pause for 15 breaths, repeat until 3 or 4 sets are done. Reps are likely to halve each set. E.g 12, 6, 4, 2. Count and progress the total volume-load each session.

If progressed this way, assistance work can progress for a long time without deload or a proiodised reset. They are likely to need a deload only when you have one planned anyway.

## Appendix 1 - assistance variations

These are **just some** of the variations we could use on assistance days. That is to say, the squat variations are for squat assistance on DL day, after the heavy DL; the BP/horizontal pushes are for assistance on OHP day, after the heavy OHP, etc.

Squat	Front squat, hack squat, zercher squat, leg press, split squats or lunges, goblet squat, overhead squat, high handle TBDL, paused SQ, box SQ ...
DL	RDL, SLDL, deficit DL, low handle TBDL, block pull, paused, snatch grip, snatch grip RDL (a personal fave)...
Bench/horizontal push	(Many can be done with dumbbell or barbell), close grip BP, low incline, floor press, push-up variations, chest press machine...
OHP/vertical push	(Many can be done with dumbbell or barbell), seated, high incline, shoulder press machine, press behind neck...
Row/horizontal pull	Machine row, Kroc row, barbell/db row, supine row, T-bar, face pull, pull apart, rear flye...
Vertical pull	Pull up/chin, lat pulldown, straight arm pulldown, curl variations...

## Appendix 2 - variation starting points

This programme works, but no programme is ideal for everyone. After running it you'll want to vary it. Here are some ideas as starting points for variation:

- **More sessions** - as explained in Table 2 (page 4)..
- **Whole body** - if you can recover sufficiently, you could get through each cycle in half the time. Monday OHP and DL, Wednesday BP and SQ.
- **Baker independent rep ranges** - in [Strength and Mass Over 40](#) and in [The KSC Method for Powerbuilding](#), Andy Baker uses rep ranges that progress independently, including an 8/5/2 that seeks to maintain wider separation of lighter and heavier weeks.
- **5/3/1** - instead of 3/5/1 for those who need a steady increment to prep getting under heavy loads.

## Thanks

- Redditors of r/531Discussion
- Community on the 531Discussion Discord server