

Simple basic programming for powerlifting

By Trevor Naughton

Who am I?

I'm Trevor Naughton, head coach of the Cork City Powerlifting Club and owner of Cork Strength & Performance Centre. The article is based on the experiences I've had as a coach over the last few years and the different books and articles I've read on programming. Everything won't be applicable to everyone, there are many different styles of programming this is just what has worked for us so far.

Reasons for a program.

- Measurable progress
- Timing; competitions and rest
- Less variables (eg. Spikes in volume from session to session which may be unaccounted for that could hinder the following session or sessions)

Beginners

A beginner, is anyone who is new to the sport or new to general weight training. Anyone who can make progress from simple linear programming and improve strength from one session to the next or improving week to week.

Main Goal: to improve form and technique.

Secondary Goal: to build a large base for strength and muscle.

Method: skill practice and linear progress.

Beginner Sample Program

Reps x Sets

Day 1	Day 2	Day 3
Squat 5x5	Squat (light) 2x10	Squat 5x5
Bench 5x5 (women 8x5)	Overhead press 5x5 (women 1-10x5)	Bench 5x5 (women 8x5)
Deadlift (light) 1x 10-20	Bent over rows 8x5	Deadlift 5x 2/3
Chin up/pull up/ lat pull down 3-10x 5		Face pulls 10-20x5

Excluding the light lifts, which are there for controlled light specific skill practice, they should be done with slow, deliberate practice emphasising great form, you should be aiming to add 2.5kg to each lift per session. Women should try to aim for 1kg increments on bench press and the same for overhead press when the top rep range has been met. When 1kg increments aren't possible use staggered rep increments ie. 5x5 for one session 8x5 on the following session increase the weight by 2.5kg and repeat.

For example Monday is 25kg 5x5, Friday 25kg 8x5, the following Monday 27.5kg 5x5, Friday 27.5kg 8x5 repeat. For the overhead press aim to add one rep a session until you reach the top rep range, this will keep progress tipping over for a much longer period of time, and should

bring you further along than if you simply move up weight frequently.

Keep this style of progression going for as long as possible, when you miss a rep drop back 5-10kg and repeat the cycle.

On the light day stay at the same weight for at least 6 weeks and focus on form, use them as skill practice raise weight by 5-10kg after 6 weeks.

Intermediate

Intermediate is anyone who has progressed beyond the daily progressions , generally after 4-12 months (some will stay in the beginner phase much longer and if you can you really should)

Main Goals: cementing good clean form and strength

Secondary Goals: to build work capacity

Method: weekly linear/periodized blocks volume to intensity.

Sample Intermediate Program

Day 1	Day 2	Day 3
Squat 90% of RM 5x5	Front squat/Paused Squat/Box squat 8x3	Squat 5RM
Bench 90% of 5RM 5x5	OHP 8x5 (women 1-10x10)	Bench 5RM + 1x3 paused comp reps after
DL 80% of 5RM 2x10-15	Bent over row 5-10x5	DL 5RM
Upper assistance 1	Lower assistance 1	Pull up/Lat pull down 6-15x 5

The aim is to add 2.5kg to your 5RM every week and hit your volume based on the previous weeks rep max. Some days it will be lower than the week before some days it will be higher than expected, this is normal occurrence and depends on an individuals' ability to recover.

Deadlifts should be pulled with as much speed as form will allow, don't break form to move the bar faster.

Keep your progressions going for as long as possible, we highly recommend splitting your

training in to blocks of 3RMs, 5RMs and 8RMs as soon as 5RMs by themselves stop working and taking regular scheduled deload weeks (50% 3x3 on everything for one week).

Between 3-6 weeks per block tends to be ideal for most people, find what works for you, everyone is different and responds differently to volume.

Two examples of a block would be week one 8RM, week two 5RM week three 3RM week four deload and repeat as necessary or week four 8RM, week five 5RM, week six 3RM then week seven deload and repeat.

Week 1	Week 2	Week 3	Week 4
Day 1 8RM Squat 8RM Bench 8RM DL Pull ups 5 sets	Day 1 5RM Squat 5RM Bench 5RM DL Pull ups 5 sets	Day 1 5RM Squat 5RM Bench 5RM DL Pull ups 5 sets	Day 1 3x3 50% Squat 3x3 50% Bench 3x3 50% DL pull ups 5 sets, (less reps than heavy sessions, if you are hitting 8s go for 3s)
Day 2 Front squat 8x3-5 OHP 8x5 Bent row goblet squats 10x5	Day 2 Add weight from previous week Front squat 8x3-5 OHP 8x5 Bent row 5-10 x5 goblet squats 10x5	Day 2 Add weight from previous week Front squat 8x3-5 OHP 8x5 Bent row 5-10 x5 goblet squats 10x5	Day 2 3x3 50% Squat 3x3 50% Bench 3x3 50% DL
Day 3 90% 8RM Squat 8x5 90% 8RM Bench 8x5 90% 8RM DL 2x 10 Tricep push downs 15x5-10	Day 3 90% 5RM Squat 5x5 90% 5RM Bench 5x5 80% 5RM DL 2x 10 Tricep push downs 15x5-10	Day 3 90% 3RM Squat 3x5 90% 8RM Bench 3x5 80% 8RM DL 1x 10 Tricep push downs 15x5-10	Day 3 3x3 50% Squat 3x3 50% Bench 3x3 50% DL Tricep push downs 15x5-10

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
Day 1 8RM Squat 8RM Bench 8RM DL Pull ups 5 sets	Day 1 5RM Squat 5RM Bench 5RM DL Pull ups 5 sets	Day 1 3RM Squat 3RM Bench 3RM DL Pull ups 5 sets	Day 1 8RM Squat 8RM Bench 8RM DL Pull ups 5 sets	Day 1 5RM Squat 5RM Bench 5RM DL Pull ups 5 sets	Day 1 3RM Squat 3RM Bench 3RM DL Pull ups 5 sets	Day 1 3x3 50% Squat 3x3 50% Bench 3x3 50% DL pull ups 5 sets less reps
Day 2 Front squat 8x3-5 OHP 8x5 Bent row goblet squats 10x5	Day 2 Add weight from previous week Front squat 8x3-5 OHP 8x5 Bent row 5-10 x5 goblet squats 10x5	Day 2 Add weight from previous week Front squat 8x3-5 OHP 8x5 Bent row 5-10 x5 goblet squats 10x5	Day 2 Add weight from previous week Front squat 8x3-5 OHP 8x5 Bent row 5-10 x5 goblet squats 10x5	Day 2 Add weight from previous week Front squat 8x3-5 OHP 8x5 Bent row 5-10 x5 goblet squats 10x5	Day 2 Add weight from previous week Front squat 8x3-5 OHP 8x5 Bent row 5-10 x5 goblet squats 10x5	Day 2 3x3 50% Squat 3x3 50% Bench 3x3 50% DL
Day 3 90% 8RM Squat 8x5 90% 8RM Bench 8x5 90% 8RM DL 2x 10 Tricep push downs 15x5-10	Day 3 90% 5RM Squat 5x5 90% 5RM Bench 5x5 80% 5RM DL 2x 10 Tricep push downs 15x5-10	Day 3 90% 3RM Squat 3x5 90% 8RM Bench 3x5 80% 8RM DL 1x 10 Tricep push downs 15x5-10	Day 3 90% 8RM Squat 8x5 90% 8RM Bench 8x5 90% 8RM DL 2x 10 Tricep push downs 15x5-10	Day 3 90% 5RM Squat 5x5 90% 5RM Bench 5x5 80% 5RM DL 2x 10 Tricep push downs 15x5-10	Day 3 90% 3RM Squat 3x5 90% 8RM Bench 3x5 80% 8RM DL 1x 10 Tricep push downs 15x5-10	Day 3 3x3 50% Squat 3x3 50% Bench 3x3 50% DL Tricep push downs 15x5-10

Another block cycle would be four weeks 8rm one deload week, four weeks of 5RMs deload and repeat, generally we wouldn't recommend a 4 week block of 3RMs as they tend to push a bit too far, If you want to add in a two week piece at the end of the cycle of 3RMs it would work out better for most people, but again not everyone is the same do what works for you.

This kind of cycle can last well over a year and continue to progress without stalling, the only major drawback is it can get boring but it will reward patience.

Advanced

An advanced lifter is anyone who has progressed passed the point where weekly or fortnightly progression is no longer possible, generally after 18 months or more of regular consistent strength training.

Main Goal: Increase Strength and address lagging muscle groups.

Secondary Goal: improve the individuals work capacity and recovery.

Method: progressive overload, block periodization, higher training frequency, upper/lower split.

Sample Advanced Program

Day 1	Day 2	Day 3	Day 4
Bench	Squat	Bench	DL
Paused Bench 1x1-3	Deadlift (light)	Paused Bench 1x1-3	Squat(light)
Back assistance 1 (strength)	Squat assistance 1 (strength)	Bench assistance 1 (Strength)	DL assistance 1
Back assistacne 2 (Hypertrophy)	Squat assistance 2 (Hypertrophy)	Bench assistance 2 (hypertrophy)	DL assistance 2
Shoulder assistance 1 (health/prehab)	Core/back/pump	Shoulder assistance 2 (health/prehab)	Core/back/pump

There are hundreds of programs aimed at advanced lifters out there, some better than others, some which could work well amazingly for one person and not all for another. One thing to keep in mind with an advanced program is how highly dependent on exercise selection and how much of the assistance work is aimed at the individual in question, based off the individuals' needs.

Below are some rough templates of loading percentages over different blocks. Each works differently and can run for different length blocks.

Russian Squat Cycle Revised

Heavy	Light	This is a very tough and aggressive program we recommend that you take your numbers a little lower for example 200kg squat =100% use 97% of your actual 1RM which in this case is 194, the difference in overall the numbers is marginal but the total tonnage of the program is very different.
1: 80% 3x6	80% 2x6	
2: 80% 4x6	80% 2x6	
3: 80% 5x6	80% 2x6	
4: 80% 6x6	80% 2x6	
5: 85% 5x5	80% 2x6	
6: 90% 4x4	80% 2x6	
7: 95% 3x3	80% 2x6	
8: 100% 2x2	80% 2x6	
9: 105% 1x1	80% 2x6	

Less aggressive squat cycle

1: 75% 5x4	70% 2x10
2: 80% 5x5	70% 2x10
3: 60% 3x4	70% 2x10
4: 85% 5x3	70% 2x10
5: 50% 3x3	70% 2x10
6: 75% (+2.5 or 5kg) 5x4	70% 2x10(+2.5 or 5kg)
7: 80% (+2.5 or 5kg)5x5	70% 2x10(+2.5 or 5kg)

8: 60% (+2.5 or 5kg) 3x4	70% 2x10(+2.5 or 5kg)
9: 85%(+2.5 or 5kg) 5x3	70% 2x10(+2.5 or 5kg)
10: 50%(+2.5 or 5kg) 3x3	70% 2x10(+2.5 or 5kg)
11: Repeat	

When setting up a block it is always advisable to work back from your goal, for example if you are a 200kg squater and in 24 weeks you want to hit 210kg-215kg, use numbers with that as the goal. Example being 95% of 215kg = 204.25kg knowing that most lifters in this stage of their training can roughly double 95% this would be the target for the end of the cycle, so the target finish would be 2 or 2x2 with 205kg (this is an extreme example of a very aggressive goal especially for an advanced trainee, but not impossible for some at least)

Rep range should correlate with the end goal of a program, and the percentages of your 1RM, increments we usually use for programming tend to be between 2% and 5% of 1RM, the shorter the cycle the higher the percentages we would use. For a longer cycle like 24 weeks we would have at least two training blocks in there where we'd work up to a top end in both blocks and go a little higher on the second block.

Rough estimations based of 1RM to other rep max

reps	1	2	3	4	5	6	7	8	9	10	12	15
% of 1RM	100%	95%	93%	90%	87%	85%	83%	80%	77%	75%	67%	65%

So in using these percentages as a rough guide we can work set ranges from the numbers, the more sets you do at the % the less reps by comparison to your 1RM you so for exmple if we were to us 65% we for 5 sets we wouldn't use 15 reps we would use something less like 12.

This has proven to be fairly accurate with most men we've trained in regards to the squat and bench but not deadlift.

Most women tend to have 1 or 2 more reps than men above 80%

(The reasons for which vary and would take another article.)

A basic layout example of a block based off the goal of 215 could look something like this.

Sample squat block

session	weight	Reps x sets
1	205kg	2x2
2	195kg	2x4
3	185kg	3x2
4	175kg	3x4
5	165kg	5x5
6	155kg	8x5
7	200kg (100% of 1RM)	2x2
8	190kg	2x4
9	180kg	3x2
10	170kg	3x4
11	160kg (80% of current 1RM)	5x5
12	150kg	8x5

This would be the second block in the cycle, the first block would look much the same with the weights lowered again.

We would usually recommend blocks be broken up between 4 and 12 weeks at a time, we wouldn't advise anyone to continue past 12 weeks without a deload mixed in. The best thing for getting stronger is recovery!

The importance of rest weeks and general recovery can't be overstated, no program will work well if you are not getting enough rest. Plenty of sleep and plenty of food is the closest thing to performance enhancing drug you can get without taking them!

There are three main reasons a program will work and the same three why it won't work.

1. Recovery: If you don't eat and sleep enough, or if the program doesn't allow for rest generally you won't progress well.
2. Workload: This works both ways, if the workload is too low you won't cause enough fatigue to allow for compensatory adaptations to occur (if you aren't making your body struggle it won't try to adapt) conversely if the work load is too large your body won't recover and because of that you will not progress.

3. Belief: No matter how hard you work on any program, if the exercises are perfect, the rep range is exact, if you don't think it's going to work for you it won't. (I could almost do an entire article on that alone) belief in a program and in the work you are doing is primarily what will lead you to success and progress, more than any coach or training partner. It's ultimately on you, you are the reason you will succeed or fail.

Barbell Assistance Work

Assistance work should generally be included with a higher volume range and lower intensity than the main work, and with the goal being to address sticking points, build the lagging muscles, and to work on overall health. All sports will cause compensatory issues, the longer you spend in the sport the more likely they are to flare up and cause a problem.

For example shoulder injuries are very common in powerlifting. This is largely due to two things, constant loading on the shoulders and almost always being in a state of pronation (pronation thumbs pointed towards each other palms pointed towards your legs). To address this with the Cork City Powerlifting club we regularly do facepulls, banded pull a parts supinated and pronated (supinated thumbs facing away from each other palms pointed towards the head) and light external rotations.

Generally for most strength and hypertrophy assistance work that we do with variants of the squat, bench and deadlift, we usually stay between 60%-80% and the rep ranges usually between 6-12 reps. Depending on how heavy or light it is we bring some strength assistance up to 15 reps.

There is an order of importance when it comes to your assistance work, as powerlifter, strength is a major goal and thus strength assistance will be more important than hypertrophy (most of

the time at least). We generally keep or “strength assistance 1” as 6-10 reps x 5 and will usually hit 8-15x5-10 on every other type from there. So try to put the more important exercises earlier in the session.

Assistance work has many benefits and reasons for doing them vary from building strength, increasing muscle size, counteracting negative impact of your sport, and improving work capacity.

In summation I have explained the various types of training programs which are normally used by powerlifting beginners, intermediates and advanced trainees.

Each lifter is different, and will ultimately find an approach to programming which will work best for them.

Having an experienced coach do your program is what I would recommend but at the same time as a coach I encourage lifters to try it out for themselves it can be a great learning experience.

I will do a follow up article on how to select specific assistance exercises and rep ranges for each to help improve your programming.

If you have any questions you can contact us by email at

corkstrengthandperformance@gmail.com, through the contact us page on the website or through facebook.

Thank you for reading hope it helps.