

A Very Brief A-Z of Weight Training

By Chris Young, Gym Manager at the highly prestigious Spa at Pennyhill Park and Powerlifter.

Exercise Selection

The amount of exercises you do depends on how often you train (frequency), and how hard you train (intensity), but whatever you are training for your programme should include a squat, a push, and a pull.

Squat Type Movements

You can choose from the following; squats, box squat (of various heights), bottom up squats with the bar set on a pin, paused squats, front squat both Olympic and bodybuilder style, Zercher Squats, hack squats, deadlifts, sumo deadlifts, pin pulls (deadlifting from different heights), snatch grip deadlifts, Steinborn lift, and prisoner squats.

Pushing Movements

You can choose from the following; barbell (BB) bench press, dumbbell (DB) bench press, BB or DB incline or decline press, dips, board, pin or carpet presses, bottom up benches, paused benches, various overhead lifts such as military presses, behind the neck presses, Bradford presses, 2xDB press, Arnold press, W press, one arm press with either DB or BB, push press, jerk, side press, or bent press.

Pulling Movements

You can choose from the following; chin ups, pull ups, pulldowns to front or back, long pulley rows, BB rows, reverse grip rows, chest supported rows, DB rows, one arm row, power clean, full clean, hang clean, full snatch, hang snatch, power snatch, DB snatch, DB swing, face pulls (seriously there is an exercise called this), and straight arm pulls.

And if you have the time

The next exercises selected would be for the mid-section especially if you're a beginner; this is because the weight used for the squat would not be enough to overload the mid-section whereas with an advanced trainer it could be. A good combination of exercises would be the stiff leg or Romanian Deadlift and a type of leg raise, plank, or pseudo plank type of exercise. In my opinion only when these 5 core exercises are performed would a trainer then perhaps do some direct arm work afterward.

To emphasize this point John McCallum wrote of observing 50's bodybuilding champion and film star Reg Park train; his workout consisted of squats –several sets with up to 500 lbs for 15 reps on the last set, bench presses –as with the squats but up to 400 lbs for 12 reps, same for BB rows 350 lbs for 12 reps, standing press behind neck 300lbs for 12 reps, weighted chins with 50 lbs for 12 reps, and weighted sit ups 50 lbs for 12 reps. As he headed for the shower a

young observer said what about your arms? Park smiled and said “done them already”.

The point is that Reg Park understood that the body works in movement patterns not on isolating the individual muscles, get strong on these movement patterns and you will get strong, lose fat, increase muscle mass, whatever your goals are, it's really that simple.

Another example would be the great Paul Anderson, 1956 Olympic Heavyweight Weightlifting Champion. Anderson is recognised by many as one of the strongest men who ever lived. His early training was pretty much Squats and Presses; the pull came from having to Clean the weight he was about to press.

By concentrating on these 2 or 3 exercises, if you include the Clean, Anderson quickly progressed to world record levels.

Please feel free to contact me if you're unsure of any of these lifts but do try google first!

Sets

A collection of repetitions usually performed consecutively.

For Power/Strength

In general sets would range from 3-10 sets per exercise and 20-30 sets per workout.

For Muscle Building

Typically 2-5 sets would be performed per exercise with usually no more than 25-30 sets performed in any one workout.

There are those who would do considerably less than this, say 1-2 sets per exercise and no more than 8 sets per workout; this is the so called high intensity training protocol (HIT); this can work for short periods of time although in my opinion it is not as effective as higher volume training (>20 sets per workout).

For Muscular Endurance

Why anyone would want to train for this I have no idea but if you did you would perform 2-4 sets per exercise and 12-16 per workout.

Reps

The amount for lifts performed within a set.

For Power/Strength

For this goal reps would be between 1 and 6.

For Muscle Building

This varies greatly but in general reps would be between 5 and 15, although one of the best muscle building routines ever is the 20 rep squat programme; but in general the total time under tension (length of set) should be less than 60 seconds.

For Muscular Endurance

For this reps would be between 15 all the way up to 50 or more.

Rest

Believe it or not rest between sets doesn't depend on how long the article that you're reading is in the daily newspaper.

For Power/Strength

Rest times can vary from as little as 1 minute all the way up to 10 minutes. In general the higher the intensity (%age of max effort) the longer the rest period.

For Muscle Building

Rest could be as little as 30 seconds but not normally more than 2 minutes as the aim is to exhaust the muscle.

For Muscular Endurance

Rest times can vary from 15 seconds up to 1 minute.

Frequency

This is defined as the amount of workouts performed in a certain time frame, usually a week.

For Power/Strength

From as little as 2 sessions a week right up to 50! Yes 50; the amazingly successful Bulgarian weightlifting team has athletes that train 50 times a week and sometimes more before competitions; they do this not for enjoyment but because it works! And a trainer once told you that 3 times a week was optimal! The moral is be careful who you listen to.

If very high frequency (>6 sessions a week) is going to be used then each session must be planned, you can't lift maximal weights for 50 times a week but you can perform exercises that contribute to the overall goal.

For Muscle Building

From 2 to 12 workouts a week. One of Arnold Swartzenegger's favourite programmes was training 6 days a week, each day performing 2 workouts, although he was receiving pharmaceutical help.

For Muscular Endurance

Usually 2-6 workouts a week; time would usually be spent on the particular sport that one is trying to improve.

Weight

The weight lifted should be determined by the amount of reps and sets that you're doing; if you can perform 3 sets of 10 reps in a given exercise then the weight should increase for the next workout. Obviously you would use more weight following a 5x5 programme than you would on a 3x12 programme. The important thing here is that whatever sets and reps you use you should always strive to increase the weight used.

For Power/Strength

The weight used would normally be 70-100+% 1RM (Max weight for 1 rep).

For Muscle Building

For most people most the time the weight used would be between 60-100% 1RM, it is important to work both ends of this spectrum at certain times to develop maximal muscle.

For Muscular Endurance

30-60% 1RM would be used for this goal.

Using Weight Training for Fat Loss

For optimal fat loss I recommend 2 different tri-sets comprised of the following;

- Tri-set 1, a quad dominant lower body exercise immediately followed by an upper body push immediately followed by a mid section exercise for the obliques, either twisting or side flexion. Perform 3-5 sets of 10, 15, or 20 reps with 120 seconds rest between each tri-set.
- Tri-set 2, a hip dominant lower body exercise immediately followed by an upper body pull immediately followed by a mid section flexion exercise. Again, perform 3-5 sets of 10, 15, or 20 reps with 120 seconds rest between each tri-set.

With beginners I would precede this with 5 sets of 5 reps in the Box Squat. When the trainee can use 80kg (men) or 60kg (women) I would then include Box Squats in the quad dominant, lower body exercises which could be performed in the first tri-set; in fact I would recommend it for at least one third of the workouts performed.

The reason that I strive to get clients strong in the Box Squat before using it as a fat burning exercise is that if the client is only strong enough to use 20kg for 15 reps then other exercises such as Step Ups and Lunges probably have a higher

metabolic demand but once the trainee gets to a certain level, about 80kg for men or 60kg for women, then the Squat will work wonders.

Putting it all together

One of the major mistakes I see is that trainees follow a good programme but for too long; pretty much anything will work for 6-12 weeks but not even the greatest programme ever written will last much longer than this. The message here is that if you've been on the same programme for more than 12 weeks or the weights you're using have stalled (not increased in the last few workouts) then you need to change something.

Albert Einstein once said that the definition of stupidity is doing the same thing over and over again and expecting a different result. Don't be a moron in the gym!

Chris has over 24 years of experience in the fitness industry and has competed in Powerlifting, Martial Arts, and Bodybuilding. He is a self confessed anorak with anything to do with strength and conditioning. Chris can be contacted at youch01@yahoo.co.uk