# ADVANCED RESIITANCE TRAINING METHOD GUIDE 

## YOU WILL NEVER PLATEAU AGAIN

## INTRODUCTION

This guide has been created not to change your training routine but to enhance it. These techniques and methods can be added to any training routine to increase intensity and results. The main thing to remember is no matter what technique or method you use that you control the weight and not let the weight control you.

Never lift a weight that is too heavy, you must have control and total muscle connection. I see it so often, people go heavy on the concentric phase and basically go limp during the eccentric phase of their movement or they will use momentum to move the weight without isolating the targeted muscle group.

I also see people reading from a program or card, going through the motions and training with nowhere near the intensity or resistance to stimulate muscle growth. Your muscles can't count, so if your program says do 10 reps and you put it down when you could easily increase the weight or reps, then essentially you're missing the point of the exercise. The exercise, number of reps and particular weight is just an instrument to put tension on the muscle. Going heavier isn't necessarily going to be more beneficial if you don't have proper form.

Put your mind in the muscle. The negative phase has been shown to produce more micro-trauma in the muscle, which leads to an increase in muscle breakdown, which in turn obviously leads to recovery and muscle building. Keep constant tension during your set, full ROM, squeeze at your peak contractions unless instructed otherwise in the particular technique description.


## FUNDAMENTALS

## 1 REP MAX PERCENTAGES

1RM Stands for one repetition maximum. This 1RM percentage system uses various percentages of a one rep max (1RM) for a specific number of reps (repetitions).This is put in place so you have a guide of what intensity and effort should be exerted for a particular number of reps.

HERE IS A GUIDE YOU CAN FOLLOW

| REPS | \%1RM |
| :---: | :---: |
| 1 | 100 |
| 2 | 95 |
| 3 | 90 |
| 4 | 88 |
| 5 | 86 |
| 6 | 83 |
| 7 | 80 |
| 8 | 78 |
| 9 | 76 |
| 10 | 75 |
| 11 | 72 |
| 12 | 65 |
| $14-15$ | 60 |
| $16-18$ | 55 |
| $18-20$ | 50 |
| $20+$ |  |

If you'd like to calculate your percentages and ranges on a particular lift use the 1RM calculator at www.dppt.com.au/exercise

## TRADITIONAL BODYBUILDING PRINCIPLES \& REP RANGES

| REP RANGE | \% OF 1 REP MAX | TRAINING EFFECT GOAL DESIRED |
| :---: | :---: | :---: |
| 1-5 reps | 85-100\% | Strength \& power |
| 6-8 reps | 75-85\% <br> Metabolic \& neural | Strength \& hypertrophy |
| 9-12 reps | $70-75 \%$ <br> Metabolic \& neural | Hypertrophy \& some strength |
| 13-20+reps | 60-70\% <br> Metabolic | Local endurance, some hypertrophy, little strength |

This is not an exact science but more of a guideline. When the muscle cells are exposed to appropriate training stimulus they will. grow regardless of rep range. Some rep ranges and methods are more effective for a particular goal but done correctly every method and range will be beneficial.

## PROGRESSIVE OVERLOAD

This is the key to your training success. Without PROGRESSIVE OVERLOAD your body does not need to adapt and therefore will never get bigger or stronger beyond a certain point.

THERE ARE 7 WAYS TO CREATE PROGRESSIVE OVERLOAD:

- Increase resistance
- Increase sets
- Increase repetitions
- Increase frequency
- Increase exercises
- Increase intensity
- Decrease rest

Methods and techniques that implement all of these 7 principles are included in this guide. Now we have covered the fundamentals it's time to get into the advanced training techniques.

DANIEL
PERSONAL TRAINING

## ADVANCED TRAINING TECHNIQUES <br> TUT (TIME UNDER TENSION)

Time under tensiopn refers to how long the muscle resists the weight or is under strain during each set. Changing the tempo and increasing the time under tension is a great way to increase intensity, strength and stimulate muscle growth. This simply means performing an exercise at a slower tempo and putting the muscle under tension for a longer period of time. An example of time under tension is performing a dumbbell shoulder press.

## Tempo 3:1:1

3 seconds eccentric (The lengthening contraction of the movement)
1 second at the bottom iof the movement.
1 second concentric (The shortening contraction of the movement) (Explosive part of the movements)

Instead of your usual tempo bring the weight down at a tempo of 3 seconds, hold for a second at the bottom of the movement and push the weight back up in one second then repeat. Don't completely lock out and keep constant tension on the muscles.

There are different tempo's for time under tension. $2 / 2-2$ seconds eccentric 2 seconds concentric 2/4-2 seconds concentric 4 seconds eccentric $4 / 1 / 2$ weight is lowered for 4 seconds, paused for 1 , and finally lifted over a duration of 2 seconds.
There are plenty of tempo's for time under tension but the main thing to take out of it is that you place the muscle under tension for a longer period of time. This may decrease the number of reps and weight you can do but is a very effective method to develop true strength and muscle mass.

Example: Shoulder press. Normal shoulder press 30 kg dumbbells for a set of 12 (Normal tempo)
TUT weight either $20 \%$ off your 1 rm or try the same weight but you will not be able to get the same number of reps. Press the weight up, bring it down for the seconds, hold at
peak contraction for a second (Arms parallel or just below parallel) then press up in a second and repeat til failure.

## REST PAUSE

The rest pause method is utilised by doing a set to failure, waiting about $5-10$ seconds then doing a few more reps. Usually you can get another 3 or so. This can be done multiple times.
Example: Bicep curls. Fail on 12 reps, wait 5-10 seconds then fail again, wait another $5-10$ seconds and fail again. This puts the already exhausted muscle under even more stress and allows you to get more reps out on the same weight.

## DROP SET

This method entails you to do your regular set until you fatigue or fail then before you rest pick up a lighter weight and keep going until you fail on that weight. A general number for drop sets is to drop the weight around $20 \%$ and keep going. However I usually drop the weight 40-50\% on my drop sets as I'm already fatigued and just want to further stress the muscle.

There is no limit to how many drop sets you could do. You could do a double drop set (Drop the weight twice) A triple drop set (Drop the weight 3 times) An example would be bench press 100 kg to failure, drop to 80 kg , fail, drop to 60 kg to failure then for the last drop lower it to 40 kg and fail on that weight. This puts tremendous load and tear on the muscles and is a very effective method in building muscle.

Another method of drop setting is called Run the Rack or Run the Stack.

RUNTHE RACK is performed with dumbbells on a dumbbell "rack"
Example: Lateral raises a set of 20 kg to failure then drop to 16 kg , then 14 kg , then 12 kg , then $10 \mathrm{~kg}, 8 \mathrm{~kg}, 6$ and then finish with 4 kg . No rest in between.

RUN THE STACK on the any pin loaded bit of equipment.
Example: We will use the seated row. This is a very intense method and may be performed only once during a workout. Do the stack on the seated row. Drop it 2 plates, fail again, drop it another 2 plates, fail and do this all the way down until you're on the lightest 3 or so plates.

## STRIP SETS

Strip sets are another form of drop set. This method is done on plate loaded exercises with lots of weight. You would have a spotter on each side take a plate off simultaneously after you fail and drop set the weight.

Example: Squats performed on 180kg (4 plates)
3 reps on 4 plates (Spotters take off a plate each without racking the weight)
4 reps on 3 plates (Spotters take off another plate) 6 reps on 2 plates then rack the weight.

This method allowed you lift 90\% of your 1RM but still worked the muscles to a higher rep range which stimulates both fast and slow twitch muscle fibres and excels muscle growth. .

## SUPERSETS

Supersets are when two exercises are performed in a row without stopping. This can either be the same body part like squats supersetted with lunges, or opposite body parts like bench press supersetted with rows.

This is a very effective method to keep heart rate elevated, shock your muscles, shorten workout time, increase intensity and, in the case of supersetting the same body part, increase growth.

Example of each type of superset.

## SAME MUSCLE GROUP SUPERSET

This is done by doing two exercises on the same muscle group in one set.

Example: On legs, perform a leg press then without rest move straight on to lunges.
This increases load on a particular muscle group and creates muscle trauma and a higher growth stimulus. This method can be done with either compound exercise (exercises that use more than one muscle group) or isolation (exercises that use one muscle group).

A popular example for the compound/isolation superset is bench press supersetted with dumbbell flyes or vice versa

OPPOSITE MUSCLE GROUP (ANTAGONISTIC) SUPERSET This is a superset that uses the opposing muscle group.

Example: Doing a bench press supersetted with a seated row. This is a good method for increasing workout intensity and cutting down workout time. Each muscle group has a chance to rest while the opposing muscle group is working.

For supersets to be effective you cannot have a long rest period in your transition from one exercise to the other. It must be instantaneous. Make sure you hit the targeted muscle group first before drop setting as the drop set will further the load on this muscle group and not hinder your lift.

## TRI-SETS

Tri-sets are just like supersets but instead of two exercises being performed one after the other, it's three exercises performed back to back. The same method applies you could do opposing muscle groups or three sets on the same body part. Tri sets are very effective for similar reasons to supersets as they cut workout time down, increase load on the muscle, increase metabolic rate and shock the muscle by hitting it in different angles in the same set.

## TRI-SET (SAME MUSCLE GROUP)

## Example: Triceps

Close grip bench press x 12
Skull crushers x12
Triceps pushdown $\times 12$
I like this tri-set for triceps because it hits all three heads and is very effective for growth and a well-rounded tricep.

## TRI-SET (OPPOSING MUSCLE GROUPS)

## Example:

Bench Press x 12
Pull ups fail
Deadlifts x 8
These are three big compound movements. This tri-set is great for boosting metabolism, maintaining muscle and optimising hormones.

## GIANT SETS

Giant sets consist of four or more sets (usually of 10-ish reps) of four or more different exercises working the same muscle group.

Example: A chest giant set might consists of:
10 reps bench press,
10 reps of dumbbell pec flys,
10 reps on an decline bench press and
10 reps of incline dumbbell presses
All this is performed with no rest. Rest when this set is done then repeat.

You can tailor the giant set to whatever muscle group you'd like to work (i.e., back, legs, arms, etc.), and you can create any combination of four corresponding exercises.

This method works in the same way as supersetting but can further shock your muscles, keep blood flow in the same area stimulating the growth response and allow you to cut workout time down. Try to lift the weight you would normally lift on these exercises or drop it 10-10\% of your 1 RM so you don't sacrifice form when you are fatigued.

## CIRCUITTRAINING

Giant sets are a form of circuit training. Except with giant sets there are 4 exercises performed on one body part. With circuit training there is no maximum number of exercises or restrictions of exercises. This can be done with weights, cardio or a combination of both.

| Example: |  |
| :--- | ---: |
| Bench Press | 15 reps |
| Seated Row | 15 reps |
| Squats | 15 reps |
| Military Press | 15 reps |
| Lat Pulldown | 15 reps |
| Leg Press | 15 reps |
| Burpees | 15 reps |

Repeat 3-5 times
Around $60 \% 1 \mathrm{rm}$ on all of these lifts.

All these exercises are performed in a row with no rest period in between. The benefits of circuit training are it gets
your heart racing, burns a lot of calories and cuts workout time right down. This method is effective for people wanting to burn body fat. In this particular circuit certain muscle groups are not used two exercises in a row so lift the weight you would normally lift, or as close to it as you can, in this circuit.

## PARTIALS

This technique is doing partial movement and not going the full range of motion. This method can be used in two totally different ways.

It can be done with a heavier weight than usual, for example on the bench press. Use a weight around your 2-4 rep max. Do not go the full ROM instead only about a quarter range of motion. This is not an effective method for building muscle, but for building strength and helping break plateaus on lifts it can be helpful by getting your body used to a higher weight. This can be dangerous so partials with big compound movements like bench press and squats are done in the power rack with pins or guards set to appropriate levels or have a spotter. In this method the ROM is at the strongest part of the movement, moving the bar a few inches or so.

## PARTIALS/PULSING

The other way partials are performed are to increase tension on the hardest part of the movement. You may see a lot of bodybuilders do this. They will only lift in the range with the most tension, for example on a dumbbell shoulder press or bench press. The most tension on the muscles are at the bottom of the movement so they will almost pulse the weight up and down in that range without locking out. This increases the load on the muscle you are trying to work. Another example of partials in this method are 21 's on the barbell bicep curl. They are performed like so

7 reps and the top of the movement
7 reps at the bottom of the movement
7 reps full ROM

Another example of pulsing is doing squats on the smith machine. Go all the way down to the bottom of the movement and only come up halfway. Keeping pumping out reps until you can't take it.
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## PYRAMID SETS

A pyramid set is done in 4 or more sets. If you picture the shape of a pyramid you will get the concept of this method.

## PYRAMID TRAINING

This method is performed over multiple sets. In the sets they will increase then decrease thus the name pyramid to describe the shape. The first sets are progressive or working warm up sets. You will then do your heaviest sets the progressively work your way down in weight as you cannot lift the same amount due to your muscles being fatigued.

## An example pyramid set would be

Squats
Set $1-40 \mathrm{~kg} 20$ reps
Set $2-60 \mathrm{~kg} 15$ reps
Set $3-80 \mathrm{~kg} 8$ reps
Set 4-60kf for 12-15 reps
This is a great method to work both fast twich and slow twitch muscle fibres and also get the maximum out of the muscle and exercise you are performing. This method is a great way to stimulate muscle growth.

## GERMAN VOLUMETRAINING

German volume training is a method where you pick one exercise and do that one exercise for 10 sets on 10 reps. This equates to 100 reps in total and is usually done with a compound exercise. The weight should be around $60 \%$ your 1 rm (a weight you can do approximately 20 reps on)

I GVT workout will consist of you using this method with 2 exercises. You can either do compound to compound like bench press to seated row or compound to isolation lat pulldown to dumbbell bicep curls. 10x10.

## Example

Bench press $60 \% 1 \mathrm{rm}=70 \mathrm{~kg} 10$ sets of 10 reps on 70 kg Seated row $60 \% 1 \mathrm{rm}=75 \mathrm{~kg} \quad 10$ sets of 10 reps on 75 kg

## REP TARGETING SETS

This method is performed by setting a number of reps the most common being 50 or 100 and achieving that target no matter how many sets it takes you to get there.

## For this example let's do 100 reps or "Century sets"

I want to do 100 reps on the leg press or 100 pull ups
First set you get to 25
Rest
15
Rest
12
Rest
10
Rest
10
Rest
10
Rest
8
Rest
6
Rest
4
Finished

The stipulation is you are only allowed to have between 15-30 seconds in rest period all the way to your targeted goal, The heavier you do the harder it is obviously.

A popular century set amongst advanced lifters is bodyweight on the bench press. E.g. A person who weighs 80 kg performs an 80 kg bench press 100 x and record how long it takes.

## 100 REP METHOD (CENTURY SETS)

| Exersise | \% of bodyweight |
| :--- | :--- |
| Bench press | $65 \%$ |
| Lat pulldown or assisted pull up | $75 \%$ |
| Overhead Press | $60 \%$ |
| Squats | $100 \%$ |
| Deadlift | $125 \%$ |

## WEIGHT TARGETED SETS

This method is similar to the rep targeted sets. With rep targeted sets you picked a targeted number of total reps, with this technique you will pick a total amount of weight lifted.

## In this example I will use a method I utilise every Friday. 10 tonnes of deadlifts <br> $100 \mathrm{~kg} \times 10$ reps $=1000 \mathrm{~kg}$ or 1 tonne.

Simply doing 10 sets of 10 reps at 100 kg will reach the 10 tonne goal. However the heavier you go increases the intensity.
If I deadlift $180 \mathrm{~kg}, 4$ times that equals $180 \times 4=720 \mathrm{~kg}$. That would mean l'd need to do almost 14 sets of maxing out. That is very difficult so start heavy (once you've warmed up) then drop the weight when needed on your sets and calculate the total weight lifted on each set until you have reached your number.

## FST-7

FST-7 stands for Fascial Stretch Training. The 7 refers to , 7 sets performed usually as the final exercise of a target bodypart. Basically you work the same bodypart on any given day the same way you normally would keeping the rep range between 8-12. With FST-7 on the last exercise you perform the seven sets to finish off that particular muscle, with minimal rest in between to get the best pump possible. This exercise is usually an isolation exercise.

## FST-7 example

Incline barbell bench press 4 set 8-12 reps
Dumbbell fly 4 sets $8-12$ reps
Dumbbell bench press 4 sets $8-12$ reps
(FST-7) 7 sets of cable cross overs 8-12 reps but with only 30-45 seconds in between.

The benefits of this method are to stretch the fascia which will allow more room for vitamins, minerals, amino acids and oxygen to be shuttled to the muscle. This shocks the muscle and the fascia stretching allows for enhanced muscle growth.

## CLUSTER REPETITIONS

Choose a weight around $90 \%$ of your one-rep max (a weight you can lift 2-3 times) then do 10 sets of one repetition. Rest for approximately 30 seconds between each set. Doing this method allows you to do 10 reps with a weight you can usually lift only two times. So it works more total muscle fibres than possible lifting $80 \%$ of your one rep max in isolation.

## Example

Your 1 rep max on deadlifts are 100kg.
Lift 90kg (which is a weight you could do about 2-3 reps) once then wait 30 seconds.
Repeat this until you reach 10 reps.
You have just got 10 reps on a weight where you'd normally get 2-3 reps on.

## PRE EXHAUST

Pre exhaust is simple pre fatiguing certain muscles with an isolation exercise before doing compound work.

For example doing chest or legs. With chest instead of starting with a compound movement like bench press you would do an isolation exercise like chest fly's first. This isolates your pectorals so when it comes time to bench your chest is already "Pre exhausted meaning they will have a better connection and take more of the load.

Pre exhaust chest
Cable fly 7 sets 15 reps
Bench press 4 sets 10 reps
Legs
Leg extensions 4 sets $15-20$ reps
Squats 4 sets $8-10$ reps
This method helps create a better connection to the target muscle, increases blood flow to the area and is a good method to shock the muscles for more stimulation and growth.

## FORCED REPS

Forced reps are a technique that requires a spotter or trainer. This is performed by doing a weight you wouldn't normally do on your own.

For example if you can bench press 80 kg on your own you would try 90 kg with your spotter. The forced reps are when you cannot lift the weight on your own and the spotter takes some of the resistance allowing you to get one or two more reps. In a nut shell forced reps are reps you cannot do without assistance to further stimulate muscle trauma which leads to strength and growth.

## CHEAT SETS

Cheat sets are performed at the end of a set to increase intensity. This means perform a lift such as bicep curls with strict form. When you start to fatigue instead of putting the weight down you would then do "cheat curls". This means using momentum to get past sticking points (to get the dumbbell up) then lowering it with as much resistance as you can. Do a few reps until you cannot hold the weight anymore.

For example you do a set of bicep curls with strict for. You fail on 40 kg barbell curl at 10 reps. With this method you would reach 10 where you have previously failed with good for then use momentum to pump out a few more reps, the form isn't good but it is adding further micro tears to the muscle which will stimulate growth.

## BURN SETS

This method is performed doing small, fast movements in the stretched or contracted position at the end of a set to increase intensity muscle and "feel the burn". Burn sets are most often seen with calf raises. People will bounce up and down in the bottom position at the end of a set until your calves burn and you cannot take any more.

## NEGATIVE SETS

Negative sets are performed by overexentuation the eccentric or stretching (lowering) part of the movements. Generally done with a weight $100+\%$ of your 1 rm on most lifts. This technique requires a spotter.

For this example we will do a bench press. The spotter will help you a lot with the concentric movement (positive part of the movement) then allow you to take all the weight for the negative part of the movement. You must allow for maximum control and about 6-10 seconds on the negative phase. The spotter will help a lot with the positive part of the movement then repeat.

## COMPLEXES

Complexes are combining two exercises into the one movement. Olympic lifts are complexes.

For example the clean and press starts out as a deadlift, then is transitioned into a clean, then is pressed like a military press. Combining multiple exercises in one is a great way to work out more muscles at once which is ideal for functional movement and helps burn a lot more calories and shock the muscles. This is an advanced technique so must be performed with caution.

## DIMINISHED-REST INTERVAL TRAINING

The way to apply this method is to time the rest you take between sets in your current workout. Each session, try to perform the same total number of sets and reps, but reduce your rest periods by 5-10 seconds each time. The benefit of this is to force your muscles to recover faster between sets which they will adapt to, become more efficient and grow.

## Example

Pull ups BW x 12 with 60 seconds rest in between.
Perform this exercise with the same weight and reps and drop the rest period down to 55-50 seconds and try to get the same amount out. If you are successful drop it even further next session.

## BLOOD FLOW RESTRICTION OR OCCLUSION TRAINING

This is a method where you will restrict blood flow to the working muscle by wrapping a wrap or band. The wrap is applied around the limbs to target either legs or arms.

To target the thighs and upper arms, wrap around the uppermost part of the muscles. To target the calves or forearms wrap tightness just below the knee or elbow. The wrap or band should be applied tight but not too tight. This method works by restricting blood flow to the veins, but not the arteries causing the blood to pool in the muscle. This means you want it to be tight enough to stop blood from leaving the muscle group but not too tight to stop blood flow to the muscle so if you are feeling a painful sensation or tingling then loosen the restriction. The wrap should be applied at approximately $70 \%$ of maximum muscle tightness, so tightness should be around 7/10.

To apply this method properly you should do a weight around $20-40 \%$ of your 1RM. Apply time under tension to increase blood flow and pump.

- This method although doesn't exert the same amount of output is quite painful. It should not be in place of a strength based routine but a method that can be allied if you are injured or too fatigued or run down to move the weight you can on your best days.

The reason this method has been has hype behind it is because the restriction causes an increase in cell swelling. When your cells swell, they sense danger and eventually adapt, restructure themselves and get larger. It also can trigger protein synthesis by trapping lactic acid into the muscle which is actually anabolic.

## Example would be a bicep curl

If you could bicep curl 40 kg for 7 that would be $80 \% 1$ RM halve this for $40 \% 1$ RM or even less.
Tie the wrap just above the bicep and under the shoulder at $70 \%$ maximum tightness.
Perform your regular set of bicep curl at a slower tempo and feel the blood swell up into the bicep.
Painful pump but an interesting method to shake things up. If you are not confident on how to apply this method do not attempt it. Also consult a physician and get blood work done before performing this exercise.

## INTERVALS

Intervals are a method that involves a series of low-to-high intensity exercise workouts interspersed with rest or relief periods. Any style of session can be made with intervals," often using time or rep ranges as a guide to follow.

## An example of intervals would be:

5 stations: skipping, boxing, squats, burpees and stair springs all performed for 30 seconds with 30 seconds rest in between. Then repeated for a certain number of sets eg. 3-5.

Intervals can be done with fast and slow or anaerobic to aerobic exercise, or in the case of HIIT (High Intensity Interval Training) you would exert a maximum output for a short burst then rest.

For example a 50 m sprint then rest for a $45-60$ seconds. This method is great for burning bodyfat and a form of cardio that your body does not adapt to which aids in better results and a faster metabolism.

## TABATA WORKOUTS

Consist of eight, 20-second high intensity rounds followed by 10 seconds of rest. In total, the workout is just four minutes long.

## Here is an example tabata workout that can be done at home.

 This is a great method for minimal time and minimal equipment.- 20 seconds skipping
- 10 seconds rest
- 20 seconds squat-jumps
- 10 seconds rest
- 20 seconds push-ups
- 10 seconds rest
- 20 seconds burpees
- 10 seconds rest
- Repeat x2


## CONCLUSION

All of these methods can be used in your current training routine with the same exercises to enhance your workout.

In this guide particular exercises and weights were used as an example. This by no means you need to do those particular weights or exercises for the method to be effective. Always choose a weight that you can move comfortably, with full rom and complete muscle connection. Lifting a weight you cannot lift will increase the risk of injury and slow progression to your desired results.

Do not jump the gun, make sure you have the fundamentals of lifting down before applying advanced methods. If these techniques are applied properly they will excel your results.

Apply these in your training and in time I'd love to hear all about your progress.
Train hard, train safe and enjoy the GAINS.

