**Weight/Strength Training Advanced Techniques**

Advanced techniques are used to boost the intensity of a workout, improve muscular endurance and shock your body to prevent a plateau. Some of these kinds of training can also enhance fat loss, and because in many of them incorporates very little rest you also get some cardiovascular benefits. In addition, these techniques all force more blood into your muscles, which helps deliver nutrients and amino acids to the tissues and accelerates the repair process. These techniques can be intense, so use them **sparingly**. Overuse can lead to overtraining.

Cheat sets – Continuing to use good technique on an exercise but recruiting other muscle groups to help in the start or completion of said exercise, allowing you to complete more reps for the target muscle.

Circuit Training – is a form of body conditioning or resistance training using high-intensity aerobics in conjunction with weights. It targets building strength and muscular endurance simultaneously. An exercise "circuit" is one completion of all prescribed exercises in the program. Circuits normally involve sub maximal weights, high repetitions, and short durations of rest between exercises/sets.

Drop Sets/Stripping Sets – A **drop set** is basically an extended set of a move, usually performed as the last set of that exercise as a burnout. Once the first repetitions of the exercise are completed the load is lightened by 10% (approximately) for further repetitions to be completed.

Giant sets – A giant set is a group of four or more exercises that target one part of the body.

High Intensity Training (HIT) – Training focuses on performing quality weight training repetitions to the point of momentary muscular failure. Normally one set performed at a moderately slow pace (eccentric). Often times no more than one exercise per body part.

High Intensity Interval Training (HIIT) –

Interval training – is a type of training that involves a series of low- to high-intensity exercise workouts interspersed with rest or relief periods. The high-intensity periods are typically at or close to anaerobic exercise, while the recovery periods involve activity of lower intensity.Varying the intensity of effort exercises the heart muscle, providing a cardiovascular workout, improving aerobic capacity and permitting the person to exercise for longer and/or more intense levels.

Negatives (Eccentric) – Lowering of the load at a slow pace (2, 4, or 8 seconds), after a couple of repetitions you must have a spotter to help you raise the weight back into place before another repetition can begin. Can also be done with a weight greater than your maximum (Forced Negatives) from the beginning as long as you have one or more good spotters.

PNF or Proprioceptive Neuromuscular Facilitation Stretching - a way of stretching agonist-antagonist muscle groups. A muscle is first stretched (contracted), and then stretched while relaxed. It is a force against muscles. Most of the time it requires a partner and physical therapists use this: a) isometric phase (b) stretching phase.

Power Factor Training - Power and work output are believed to be important parameters that can stimulate muscular hypertrophy/strength. This theory/style of lifting is noted for its use of a partial range of motion and static contraction exercise programs. Basically by doing high weight partial repetitions you will force the muscle to grow and become stronger than using lower weight with full repetitions. Particularly beneficial to strength-speed athletes.

1. Power factor (PF): A measurement of the intensity of muscular overload during an exercise.
2. Power Factor = Weight / Time.
3. Weight = Total amount weight lifted in lbs. (from multiple reps, aka - volume)
4. Time = Total time in minutes.

Supersets – A superset is performed when two exercises are performed in a row without stopping/rest, supersets are really an excellent hypertrophy method. You can do agonist supersetting which is the pairing of two exercises for the same muscle. For example, you can superset bench press with dumbbell flyes, squats with leg extensions, and leg curls paired with Romanian Deadlifts. Usually agonist supersetting is a combination of a compound movement with an isolation movement. You can also do antagonist super setting which is the pairing of two different muscle groups that are proximal to each other (i.e. chest-back, biceps-triceps, and quadriceps-biceps femoris) within your superset. The third type of superset is the staggered superset where you work out two completed different body parts (unrelated to each other in their anatomical function/work), such as shoulders and gastrocnemius.

Tri-Sets – A group of three exercises to target one muscle group. Little to no rest between exercises.

¼ Reps/Partial Reps – At the end of the set adding ¼ or partial reps. Works the strongest part of a muscles range, but causes muscle fiber recruitment due to fatigue/overload.