

## **Sets and Repetitions**

A Repetition is referred to as a Rep and is a single lift of the weights. A group of Reps are called a Set. An exercise is generally composed of 3 to 4 Sets.

The amount of weights to use is dependent on the goal of the participant and the fitness level. If the goal is to build muscle at the fastest rate then 6 to 8 Reps should be done with a heavier weight. If the goal is to simply tone or maintain the existing muscle strength then 12 to 16 Reps should be done with a lighter weight. The table below shows the 8 to 12 intermediate goals:

Participants should never use the heavy weight category if they have not lifted before or if significant amount of time has passed since they have last trained. When initially beginning a training program it is recommended to use the Light category for a least 3 to 4 weeks before progressing to the medium weight level.

There are various methods for determining the amount of weights to incorporate into a training effort (Heavy, Medium, and Light). The 1 Repetition Maximum (1RM) method is determined by the highest weight that one can lift only once and not again. A percentage of this 1RM value is then calculated to use for multiple Reps and Sets. For example if the participant can bench press 150 lbs as a maximum effort and only once then the 1RM is 150 lbs. A percentage of this weight is used for the full complement of Reps and Sets. For the Light category, 50% of the 1RM is used.

Another method that can be used to determine the weight to use for a particular exercise is to simply estimate the initial weight. Do as many as you can. If your goal is to build muscle at the fastest rate, then if you can do more than 8 Reps then the weight is too light. If you can't do more than 6 Reps, then the weight is too heavy.

The following table details the number of Reps to use depending on the participant's strength training goals. In each case perform 3 to 4 Sets.

<b>REPS</b>	<b>WEIGHTS</b>	<b>%1RM</b>	<b>RESULTS</b>	<b>REST PERIOD</b>
6 - 8	Heavy	85%-90%	Building at the fastest rate	2 -3 minutes
8 - 12	Medium	70%-80%	Building/Toning	1 minute

12 - 16	Light	50%-65%	Toning	30 seconds
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## ***Variations of Sets and Repetitions***

All of the following systems are good for promoting muscle strength and endurance.

Form is critical in all weight training and particularly for each of the following variations:

- **One Set** - One set for each exercise. One or more exercises may be selected for each body part to be trained. Excellent for beginners and those with limited time.
- **Three Set** - Provides good results for most people regardless of their fitness goals. Most commonly used system.
- **Split Routine** - Alternate training days of specific muscle groups. Never train the same muscle groups two days in a row.
- **Pyramid Set** - Begin with heavy weights and low reps and end with high reps and low weight. Increases stamina.
- **Heavy Set** - Begin with a warm-up set of less than 50% of the intended maximum weight. Continue increasing the weight in each set to near maximum until the weight that can be lifted a maximum of 4 repetitions. Increases peak power.
- **Super Set** - Two exercises for one body part done consecutively with no rest in between. This technique can be applied to opposing muscles, i.e. quadriceps and hamstrings.
- **Tri Set** - Three consecutive exercises for the same body part.
- **Giant Set** - Five or more consecutive exercises.

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