

WEIGHT TRAINING STUDY GUIDE

A. Purpose of Weight Training

1. The purpose of our weight training program is to give you a thorough introduction to certain exercises performed in the weight room. Our goal is to teach you the correct technique to use on several machines and which muscles are benefitting from that particular exercise. We will not make you a world heavy weight lifting champion.

B. Benefits

1. Weight training can benefit every individual regardless of sex.
2. When a muscle is stressed beyond its normal demands, adaptations occur at the cellular level to meet the demands of that stress, and muscular strength and endurance improves.

C. Principles of Weight Training

1. A “**repetition**” is when you lift the weight once. If you lift the weight twice in succession without resting then you’ve done two “**reps.**” and so on. One “**set**” is doing a certain number of repetitions as a group then resting before moving onto another exercise or performing a second set of that exercise. If you do 10 repetitions of an exercise, rest for say 3 mins., then come back and do 10 more repetitions of that same exercise, then you’ve completed two sets. Completing at least two sets of one exercise, if not three sets per day is necessary to really improve muscular strength, muscle tone, and endurance.
2. With a proper program of weight training (actually stressing the muscles) and adequate rest, a muscle will get stronger over a period of time.
3. The weight training or “**stress program**” needs to be “**progressive**”, which means you must either add weight or increase the number of repetitions for each set as the weeks go by and you get stronger.
4. When a muscle is stressed or worked, it gets stronger and larger. This is called “**hypertrophy.**” When a muscle is not used it gets smaller, and the term for this is called “**atrophy**”.

D. How to Lift Properly

1. A slow controlled movement is recommended when lifting. Do not jerk, squirm, twist, or lean when lifting, and DO NOT drop or slam the weights when lifting!
2. Lift through the “**full range of motion**”, or else reduce the weight so you can. Not lifting through the full range of motion will actually shorten the muscles over time which is not good.
3. **How you lift** is more important than **how much you lift**. In the long run, proper form is more important than how much you lift.
4. Each repetition should take between 3-6 seconds to complete: 1-2 seconds during the lifting phase, and 3-4 seconds during the lowering phase. You should exhale when you lift, and breathe in when you lower the weight.
5. “**Partner assisted reps**” are a good way to “**work to failure.**” Working to failure means doing a certain number of reps. or lifting a certain amount of weight to the point when you can do no more. In this system, your partner gives you a little help on the last couple of reps. so you can really work your muscles hard. Having your partner help you when needed and lifting to the “point of failure” is very beneficial for the lifter.
6. In general, there are two types of workouts. Doing a high number of reps (12-15, or more) with less weight is designed to build **muscular strength and endurance**. Lifting heavier weight while doing a low number of reps., say only 1-3 reps., is designed to build bulk.
7. For beginning weight training, the following program is recommended: Do 2 sets of 8-12 reps. if you can do more than 12 reps. within a 20 second time period in any one set, then add weight the next time. If you cannot perform 8 reps. within 20 seconds or so, then reduce the weight the next time.
8. Doing 8-12 reps. in approximately 20 seconds is a good way to develop muscular strength, muscle tone, and endurance.

F. Major Muscle Groups: Learn; 1) the major muscle groups 2) Their location on the human body 3) And which weight lifting exercises benefit which muscles. Below is a list of the major muscle groups and the weight lifting exercises/machines that benefit them...if you work hard.

1. Pectoralis Major (Pecs)	Bench Press
2. Biceps	Lat Bar (narrow & wide grip), pull-ups, arm curls
3. Triceps	Tricep pull-downs, Bench Press
4. Deltoids	Bench press, Fly (straight arm raises)
5. Abdominals	Sit-ups, Knee/Leg Lifts
6. Obliques	Medicine Ball
7. Quadriceps (Quads)	Leg Press, Leg Extension, Squats
8. Hamstrings	Leg (hamstring) curls
9. Gastrocnemius	Calf Raises
10. Gluteals (gluts)	Leg Press, squats
11. Erector Spinae Muscles	Back Arches (lower back machine or exercises)
12. Latissimus Dorsi (Lats)	Pull-Downs, pull-ups, Shoulder Press
13. Trapezius	Shoulder Rolls, Fly (Straight Arm Raises), Shoulder Press
14. Brachioradialis	Wrist Roles

