

Strength Training Guidelines

By Dave "Coach K" Kamienski

1. Always warm-up at least 5 minutes before engaging in any resistance training. Any cardio-vascular exercise machine, especially one involving arms, will suffice.
2. Recommended **Repetition** (and **Duration**) targets for exercises based on goals. A repetition is one complete movement – muscle contraction and lengthening - of a given exercise through out the full range of motion. The last value represents the amount of **weight** to be used for the exercise, and is expressed as a percentage of the maximum possible amount that could be lifted 1 time.
 - Building Strength: 10-12 (45-60 seconds); 75-80%
 - Strength-Endurance: 12-15 (60-75 seconds); 60-75%
 - Endurance-Cardio/Conditioning: 15+ (45-90 seconds); 50-60%

The primary push/press, pull/row, or raise/lift phase of the repetition should take 2-3 seconds and the release or lengthening phase should take 3-4 seconds.

3. A **Set** is multiple continuous repetitions of the same exercise on a resistance machine, free weight station, or by lifting/pulling dumbbells, cables or barbells. Body weight exercises (such as pushups, row-ups, step-ups, etc) can be included as well. A **workout** is comprised of multiple sets across multiple muscle groups.
 - Beginners: 1 **set** per muscle group; overall workout, target 10-12 **sets**
 - Intermediate: 2-3 **sets** per muscle group; overall workout, target 16-20 **sets**
4. **Rest/recovery** time *between sets* based on goals:
 - strength gains: 1-2 minutes
 - endurance: 30-45 seconds
 - cardio/conditioning: 10-15 seconds
5. **Rest/recovery** time *between strength workouts* is 48 hours or more for a given muscle group. Consecutive strength training days are fine as long as different muscles are targeted.
6. Sample workout sessions based on different number of days per week:
 - i. *Day 1*: Upper Body & Arms; *Day 2*: Legs, Hips & Core
 - ii. *Day 1*: Upper Body & Core; *Day 2*: Arms, Legs & Hips
 - iii. *Day 1*: Shoulders, Lats, Triceps; *Day 2*: Chest, Back, Biceps;
Day 3: Legs, Hips & Core
 - iv. *Day 1*: Upper Body & Arms; *Day 2*: Legs; *Day 3*: Hips & Core