

**Strength Training for Triathlon**  
Maximum Strength (MS) Phase  
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**Purpose:** Improve strength reserve and develop maximum force capabilities of muscles and tendons by improving neuromuscular recruitment patterns. In later phases this will be converted to muscular endurance and power.

**Frequency:** 2-3 times per week (2 if in first 2 years of strength training).

**Equipment:** Either free weights or machines. Free weights preferable.

**Load/Resistance:** For most exercises use 85-95% (80-90% if in first two years of strength training) of 1RM or the greatest load possible for 3-6 reps per set (note the exceptions to this below under "Exercises"). If using a 1RM percentage, check 1RM every four weeks for each exercise. It's OK to initially estimate loads and then adjust them as you progress, but start very conservatively. Increase resistance carefully in the first 3-4 sessions of maximum strength. Following that you should be able to increase loads by about 5% every 4-5 workouts.

**Sets:** 2-5    **Reps:** 3-6            **Recovery between sets:** 2-4 minutes.

**Important:** During recoveries stretch muscle group just worked before starting next exercise.

**Speed:** Slow to moderate emphasizing form.

**Progression:** Complete all sets of each before starting next. The first set for each exercise is the lightest. When you can complete all sets at 6 reps, increase load.

**Exercises:** In order of completion...

1. Hip extension (squat, step-up, or leg press)
2. Seated row
3. Crunches/abdominals ( choice of exercise, 20-30 reps with light load)
4. Personal weakness (hamstring curl or knee extension, 20-30 reps with light load)
5. Standing straight-arm lat pull down

**Phase Length:** 3-6 weeks.

**Warm-Up & Cool Down:** Warm-up on stationary bike/trainer or by running easily for 5-10 minutes. Cool down for 5-10 minutes spinning at 90+ rpm in light gear/resistance. Do not run immediately following this workout.

