

## Pumping Iron: Rules To Lift By

By: Curtis Cramblett, Physical Therapist, Cycling Coach, Strength and Conditioning Specialist

Ask any mechanic, and they will tell you that the best way to increase your car engine's gas mileage, increase its acceleration and max speed, while decreasing the time it takes the gas to get to the engine, is with regular maintenance and tune-ups of your car's engine and components. Well, your muscles (including your heart) are your body's engine and components and strength training is one of its forms of maintenance and growth.

Research has conclusively proven that with appropriate strength training, you can make all of the above happen for your body's engine. Imagine increases of 10-30 percent in:

- 1) Energy during and after a ride
- 2) Power - to climb hills with less fatigue
- 3) Cruising speed

However, like the maintenance on your car, your strength training needs to be specific to the components being used. This means to make improvements on your bike, your time in the gym needs to focus on strength gains in the way you ride, i.e. similar muscles and similar positions. Some of my favorite cycling specific exercises are:

For Legs (Quads, Gluteals, Calves, Hamstrings):

- Step ups
- Leg press
- Lunges
- Bridges using a large gym ball - feet on the ball, lifting hips into air
- Calf raises (sitting and standing)

For the Upper Body and Abdominals / Core :

- Modified push-ups face down on a large gym ball,
- Standing bent over rows
- Alternate arm lifts with your stomach on a large gym ball
- Standing or Seated Rows
- Side / Front Plank

When you first start your strength training program it should be oriented toward endurance and "training to train " -- This means:

- Sets: 2-3
- Repetitions: 15-20
- Rest between Sets: 30 seconds
- Days per Week: 2-3
- Weight: A feeling of light your first several reps becoming somewhat hard to hard by 15-20 reps

The above variables change depending upon the time in your season. As the season progresses, so will your strength training, increasing your weight as you decrease your repetitions. You will also increase your resting time between sets. Adjusting your strength training variables every four to six weeks will decrease your chance of injury and reduce the repetitiveness of doing the same thing over and over again.

Remember, when doing strengthening exercises, you should only feel a muscular fatigue or burn. Any pain outside of the muscle (i.e. joint discomfort) is a warning sign! Pain is your body telling you: "Continue, and I will make it so you can't continue ever again". Most of you will come to know the difference between a muscular sensation and joint pain.

Above all, have fun and be safe. Enjoy a lycra-free workout and its' benefits.

You can find the descriptions of most of the above mentioned exercises in Joe Friel's *Cyclists Training Bible* and *Strength Training for Cyclists*". You can also find more details on strength training on my website at [www.revolutionsinfitness.com](http://www.revolutionsinfitness.com)

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Licensed Physical Therapist  
Master Level Personal Trainer / Fitness Coach  
Expert Level Cycling Coach  
Certified Strength and Conditioning Specialist  
Certified Spinning Instructor

#### Resources List

1) Curtis Cramblett, PT, CSCS, Expert Level cycling coach, CAR 6,7 (510) 325-1884,  
[Curtis@RevoutionsInFitness.com](mailto:Curtis@RevoutionsInFitness.com)

#### 2) Books

- Nancy Clarks Sports Nutrition
- Serious Cycling, Long Distance Cycling, Precision Heart rate training, all by Ed Burke
- Cycling Past 50, Friel
- Indoor Cycling – Heart Rate Training, Sally Edwards
- Smart Cycling, Arnie Baker
- Road bike training, Fred Matheney