Complex Strength Training for Mountain Bike Racing

Power Endurance (PE) Phase ©1999 Joe Friel

Purpose: Develop greater sport-specific power by emphasizing the combination of speed and force.

Frequency: 1-2 times per week.

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

Load/Resistance: 40-60% of 1RM (note the exceptions below under "Exercises"). It's OK to initially estimate loads and then adjust them as you progress, but start conservatively. Should be able to increase loads by about 5% every other workout. The emphasis, however, is on power, not strength.

Sets: 2-4 Reps: 8-15 Recovery between sets: 2-4 minutes.

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

Phase Length: 2-6 weeks

Speed: Concentric movements (ascending) are fast, but under control. Eccentric (descending) are slower.

Progression: Complete all sets of each exercise before starting second exercise. The first set of each exercise is the lightest.

Warm-Up: Warm-up on stationary bike/trainer, by running, or jumping rope easily for 5-10 minutes.

Exercises: In order of completion:

- 1. Hip extension (squat, step-up, or leg press)
- 2. Lat pull to chest
- 3. Personal weakness (knee extension, hamstring curl, biceps curl or triceps extension—20-30 reps with light load as in AA phase)
- 4. Seated row
- 5. Crunches/abdominals (choice of exercise, 20-30 reps with light load). NOTE: These may be done on an incline board playing "medicine ball catch" with a standing partner. Or do them on the floor with both partners doing crunches and playing medicine ball catch at the same time.

Phase Length: 2-3 weeks

Cool Down: Cool down for 5-10 minutes spinning at 90+ rpm in light gear/resistance.