

Goals:

800-meter race development. Balance raw speed with high anaerobic capacity, focusing on lactate tolerance, max velocity, and specific aerobic endurance.

Key Strategies:

Prioritizing high-intensity speed, building aerobic strength through tempos, and utilizing race-pace workouts e.g. 4 x 500 with full recovery, tailored to the specific energy needs of the 800m and 400m.

Specific Considerations:

Know what you are currently capable of running a rested 400 and 800. Pinpoint what your goal paces should be for that pace 400 and 800 every three weeks.

For instance, if you are currently a :56 400 and a 2:15 800 athlete, begin to complete sets that anchor the corresponding paces through the duration of a non-max velocity set. As you approach the end of a three-week cycle, set your goal paces slightly faster.

Training Principles for 400/800

- **Max Velocity Training:** Consistent 30-60m accelerations/sprints, year-round, to improve top-end speed.
- **Special Endurance Develops Anaerobic Power:** High-intensity workouts (e.g. 4 x 300 at 400m pace or 4 x 500 at 800m pace) with long recoveries to build anaerobic power.
- **Lactate Tolerance:** High intensity efforts generate the lactate acid that your body needs to tolerate. Doing so with shorter rest is the key component for LaTol workouts. High-intensity should be at or near race pace. 8 x 200 at goal 800 pace with short rest, perhaps only :30 rest.
- **Aerobic Development:** Crucial for 800m runners, including moderate tempo runs (1-2 miles), Fartleks (20 min), and over-

distance training (e.g., 3000m-5000m runs) to build endurance without compromising speed.

- **Workout Progression:** Start with higher volume/lower intensity, progressing to lower volume/higher intensity (race pace) as you move through the summer, such as moving from 12x200 @ 32/35 to 12x200 @ 29/32.
- **Strength Training:** Two times a week, focusing on high-weight, lower-volume multi joint lifts (squats deadlifts), allowing recovery for fast days.
- **Plyometrics:** In conjunction with strength training or as a stand-alone component to improve weaknesses. Jumping jacks, jump rope, jump squats, split lunges, depth jumps (jumping from small elevation than bounding higher), lateral jumps (or look up “speed skaters” drill), A-skip, B-Skip, high knees,,,
- **Easy Days:** Emphasize that recovery days are truly easy to allow adaptation to high-intensity training. This is the biggest mistake I see athletes make. You have to recover before you can advance in your training program
- **Speed vs. Endurance Focus:** I might need more information about your current fitness and how you are progressing to accurately discern what percentage of work should be speed vs endurance. My impression is that you are very close to a 50/50 athlete; that is, you are equally gifted with Type 1 and Type 2 athletic capabilities. "Type 1" (endurance-based) need more speed work, while "Type 2" (speed-based) need more endurance/VO2 work.

Additional Sample Workouts

Some of these workouts I did with our 800-3000/5000 runners at UPenn many years ago.

Max velocity sets: All about pure speed and TOP SPEED. More about training the nervous system rather than moving the physiological needle

A: Top speed fly-ins – Build up speed for 20-30 meters, then maintain top velocity for 10-20 meters, then recover with easy (gradual deceleration) run of 20-30 meters. Recover additional distance if needed (to consistently hit top velocity).

B: Work with wickets - Wicket runs are a sprinting drill using mini hurdles to improve posture, stride frequency, and force production

C: 4 x 40 meters at max with :90 rest, Rest 5:00, 4 x 40 meters at max with :90 rest

Speed endurance sets: Training your ability to sustain pace for a really long time

A: 3-4 rounds of 3 x 200 @ 800 pace or faster with :45-:60 rest. Take additional 5:00-8:00 rest between rounds.

B: Mix up the distances... 2 rounds of 200-400-200 or 200-300-200-100 @ pace 800 with :60-:90 rest between. Take additional 8-10 mins between rounds.

C: 2-3 rounds of 600 @ 3-4 slower than 800 pace, rest :90, 400 @ goal pace, rest :90, 200 @ 800 goal pace. 8:00 -10:00 between rounds.

Anaerobic power sets: Training your ability to produce a lot of power very quickly.

A: 6-8 rounds of 150 FAST with 2:00-3:00 recovery

B: 3-4 rounds of 3 x 60 as fast as you can run with 2:00-3:00 recovery. Additional 10 mins between rounds.

C: Accelerations... 5-6 rounds of 4 x 40 going from standing position to full acceleration (trying to reach top speed) with :90-2:00 rest between ea 40 and 6:00-8:00 between rounds.

Lactate tolerance sets: All about running strong when you are tired.

A: 2 rounds of 2 x 400 @ 800 pace with :60 rest. Additional 6:00-8:00 between rounds.

B: Broken 800s... 2-3 rounds of 2-3 x 500 @ 800 pace with rest :30-:60 then 300 @ 800 pace with :30-:60 between repeats and 6:00 rest between rounds.

C: 2-3 rounds of 400-300-200 (distances don't have to add up to an 800) @ 800 pace with :90 rest between each distance. 6:00 rest between rounds.