400 / 800 Meter Training for High School Athletes

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The 400/800 Challenge

- The 400 is NOT a sprint like the 100/200
- The 800 is NOT a distance race like 1600-5K
- My observation = many coaches lean too heavily on their background
 - Sprint coaches- not enough endurance for 400
 - Distance coaches- not enough anaerobic work for 800

Classifications / Definitions

- Aerobic
- Anaerobic
- Speed Development 400 multiple days year-round, 800 once/week year-round
 - 40-60 yards accelerations / full speed / "swing down"
- Volume per week
 - 400 runners: 15-20/week
 - 800 runners: 30-40/week
- Avoid no-man's land ("prolonged sprinting")

Siblings and Cousins

- 400 and 800 are siblings (complex percentages)
- 400-meter dash is 60% anaerobic / 40% aerobic
- · 800-meter run is 60% aerobic / 40% anaerobic
- 100/200 and 1600 are cousins of the 400

Heart of the Team

- Four training groups
 - Short sprints (100/200) including 4x1, 100/110 hurdles
 - 400 including 4x4 and 4x8, 300 hurdles
 - 800 including 4x4 and 4x8
 - Distance (1600/3200) non-relay runners
- Why are the 400 and 800 the heart of the team? High versatility.

What are they missing?

- 400 athletes typically have speed, lack race-specific endurance
- 800 athletes typically have endurance, need race-specific speed
- Importance of cross country season (for 800)
- Athletes win from their strengths, but you cannot ignore their weaknesses
- Over-riding principle: if leg speed is equal, then it comes down to aerobic strength

400 Meter Dash Training

- Their own training group
- What happens after 40 seconds?
- Volume 200s
- Overdistance Intervals
- Event Day workouts

400-Specific Endurance

- We are not training distance runners
- Volume 200s = 2000-3200 meters to begin, progress down from there
- Overdistance intervals = 2000 meters max, decreasing from there
- Recovery time is key

800 Meter Run Training

- Higher need for aerobic endurance
- Ability to "tolerate" lactate buildup at 15+ mph (boys), 13+ mph (girls)
- Two types of 800 runners -- XC and non-XC
- Threshold runs
- Long runs (early in training)
- VO2 Intervals

800-Specific Endurance

- Winter pretty vanilla, long runs, threshold runs (tempos/fartlek runs)
- VO2 intervals starting in January (4-5k in volume)
- Race pace intervals a couple times in March, a lot in April/May
- Fast intervals faster than 800 pace, May

My favorite April & May workouts for 800 runners

- Race Pace Intervals 6-8x300 (3 minute rest), 3-4x400 (5 minutes rest)
- Down Ladders 600, 500, 400, 300, 200 (avoid the 100 no-man's land)
- Sebastian Coe accelerations workout (200, 220, 240, 260, 280, 300)

My favorite April & May workouts for 800 runners

- Split 800s (with variations)
 - 500 hard, rest 1 minute, 300 hard 3 sets, 5-8 minutes rest in between
 - First part = hard enough to build up some lactate
 - 600 / 200 is harder to hit right pace on first part
 - Split 700s 500/200 or 400/300
- Balance fast intervals workouts with races -- both take a toll on the athlete

Peaking / Tapering

- Longer race distance = more important it is to NOT taper (reduce volume)
- Cross country = don't taper ... the 5K relies on 95%+ aerobic energy
- Solutions:
- 400 Reloading Weeks (every 3rd week in April/May)
- 800 Limit the reduction and delay until 10-14 days before championship meet

400 runners going up to 800/4x800

- Tempo runs (1-2 miles)
- Fartlek runs (20 minutes)
- Long(ish) runs (30 minutes at conversational pace)
- An extra rep of overdistance intervals (ex: 3x800)
- Incorporate ladders, with varying distances (ex: 500-down ladder)

800 runners going down to 400/4x400

- They need more work @ 400 race pace (speed development days)
- They need to regularly run on 4x4s on meet days
- Other than that, don't change much