## Training the 800m runner

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## Context:

Assumption High School is an all-girls Catholic school in the suburbs of Louisville Typical students are upper-middle class and above
Most of our athletes have access to crosstraining equipment (elliptical, stationary bike) Lots of variation with training/history and racing background

We use the following progression with the majority of our athletes
Freshmen: 800, 1600 if able
Sophomores: 800, 1600, targeted 3200 if able
Juniors: 800, 1600, targeted 3200
Seniors: 800, 1600, targeted 3200
All of our Varsity athletes run at least a few $400 \mathrm{~s} / 4 \times 400 \mathrm{~s}$, and 200 s

We impose volume limits on training - typically based on grade level

How the 800 fits within the goals of our program:
(1) We use the 800 as a teaching tool, a condensed version of every race

First 1/4: get out
Second 1/4: settle in
Third 1/4: big decisions (don't fall asleep)
Last 1/4: close
(2) We seek to develop racing range with as many of our Varsity athletes as possible, and seek not to peg athletes into longer races

- Typical race progression over time is shorter to longer
- Easier to add strength/endurance to speed than speed to strength/endurance

Types of runners we get in the 800:

- Long Sprinters who step up (400/800)
- $\checkmark$ Distance runners who step down (800/1600/3200)

Other points of emphasis:

- Recognize that the typical race involves positive splits
- Understand how to compete with people, not focusing on time/splits
- Ability to respond/adapt quickly is critical in the 800


## Training format

A standard periodization approach is as follows:
General Preparation phase - introduction of aerobic training
Specific Preparation phase - introduction of anaerobic work
Pre-Competition phase - continued application of all elements of training
Competition phase - transition to higher quality workouts with longer rest

Some terminology:
Macrocycle: season-long training plan
e.g. Cross Country season training plan

Mesocycle: training block with a specific developmental goal
e.g. General Prep

Microcycle: period of training that contains the elements you use to achieve a developmental goal (e.g. if the developmental goal is developing anaerobic ability, the microcycle may include anaerobic workouts at various paces, recovery runs, sprint work). These elements are then effectively repeated in a way that helps us achieve the developmental goal of a particular phase.

## Aerobic training

| Training: | Pace | Workout Distance |
| :--- | :---: | :---: |
| Recovery run | $60-65 \%$ of VO2 max pace | $30-50 \mathrm{~min}$ |
| Long runs | $70 \%$ of VO2 max pace | $50 \mathrm{~min}-2 \mathrm{hrs}$ |
| Tempo runs | $80-88 \%$ of VO2 max pace | $20-30 \mathrm{~min}$ |
| VO2 max runs | $97-101 \%$ of VO2 max pace | $600-3200 \mathrm{~m}$ |

Speed training

| Training: | Pace | Workout Distance |
| :--- | :---: | :---: |
| Max Speed | ${ }^{\sim} 114 \%$ of 400 m race pace | $30-70 \mathrm{~m}(6-10 \mathrm{sec})$ |
| Speed Endurance | ${ }^{\sim} 105 \%$ of 400 m race pace | $60-150 \mathrm{~m}(10-25 \mathrm{sec})$ |
| Special Endurance 1 | $95-100 \%$ of 400 m race pace | $150-300 \mathrm{~m}(25-50 \mathrm{sec})$ |
| Special Endurance 2 | $95-100 \%$ of 800 m race pace | $300-600 \mathrm{~m}(45 \mathrm{sec}-2 \mathrm{~min})$ |

Energy system contributions by race distance

| Race distance | \% VO2 max | \% Aerobic | \% Anaerobic |
| :--- | :---: | :---: | :---: |
| 400 m | $130-140 \%$ | $40-45$ | $55-60$ |
| 800 m | $115-130 \%$ | $60-70$ | $30-40$ |
| 1500 m | $105-115 \%$ | $80-85$ | $15-20$ |
| 3000 m | ${ }^{\sim} 100 \%$ | $85-90$ | $10-15$ |
| 5000 m | ${ }^{\sim} 97 \%$ | $90-95$ | $5-19$ |

## General Prep phase

6-7 week training period, consists of 6-7 $\times 7$ day microcycles
Primary emphasis: aerobic development
Secondary emphasis: prepare for transition to anaerobic work
Training modalities: hills, tempo runs, VO2 max pace workouts, max speed

## Specific Prep phase

6-7 week training period, consists of $4 \times 12$ day microcycles
Primary emphasis: anaerobic development
Secondary emphasis: introduction of racing and developing long sprinting ability

## Training modalities:

- Continue with: hills, VO2 max pace workouts, max speed
- De-emphasize tempo-paced running
- New stuff: Special Endurance 2, Special Endurance 1, Speed Endurance
- Interval training w/ incomplete rest
- SE-1 \& Speed Endurance: run as both interval training and fast reps
- Races: indoor meets


## Pre-Competition phase

5 week training period, consists of $3 \times 12$ day microcycles
Primary emphasis: balancing the various facets of training
Secondary emphasis: feeling confident at fast reps, developing a competitive race mentality

## Training modalities:

- Continue with: VO2 max pace workouts, max speed, SE-1, SE-2, Speed Endurance
- Eliminate hills, low emphasis on tempo-paced running
- Interval training w/ incomplete rest
- SE-1 \& Speed Endurance: run as both interval training and fast reps
- Races: increasingly important outdoor meets (e.g. Eastern Relays, Sundown)


## Competition phase

3 week training period, consists of $2 \times 12$ day microcycles
Primary emphasis: maintaining quality with more complete recovery
Secondary emphasis: preparation for big races

## Training modalities:

- Continue with: VO2 max pace workouts, max speed, SE-1, SE-2, Speed Endurance
- Eliminate tempo-paced running
- Interval training emphasis shifts to faster pace w/ more complete rest
- Races: most important outdoor meets (e.g. Regional, State)


## Training concerns

Overall training plans are determined by where your 800 m athletes are coming from, and in understanding their various strengths and weaknesses. Training age may also determine volume of the workout.

## Long sprinters

Training expectations: lower distance expectation split time with the sprinters and distance runners

Race distances: 200, 400, 800

Concerns: $\quad$ problems with speed reserve on the high end (vVO2 max) long sprinters will struggle more with SE-2, VO2 max ** consider shorter reps w/ similar volume (see below)

Example 1: $8 \times 400 \mathrm{~m}$ workout at $95 \%$ of 800 m race pace ( 200 m jog rest)

## Adapted versions:

- $2 \times 4 \times 400$ workout @ same pace, 200m jog between reps, 400 m jog between sets
- $16 \times 200 \mathrm{~m}$ workout @ same pace, 100m jog between reps
- $2 \times 8 \times 200 \mathrm{~m}$ workout @ same pace, 100 m jog between reps, 400 m jog between sets

Example 2: $6 \times 800 \mathrm{~m}$ workout at VO2 max pace (3 min rest)
Adapted versions:

- $2 \times 3 \times 800$ workout @ same pace, 3 min rest between reps, 6 min rest between sets
- $12 \times 400 \mathrm{~m}$ workout @ same pace, 90 sec rest between reps


## Middle distance runners

Training expectations: higher distance expectation
General Prep w/ distance runners start separating into their own group in Specific Prep

Race distances: $\quad 800,1600$ (occasional $4 \times 400$, possible 3200)

Concerns: problems with speed reserve on the low end (slow max speed) understanding the importance of fast reps ** timing all fast reps and reporting results

## Speed Training

Some workout examples from our practices

| Speed Training | Examples | Recovery |
| :--- | :--- | :--- |
|  |  |  |
| Speed* |  |  |
| Fast 40s | $2 \times 40 \mathrm{~m}$ @ 100\% | slow walk back to start |
| 60 m sprints | $2 \times 60 \mathrm{~m}$ @ 95-100\% | slow walk back to start |
|  |  |  |
| Speed Endurance |  | $8-10$ minutes |
| 90 m sprints | $1 \times 90 \mathrm{~m}$ @ 95-100\% | $10-12$ minutes |
| Fast 150s | $2 \times 150 \mathrm{~m}$ @ 100\% | $3-4$ minutes |
| 150 m reps | $6 \times 150 \mathrm{~m}$ @ 95\% |  |
|  |  |  |
| Special Endurance I | $2 \times 200 \mathrm{~m}$ @ $100 \%$ | $12-15$ minutes |
| Fast 200s | $5-6 \times 300 \mathrm{~m}$ @ 90-95\% | $3-4$ minutes |
| 300 m reps | $1-3 \times 300 \mathrm{~m}$ @ 100\% | $12-15$ minutes |
| Fast 300s | $1-2$ split 400s @ 100\% | 4 minutes/10 minutes |
| Split 400s (200/200) |  |  |
|  |  | 1 minute/10-15 minutes |
| Special Endurance II | $2-3 \times 2 \times 300 @$ goal 800 pace | $2-3$ minutes |
| Pairs of 300s | $8 \times 400 @ 95 \%$ of 800 m pace |  |
| 400 m reps |  |  |

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## Race specific training

Training designed to prepare athletes for the specific demands of an important race

Example 1: $3-4 \times 2 \times 300$
This workout is run as pairs of 300 s , designed to replicate the demands of a typical 800 m race. The basic race format is 1 min rest between reps, with fuller recovery between sets ( $6-10 \mathrm{~min}$ ) Variations on this workout:

300 \#1: faster than race pace
300 \#2: hang on for dear life
300 \#1: average race pace
300 \#2: below race pace

Example 2: 2-3 x 300-300-200
This workout is run as race-pace 300s, followed by a finishing 200 at below race pace The basic race format is 90 sec rest between reps, with fuller recovery between sets ( $6-10 \mathrm{~min}$ )

Example 3: 200 m buildups
This workout is broken down into segments: first 50m, second 50m, final 100m
Group runners as slower runners in front of faster runners
Runners run increasingly faster over each segment and use the segments to replicate positioning in the final 200 m of a race


[^0]:    * not a stand-alone workout

