

## 800m Training Theory

Training the 400-800 Athlete with a Vertical Integration Model.



## Vertical Integration

- ◆ Concept that you work all elements of training to some degree throughout the entire year.
- ◆ Theory is opposed to classic periodization
- ◆ Speed reserve is an important component
- ◆ As the season draws closer to peak competition you deemphasize less specific training factors and emphasize what you feel is important
- ◆ 10 day training cycle
- ◆ 2 cycles "ON" 1 cycle "OFF"

## TRAINING TERMS

- ◆ ALACTIC SPEED – 0-60M 95%+ REST 3 MIN SET REST 8-10 MIN  
MAX VOLUME 250M
- ◆ SPEED ENDURANCE – 60-150M 90%+ REST 5-8 MIN 1 SET ONLY  
MAX VOLUME 450M
- ◆ SPECIAL ENDURANCE – 250-600M 90%+ FULL REST!!!  
MAX VOLUME 1000M

## Training Terms

- ◆ TEMPO – 60-70% GENERALLY 3:1 OF TIME RUN  
VOLUME 1200-3600M
- ◆ SHORT REST TEMPO 60-70% 1:1 OR 2:1 OF TIME RUN  
VOLUME 2000-4000M
- ◆ INTENSIVE TEMPO – 80-85% REST 5-8 MIN  
VOLUME 600-1000M

## Training Terms

- ◆ FLEX DAY – AN INTERCHANGABLE WORKOUT DAY IN THE TRAINING CYCLE BASED ON WHAT THE COACH FEELS THE ATHLETES NEED
- ◆ MED BALL – A SERIES OF MED BALL LONG THROWS FOR COORDINATION
- ◆ SINGLE RESPONSE JUMPS – IN PLACE JUMPS, DEPTH JUMPS, HURDLE HOPS
- ◆ MULTI RESPONSE JUMPS – ENDURANCE JUMPS, SL, BOUNDING
- ◆ CORE – STABILIZATION EXERCISES THAT FOCUS ON TRUNK FLEXION, TRUNK EXTENSION, TRUNK ROTATION, TRUNK LATERAL FLEXION

### Cycle Setup

	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6/7
AM	THRESHOLD RUN ON TREADMILL CORE WORK	30 MIN EASY WEIGHT ROOM	OFF	THRESHOLD ON TREADMILL CORE WORK	40 MIN EASY	50-60 MIN CONVERSATION PACE
PM	INTENSIVE TEMPO MULTI RESPONSE JUMPS	SHORT REST TEMPO	30-40 MIN E MED BALL	SPECIAL ENDURANCE	EXTENSIVE TEMPO	
	DAY 8	DAY 9	DAY 10			
AM	THRESHOLD ON TREADMILL CORE WORK	30 MIN EASY	OFF			
PM	FLEX DAY SINGLE RESPONSE JUMPS	HILLS	40 MIN EASY			

### In-Season Adaptation

	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6/7
AM	THRESHOLD RUN ON TREADMILL CORE WORK	30 MIN EASY WEIGHT ROOM	OFF	1/2 THRESHOLD ON TREADMILL CORE WORK	40 MIN EASY	50-60 MIN CONVERSATION PACE
PM	INTENSIVE TEMPO MULTI RESPONSE JUMPS	SHORT REST TEMPO	30-40 MIN E MED BALL	SPECIAL ENDURANCE SHAKEDOWN	EXTENSIVE TEMPO PRE-MEET DAY	RACE
	DAY 8	DAY 9	DAY 10			
AM	THRESHOLD ON TREADMILL CORE WORK	30 MIN EASY	OFF			
PM	FLEX DAY SINGLE RESPONSE JUMPS	1/2 INTENSIVE TEMPO/ RHYTHM WORK	40 MIN EASY			

### Jack Daniels Threshold Training

### HOW TO IMPLEMENT JD THRESHOLD TRAINING

- ◆ DETERMINE "DATE PACE" FOR 800M
- ◆ ALL WORK IS DONE ON TREADMILL
- ◆ TRAINING INCREMENTS OF 3-5 MIN
- ◆ RECOVERY IS ALWAYS 1 MIN
- ◆ TOTAL VOLUME IS 15-25 MIN OF WORK

### EXAMPLE

2:02 800M

DESIRED GOAL

1:56 800M

- ◆ 15 WEEKS TRAINING
- ◆ WEEK 1-3 PACE 5:44
- ◆ WEEK 4-6 PACE 5:40
- ◆ WEEK 7-9 PACE 5:36
- ◆ WEEK 10-12 PACE 5:32
- ◆ WEEK 13-15 PACE 5:28
- ◆ SAMPLE WORKOUT CYCLE
  - ◆ 6 X 3MIN
  - ◆ 3-4-5-4-3 MIN
  - ◆ 4 X 4 MIN

### SAMPLE WORKOUT CYCLE

	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6/7
AM	4 X 4MIN T TRX	30 MIN EASY WEIGHT ROOM	OFF	3,4,5,4,3 T PLANK CIRCUIT	40 MIN EASY	50-60 MIN CONVERSATION PACE
PM	5 X 350M @ 400M TIME 3 X 5 SL BOUNDS	2 X 10 X 200M R1 1 MIN SET 8-10	30-40 MIN E MED BALL	2 X 450 @ 90% FULL REST 10-15 MIN	4 X 5 X 100M GRASS TECH MINS R1 2 MIN SET 5 MIN	
	DAY 8	DAY 9	DAY 10			
AM	6 X 3 MIN SWISS BALL	30 MIN EASY	OFF			
PM	10 X 2H 3 X 150M @ 90%	4 X 5 X 100M HILLS	40 MIN EASY			

## Determining Race Pace

- MEN 4 + 4
- 400m PB + 4 = 1<sup>st</sup> lap
- 1<sup>st</sup> lap + 4 = 2<sup>nd</sup> lap    52.0 pb - 56 - 60 = 1:56
- Women 5 + 5
- 400m PB + 5 = 1<sup>st</sup> lap
- 1<sup>st</sup> lap + 5 = 2<sup>nd</sup> lap    60.0 pb - 65 - 70 = 2:15



## Determining Training Pace

- Time and % have an inverse relationship
- $1.00 - \% + 1.0 \times \text{date pace} = \text{training pace}$
- $[(1.00 - .90) + 1.0] \times 50 = 55 \text{ sec}$
- 95% - 1.05    90% - 1.10    85% - 1.15    80% - 1.20
- 75% - 1.25    70% - 1.30    65% - 1.35    60% - 1.40