

# 2014 West Coast SuperClinic – Troy Johnson

## Components of 400 Meter Training

### COMPONENTS OF 400 METER TRAINING

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“To work within the athlete”

### PHILOSOPHY-MOTTO-CREED

- ▶Speed
- ▶Strength
- ▶Power
- ▶Flexibility
- ▶Endurance

### BIO-MOTOR UNITS TRAINED

- ▶Maximal Velocity
- ▶Optimal Velocity



### SPEED

- ▶Speed attributes are brought out by Strength development
- ▶Make drill work count
- ▶What worse the a bad drill?.....NOTHING!

### SPEED

- ▶Redundancy of performance with same or better result
- ▶Helps maintain coordination with fatigue onset



### STRENGTH

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- ▶Ability to apply force into the ground with positive displacement of energy quickly
- ▶Backwards running

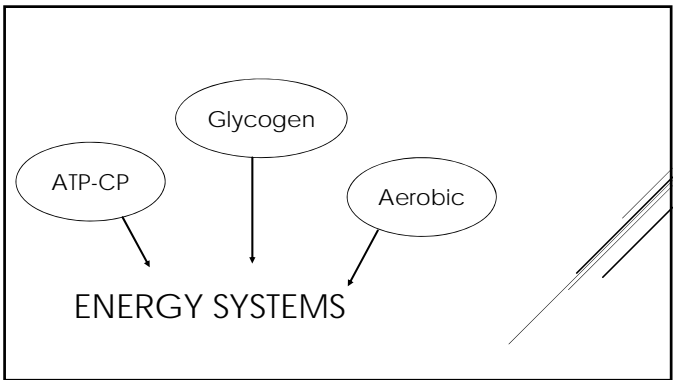
POWER

- ▶Ability to move limbs in a dynamic range of motion

FLEXIBILITY

- ▶The ability to resist onset of lactacid

ENDURANCE



- ▶The body's first energy source
- ▶"Use it or lose it"
- ▶Helps set up optimal velocity

ATP-CP ENERGY SYSTEM

- ▶Majority of 400m training is done in this system
- ▶Allows for interval training

GLYCOLIC ENERGY SYSTEM

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## Components of 400 Meter Training

- ▶ Allows for recovery of other energy systems

- ▶ All workouts will have an aerobic component

### AEROBIC ENERGY SYSTEM

- ▶ Flying 20', 30', 40'

- ▶ Block Starts 5-10x10m, 5-10x20m

- ▶ Sprints <80m rest for 1 set/3-4min

- ▶ 4x100 relay exchange zone

### ATP-CP TRAINING

- ▶ 4-6x150m 4-7min rest

- ▶ 2x3x200 5min/10min sets w/recovery jog

- ▶ 6-10x200 3min

### ATP/ GLYCOLYTIC TRAINING SPEED ENDURANCE

- ▶ 4-6x300m 7-10 min rest

- ▶ 6-10x200m 3-5 min rest

### GLYCOLYTIC TRAINING SPECIAL ENDURANCE

- ▶ 300m

- ▶ 500m

- ▶ 600m

### SPECIAL ENDURANCE II

#### Lactate Threshold Training

- ▶ Ability to resist lactic acid in training

- ▶ 3x300m w/7 min rest

#### Lactate Capacity Training

- ▶ Ability to withstand lactic acid within an interval

- ▶ 3x350m w/full recovery

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## Components of 400 Meter Training

- ▶Speed
- ▶Power
- ▶Strength

FALL CONDITIONING


- ▶Speed
- ▶Strength-Lactate Capacity training
- ▶Aerobic

WINTER TRAINING

- ▶Speed
- ▶Aerobic
- ▶Recovery

SPRING TRAINING

- ▶What you eat fuels and repairs the body
- ▶Aids in recovery
- ▶Gains "will" be lost if proper nutrition does not happen immediately after workout

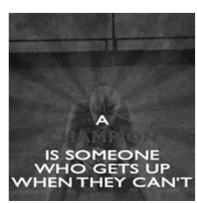


NUTRITION

- ▶Body will perform the best when it's "mentally" and physically recovered
- ▶Get away from a "Funnel" attitude in coaching.
- ▶Every Meso, Micro, and Macro cycle in periodized training should address recovery

RECOVERY

- ▶Dedication
- ▶Discipline
- ▶Commitment
- ▶Belief
- ▶Faith



CHAMPIONSHIP MINDSET