

Positive Training Adaptation

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Cycling Physiology

- ❖ Develops strong cardiovascular, pulmonary and muscular systems

To Make the Bike Move

- ❖ Force x Angular Velocity

Principles of Training

- ❖ Overload, Recovery, Progression, Specificity, Individuality
- ❖ Positive –v- Negative Adaptation

Know & Training Systems That Provide Energy

- ❖ Aerobic System
- ❖ Anaerobic System
- ❖ Phosphagen
- ❖ Correlate zone or range of work to develop physiological adaptations to systems

Establish Accurate Baselines

- ❖ VO2 Assessment, Lactate Measurement, Field Testing

Training Is A Simple Process

- ❖ Know, Find, Change, REPEAT
- ❖ Fitness is a direct result of the relationship between load, performance and recovery

Nutrition Fuel Tanks

- ❖ Fat Tank
- ❖ Sugar Tank
- ❖ Aerobic, speedy, tempo pace

Training Pyramid

- ❖ General strength and efficiency
- ❖ Aerobic Conditioning
- ❖ Strength
- ❖ Threshold
- ❖ Power & Speed
- ❖ Max
- ❖ Increase endurance (duration, miles)
- ❖ Increase work (intensity)

Training

- ❖ Aerobic Pace Training
- ❖ Tempo Pace
- ❖ Speedy Pace
- ❖ Peak
- ❖ Specificity

Training Formula

- ❖ Aerobic System 60-70%
- ❖ Anaerobic System 10-20%
- ❖ Phosphate System 0-10%
- ❖ Muscular System 20-30%

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RESULTS ARE MORE THAN PHYSICAL

Six Cycles

- ❖ Cycle 1 Aerobic Base
- ❖ Cycle 2 Aerobic Max
- ❖ Cycle 3 Threshold
- ❖ Cycle 4 Threshold Boost
- ❖ Cycle 5 Peak
- ❖ Cycle 6 Pace

Cycle 1, 2, 3
Aerobic System 70-80%
Muscular System 20-30%

Cycle 4
Aerobic 60-70%
Anaerobic 5-10%
Muscular 20-30%

Cycle 5
Aerobic 60-70%
Anaerobic 10-15%
Muscular System 15%

Cycle 6
Aerobic 60%
Anaerobic 15%
Muscular System 0-10%
Race Pace 15-20%

Weight Management

- Energy Imbalance
- Metabolic Syndrome
- Metabolic Inefficiency

Nutrition to Correct

- Cut back on starches and carbs
- Eat non processed foods
- Balance energy in/out
- Train Smart

Nutrition

- Variety & Individualism
- Limit caffeine, alcohol, sugar
- Hydrate
- Whole foods
- 50-70% CARBS; 20-30% PROTEINS; 10-20% FATS
- Spent 90% of Time ON Target
- Spend 10% of time missing the Target
- Supplements

Event

- 250-275 calories per hours
- Liquids are readily absorbed
- Solids to feel full and regulate absorption
- Use water with gels and solids
- 15-20 min increments

Hydration

- Before, during and after
- Small amounts
- Hyponatremia

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THE RESULTS ARE MORE THAN PHYSICAL