

CLYDE HART'S TRAINING PROGRAM

400 Meter

400 Meter Dash is an endurance sprint

- A. Sprinter speed and 800 runner endurance.
 - B. Determine type of 400 runner to be trained.
 - 1. Speed type 200/400
 - 2. Endurance type 400/800
- Diminish weaknesses and increase strengths.

Technique of running 400 meters

- A. Distribute runner's speed and energies in most efficient manner over the total racing distance.
- B. Good pace judgment is vital to good 400 success.
- C. Predict potential 400-meter times from a runner's 200-meter time.
- D. Develop endurance versus speed development. Stamina is developed faster in sprinter than speed in 800 runner.

Anaerobic versus Aerobic training

- A. Past approach: 90% anaerobic and 10% aerobic
- B. New approach: aerobic training can be as much as 40%

Deal with stress that comes at end of 400 meters.

- A. Body should gradually be put under stress in training runs.
- B. Repeated stress runs over several months will gradually condition the body to handle stress.
- C. Moderate runs of 40 seconds will build up lactic acid.

Training segments (4 equal parts)

- A. Off-season
- B. Pre-season
- C. Early season
- D. Late season

Key to Training: going from quantity to quality

- A. Pyramid approach
- B. Base of aerobic running
- C. Movement up the pyramid should be slow

Types of 400 Work-Outs

- A. Speed endurance
 - 1. Runner incurs a high oxygen debt.
 - 2. Runs distances of 100-600 meters. Total distance is 2 ½ times racing distance.
 - 3. Rest 5-10 minutes.
- B. Tempo endurance: aerobic workout that helps increase oxygen uptake, which helps shorter recovery time.
 - 1. Doing the run slower helps runner learn tempo and rhythm
 - 2. Emphasis is on quantity, not quality.
 - 3. Rest will be short.
- C. Strength endurance: activities that last longer than 10 seconds in duration with some type of resistance running – long hills, or stadium steps.
- D. Endurance running: pure aerobic running. Runs of 15-45 minutes.
- E. Power Speed: speed of muscle contraction is emphasized. Fewer than 10 seconds in duration
- F. Event running: runs that teach runner how the 400 should be run.
- G. Speed: full speed runs of 30 to 150 meters. Rest is usually long.
- H. Strength: general and specific strength development. Traditional weightlifting. Polymeric used as needed.

Slowing down and running faster

- A. Allows runner to do more running which will develop more endurance.
- B. Allows runner to take less rest between runs which in turn helps develop more endurance.
- C. Protects runner from injury.
- D. Stronger will mean faster.

No such thing as peaking

- A. Continually reloading will keep 400 runner strong, fresh and able to continue to get better.
- B. Training is like putting money into bank account, and racing is like writing a check on that account.
- C. Runners can't lose speed if they stay strong. Speed and strength are synonymous.
- D. Testing the runner should be done in competition, not practice.
- E. Goal should be to run fast at start of season and faster at the end.
- F. Treat the season as if it were several mini seasons.
- G. Better to be under-trained than over-trained.

Race Strategy

- A. Ideal race pattern is
 - smooth deceleration
 - with as little tightening up at finish as possible
- B. Runner should think of the race as 4 different races
 - First 100 meters pushed hard.
 - Second 100 meters paced to within 1 second of best 200 time.
 - Third 100 is positioning so as to be even or even ahead out of the turn.
 - Fourth 100 is focused on keeping good technique and trying not to decelerate or tighten up at the finish.

Summary

- A. Quantity to Quality
- B. Workouts should follow progressive pattern.
- C. Rest should be as short as possible.
- D. Stress and lactic acid build up comes only after a moderate run of around 40 seconds.
- E. Event runs are very important!
- F. Each day's workouts should help develop a specific area of 400 running.
- G. The right 200 pace is vital to success in 400-meter running.
