

Preparing for a Century

By John Hughes
REI Member since 1964



Goal

- First Century
- Better Century



Six Success Factors

I. Self assessment and planning

II. Physical training

III. Healthy nutrition

IV. Appropriate equipment

V. Skillful technique

VI. Mental skills



I. Self Assessment and Planning

- Why do you ride? What excites you?
- Athletic Maturity?
- Cycling Experience?
- Strengths and weaknesses?

Planning

- Use a written plan and training journal
- Train by hours
- Increase total weekly hours by 10-20% per week
- Increase weekly long ride by 10-20% per week

Planning (cont.)

- Increase monthly hours by 15-25% per week
- Weekly long ride no more than 1/2 to 2/3 of weekly volume
- Every 4-6 weeks cut back weekly volume by 10-25% for recovery
- Every 2-4 months include a very easy week for a physical and mental break

II. Training Principles

- Specificity – SAID Specific Adaptations to Imposed Demands
- Overload – gradually increase training demand
- Progression – increase overload over time
- Moderation – increase volume *or* frequency *or* intensity
- Individuality – what works for one may not work for another

Varying Intensity

- Four types of Workouts:
 - Active recovery
 - Aerobic endurance
 - Aerobic speed
 - Anaerobic power



Gauging Intensity

Rating of Perceived Exertion (RPE)

Purpose	Hughes RPE	1-10 RPE
Aid recovery	Digestion pace	1-2
Build endurance	Conversation pace	2-3
Increase riding speed	Hill climbing or headwind pace	3-4
Increase power	“Ouch” pace	5-6

Century Training

- Build weekly long endurance ride until duration is 2/3 to 3/4 duration of planned event
- Vary intensity:
 - 1 endurance ride of 2 – 6 hours, conversation pace
 - 1 tempo ride of 0:45 – 1:30, hill climbing or headwind pace
 - 1 brisk *mixed intensity* ride of 0:45 – 1:30, “ouch” and conversation paces
 - 1 to 2 recovery rides/walks of 0:20 – 0:40, digestion pace
- Total of 4 – 5 hours riding, increasing to 9 – 11 hours over 8 to 15 weeks

Endurance Training

- Conversation pace
- Long slow distance



Benefits of Endurance Training

- Endurance training improves:
 - The endurance of the cycling muscles
 - The respiratory system, providing more oxygen to the blood supply
 - The efficiency of the heart so it can pump more blood to the muscles
 - The capacity of the liver and muscles to store glycogen from carbohydrate

Benefits of Endurance Training

(cont.)

- The neuromuscular efficiency of pedaling
- The capacity to burn fat during long rides
- The thermoregulatory system by increasing blood flow to the skin
- Reference: Ed Burke, PhD., *Serious Cycling*, 2nd ed., Human Kinetics, Champaign, IL, 2002

Tempo Training

- Build to 0:30 to 0:45 minutes of *brisk riding*, plus warm-up and cool-down, total of 0:45 to 1:30
- Can talk but can't whistle



Intensity Training

- Build to 0:30 to 0:45 minutes of *mixed intensity*, plus warm-up and cool-down, total of 0:45 to 1:30
 - Structured
 - Intervals
 - Hill repeats
 - Unstructured
 - Group rides
 - Fartlek



Active Recovery

- Improve circulation
- Loosen tight muscles
- Relieve Delayed Onset Muscle Soreness (DOMS)



Supplementary Conditioning

- Core strength
- Flexibility
- General strength maintenance



Programs in Resources section of www.coach-hughes.com

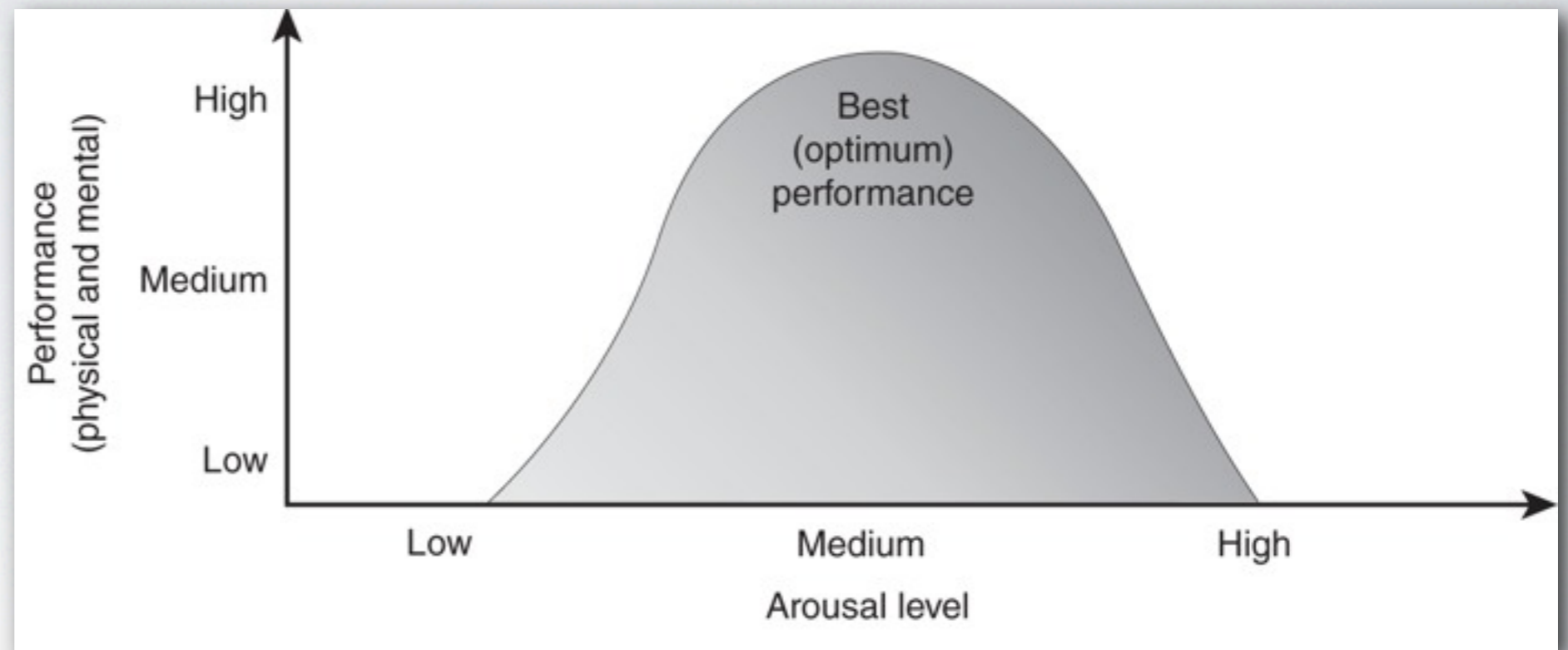
III. Mental Skills

- Relaxation to improve ability to focus and reduce anxiety
- Motivation to stay with a training program over time
- Confidence to complete a ride



Relaxation

- Breathing
- Progressive relaxation
- Tai Chi
- Yoga



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Motivation

- Training partners
- Join a club, Rocky Mountain Cycling Club, www.rmccrides.com
- S.M.A.R.T. objectives
 - Specific
 - Measurable
 - Attainable
 - Realistic



Confidence

- Test everything in training
- Work on event-specific skills
- Train in similar conditions
- Mentally rehearse the ride



IV. Nutrition: Daily Diet

- Carbohydrates provide glycogen (whole grains, fruit vegetables), 60% total calories
- Lean protein, 0.6 to 0.7 grams/lb. of body weight, 15% of total calories
- Healthy fats, 25% of total calories



Nutrition During Ride

- Hourly during ride
 - Calories - 240-360 calories plus a bit of protein and fat
 - Hydration - drink to satisfy thirst
 - Electrolytes - primarily sodium
 - Sports food products no better than real food



V. Equipment: Bike Selection

- Comfort and reliability, not light weight and aerodynamic



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Bike Fit

- Knees bent 30-35 degrees
- Hips don't rock
- Knees don't kick in or out
- Comfortable with hands on brake hoods



Ride Essentials

- Warmers and windbreaker
- Foods and fluids
- ID and money
- 2-3 tubes, patch kit, tire boot and tire irons
- Allen wrenches or multi-tool
- Pump or CO2 cartridges
- Chain tool and spoke wrench

Maintenance

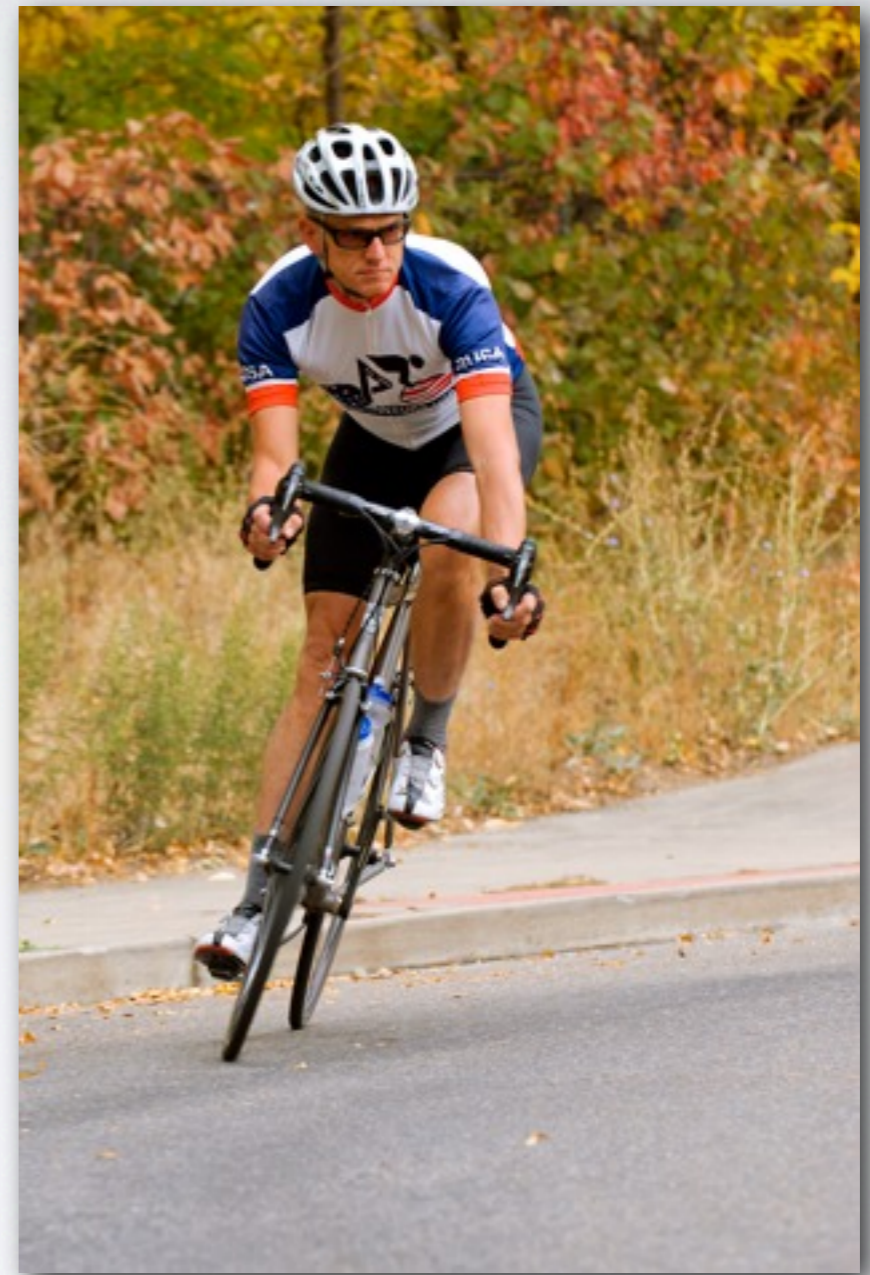
- Take a class
 - Fix a flat
 - Adjust front & rear derailleurs
 - Adjust brakes

Pre-Ride Inspection

- Ride essentials
- Tires hard and clean
- Wheels true and quick releases tight
- Brakes centered and working
- Shifting properly

VI. Technique

- Take a clinic
 - Ride in a straight line
 - Eat and drink while riding
 - Ride in a group
 - Corner
 - Descend



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Safety

- Wear a helmet
- Behave predictably
- Ride legally
- Assume you are invisible

Resources: League of American Bicyclists, John Allen Street Smarts

Pacing

- Group riding the right pace is probably behind you
- Fairly constant effort over 100 miles is most efficient
- Pay attention to perceived effort, always able to talk

Group Riding

- Protect your front wheel
- Ride predictably
- Call out before you move
- Look ahead and anticipate



Success!



Thanks

- Illustrations:
 - Alaska Digital Visions (<http://alaskadigitalvisions.com>)
 - John Embald
 - Human Kinetics, Champaign, IL. (<http://www.humankinetics.com>)
- PowerPoint by Dan Kehlenbach

Resources

- REI clinics
- *Distance Cycling* by John Hughes & Dan Kehlenbach
- Hughes & Kehlenbach's articles on RoadBikeRider.com
- Resources on www.coach-hughes.com
- www.RoadBikeRider.com newsletter

