



ALL ABOUT TRIATHLON

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GROWTH OF TRIATHLON




- Growth between 2009 and 2010 participation: 1.5 to 2.3 million competitors (53%)
- Ironman-branded events - 40 to 50 percent gains in registrations between 2008 and 2011
- Since then, participation has continued to grow at between 10 and 20 percent
- NCAA announced the approval of women's triathlon as an emerging sport (=grant money)
- Average age =42
- Average high income earners
- Upwards 60% are gym members
- Gender splits favor men as distance increases

OBJECTIVES




- What is triathlon?
- How big is it really?
- Different race options?
- Progression
- Training for a first race or any race
- Proper fueling
- Client interactions

RACE TYPES: SWIM-BIKE-RUN (+ TRANSITIONS)




- SPRINT: 750m/20km/5km (1-2 hours)
- OLYMPIC (standard): 1.5km/40km/10km (2-4 hours)
- Long course-HALF IRONMAN/IRONMAN 70.3:
1.9km/90km/21.1km (4-7hours)
- FULL-IRONMAN: 3.8km/180km/42.2km (9-14+)
- Drafting versus non-drafting

HISTORY



- The word "triathlon" is of Greek origin from ("three") and athlos ("competition")
- The first modern swim/bike/run event to be called a 'triathlon' was held in San Diego, CA in 1974.
- KONA ironman held since 1978
- Combined existing endurance events to determine which athletes were fittest
- The [International Triathlon Union](#) (ITU) was founded in 1989 as the international governing body of the sport, with the chief goal, at that time, of putting triathlon on the Olympic program

EQUIPMENT



- SWIM: Goggles, wetsuit, speed suit, neoprene cap/booties, various swim training gear
- BIKE: TT versus road, shoes, wheel sets, helmet.....
- RUN: shoes!
- Tri suit
- Triathlon can become a very expensive sport (equipment, coaching and registration)!

TRAINING-BASIC REQUIREMENTS (8-16 WEEKS)



- SPRINT: 5-8 hours (2 workouts per discipline): *By time or distance
- OLYMPIC: 6-10 hours (2-3 workouts per discipline)
- HALF/70.3: 8-12 hours (2-4 workouts per discipline)
- FULL: 12-16hours (3-5 workouts per discipline)
- Training should include: Swim, bike, run, strength, mobility

LONG COURSE 70.3 PREP



- PREVIOUS TRI EXPERIENCE + 16 WEEKS
- SWIMS 1500-3000M: 1 INTERVAL/1 ENDURANCE
- RUN 40MINS-2 HOUR: TEMPO, INTERVALS, ENDURANCE
- BIKE 1 hour -4 HOURS: VARIED (RACE TERRAIN PREP)
- BRICK (WEEKENDS: BIKE + RUN)
- TAPER: 1-2 WEEKS
- SPORT SPECIFIC STRENGTH/MOBILITY: 2X/WK

SPRINT DISTANCE TRAINING



- 8 WEEKS PREP
- SWIMS 500-1500M: 1 INTERVAL/1 ENDURANCE
- RUN 20MINS-1 HOUR: TEMPO, INTERVALS, ENDURANCE
- BIKE 30 MINS-1.5 HOURS: VARIED (RACE TERRAIN PREP)
- INTRODUCE BRICK IN 2ND HALF
- TAPER: 3 DAYS-1 WEEK
- SPORT SPECIFIC STRENGTH/MOBILITY: 2X/WK

IRONMAN



- PREP TIME: PREVIOUS TRIATHLON EXPERIENCE + 24 WEEKS
- SWIMS 2000-4000M+: 1 INTERVAL/1 ENDURANCE
- RUN 40MINS-3 HOURS: TEMPO, INTERVALS, ENDURANCE
- BIKE 1 hour -6 HOURS: VARIED (RACE TERRAIN PREP)
- BRICK (WEEKENDS: BIKE + RUN)
- TAPER 2-3 WEEKS
- SPORT SPECIFIC STRENGTH/MOBILITY: 2X/WK

OLYMPIC (STANDARD) PREP



- 12 WEEKS
- SWIMS 1200-2000M: 1 INTERVAL/1 ENDURANCE
- RUN 30MINS-1.25 HOUR: TEMPO, INTERVALS, ENDURANCE
- BIKE 45 MINS-2.5 HOURS: VARIED (RACE TERRAIN PREP)
- BRICK (WEEKENDS: BIKE + RUN)
- TAPER APPROX. 1 WEEK
- SPORT SPECIFIC STRENGTH/MOBILITY: 2X/WK

DRILLS/EXERCISES FOR EVERY DISTANCE AND TRIATHLETE



- Running movement and training drills
- Unilateral movements
- Mobility based on restrictions
- Core strength
- Muscular workouts (based on tri movements and individual needs)

THE 4TH DISCIPLINE-NUTRITION!

- Sprint=n/a
- Olympic: Likely
- 70.3: yes
- Full: Oh YES!!

WHAT TRIATHLETES EAT

PREWORKOUT

- If workout under 1-2 hours: Eat normally
- Goal for endurance: fill the muscle and liver with glycogen used a primary fuel
- Protein is secondary fuel to for 5-15% of energy needs
- Fat is the backup fuel, but it is not as efficient = slower pace or the WALL
- Consume nutrients 1-3 hours before exercise
- Intense workouts 1- <2: varied-trial and error
- Workouts > 2hrs: 100-150 grams of carb in 3 hours leading up to workout/race + 100kcal of carb 10 minutes prior to event + 10-20g protein

HYDRATION

- Fluid replacement during exercise is meant to prevent excessive dehydration and to avoid excessive changes in electrolyte balance in order to avert compromised performance
- Duration
- Temperature
- Avoid losses of more than 2% body weight = reduced performance
- 350-750 milliliters/hr general guidelines

2-3 HOURS PRIOR: MAN

ELECTROLYTES

Electrolytes.
 Conduct energy
 Regulate fluid balance
 Transport nutrients
 Support proper muscle function
 Support mental function
 Help convert calories into energy
 Regulate pH
 And much, much more.

- 200-500 mg of sodium per 750ml water
- Smaller amounts of potassium, magnesium, and calcium.
- Example: one tab= 350mg sodium, 100mg potassium, 13mg calcium, 25mg magnesium
- Too much sodium can lead to bloating and GI discomfort
- Account for all your sources, including sports drinks (100-200 mg per 8 oz), energy gels (25-200 mg per packet) and chews (20-210 mg per 3 pieces), salt packets (~200 mg per packet), and electrolyte capsules (~100-200 mg per capsule)

2-3 HOURS PRIOR: WOMAN

INTRA WORKOUT-MACROS



- Goal is NOT to replace burn rate calorie for calorie
- 2 hours + Moderate: approx. $\frac{1}{4}$ - $\frac{1}{3}$ max of your weight in grams in **carb** per hour
- Most individuals need 120-240 kcal of carb/hour
- Athletes will need liquid carbs (max about 100kcal/hr) + solid if 3-4 hrs+
- Max liquid carbs approx. 4-5g/100ml liquid
- Protein** to spare muscle and as a secondary energy source (approx. 5g/hour once in the 3 hour + training bracket)
- What to watch for: GI distress, sluggishness
- Avoid fiber

HYDRATION



- Sweat rate
- Sweat Rate = $(A + B) \div C$, where
- A = Pre-exercise body weight – Post-exercise body weight, recorded in ounces. (1 lb. = 16 oz.)
- B = Fluid Consumed During Exercise, recorded in ounces. (1 cup = 8 oz; 1 gulp = about 1 oz)
- C = Exercise Duration, recorded in hours. (40 min = .66 hr)
- Ex: During her regular 90-minute outdoor run, Sue drank 22 ounces of fluid. Her pre-exercise weight was 125 lbs; post-exercise weight was 124.5 lbs.
- A = Weight Change During Exercise = 125.0 lb – 124.5 lb = 0.5 lb = 8 ounces (99.6%)
 - B = Fluid Consumed During Exercise = 22 ounces
 - C = Exercise Duration = 90 min = 1.5 hours
 - Sweat Rate = $(8 \text{ oz} + 22 \text{ oz}) \div 1.5 \text{ hr} = 20 \text{ oz/hr}$

WHAT DO TRIATHLETES EAT/DRINK DURING RACES



- Swim=nothing
- Bike= more solid + calories/electrolytes in water+ gels/jubes
- Run= LESS solid, coke, sports drink, gels, jubes
- #1 rule: nothing new on race day!

QUESTIONS?

THANK YOU!

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