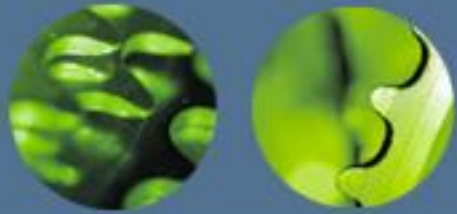




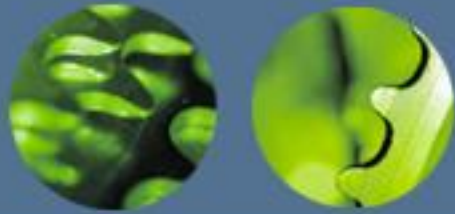
# Half-Ironman Specific Training

Marty Gaal, CSCS  
One Step Beyond  
[www.osbmultiposport.com](http://www.osbmultiposport.com)

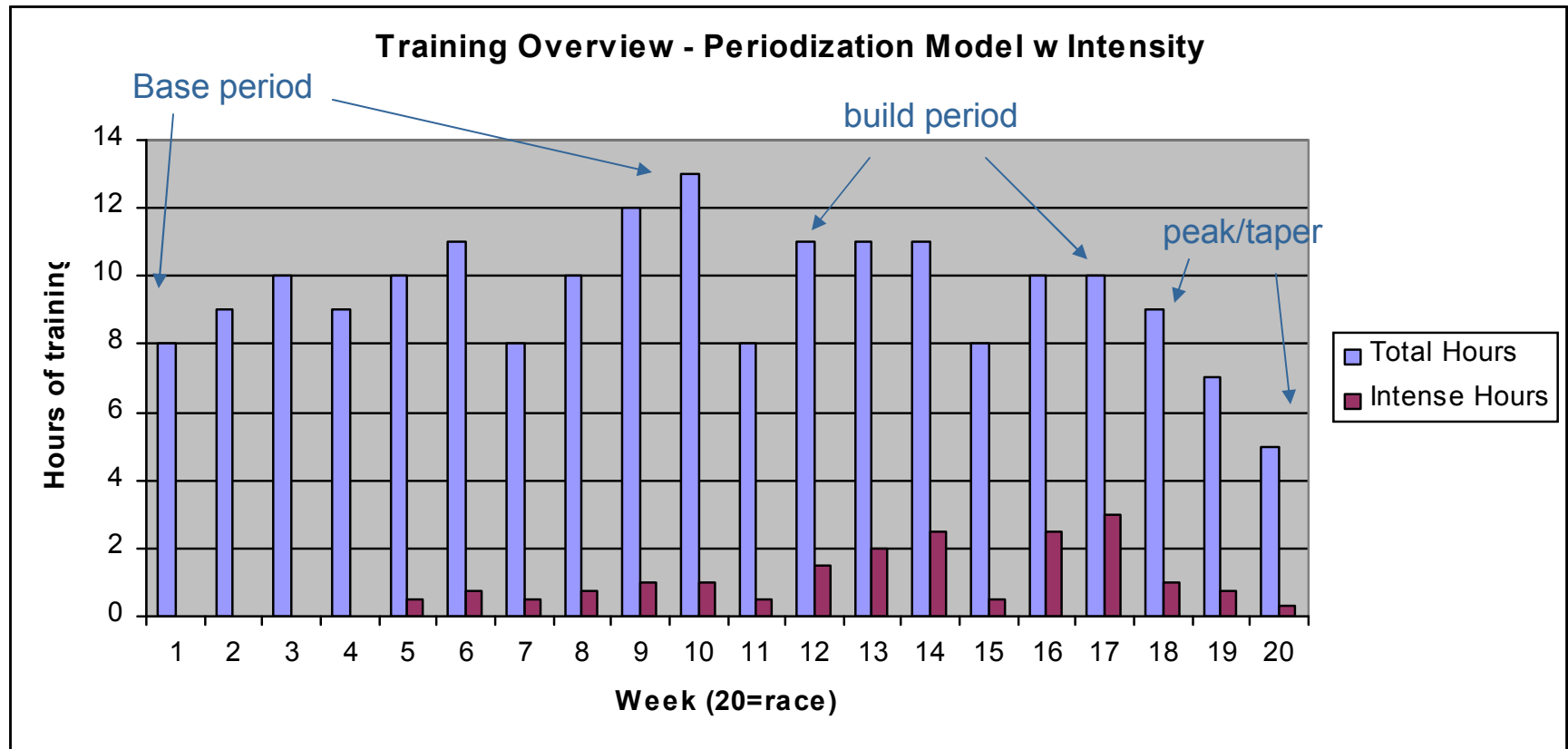


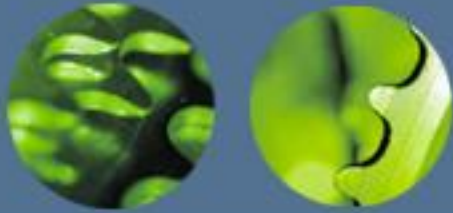
## Keys to season success

- Long term planning and goal-setting
- Development of strong aerobic conditioning (base training)
  - Consistency and frequency, then duration
- Rest and recovery periods
  - Avoid injury and burnout
- Improvement of lactate (anaerobic) threshold / power threshold (build / race prep training)
- Race specific intensity workouts & simulations

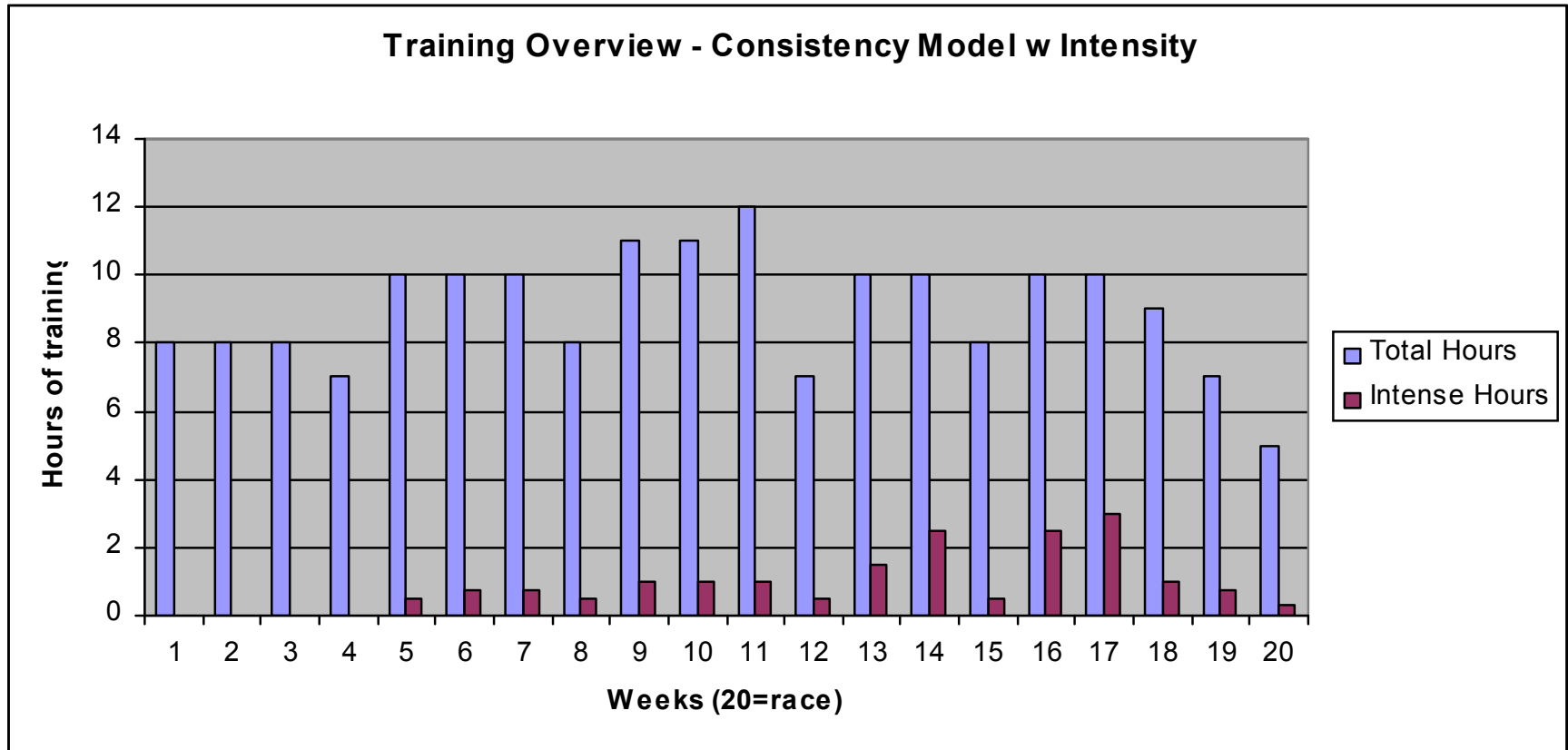


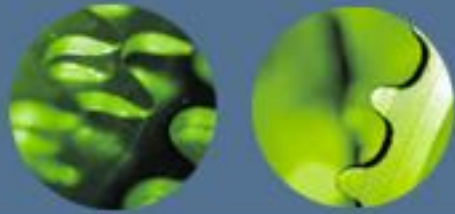
# General principles





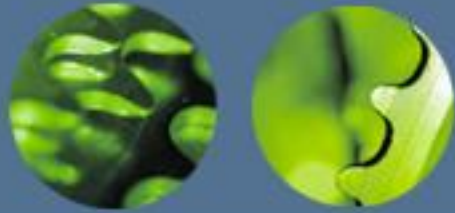
# General principles





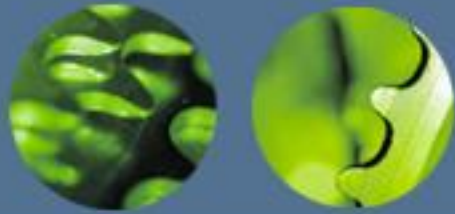
## Race/workout intensity

- Ironman / Endurance <75% threshold (AT)
- Beginner Half-Ironman 70-80% threshold  
Intermediate-Advanced Half-Ironman 80-87% threshold (tempo)
- Olympic distance 85-95% threshold (sub-threshold)
- Sprint 90-100% threshold (sub- to at-threshold)
- Anaerobic lactate threshold can be found by a 30min-1hr time trial all out effort



## General guidelines

- New athletes should avoid high intensity sessions for several weeks, if not through the entire program
- Older athletes need more recovery time
- Younger athletes need less recovery time
- Optimized body composition is helpful
- A nutrition plan is a must



## Beginner vs. advanced

- **Beginners**
  - focus on building endurance – more base/aerobic training
  - Spend more time working on your weakness
- **Advanced athletes**
  - Race specific intensity
  - Lactate threshold training
  - Maintain aerobic base

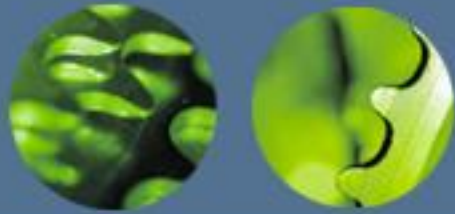


**Enjoy your sport!**



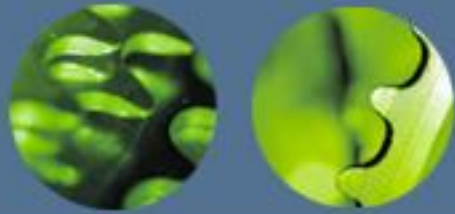
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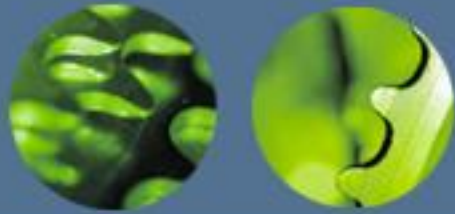
## Recommended tools

- Proper bike fit
- Aerobars, aero helmet, aerodynamic wheels
- Heart rate monitor
- Bike power meter
- The right kind of running shoe for you
- Some sort of training plan



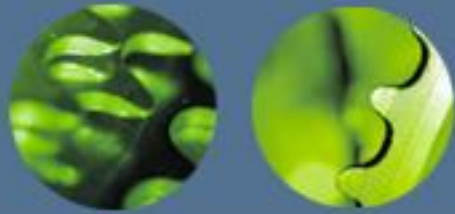
## Base period – key concepts

- Develops the aerobic energy system
  - Increased blood flow
  - Increased cellular adaptations
- Improves muscle coordination and repetitive patterns (re: practicing form drills)
- Increases connective tissue strength and durability
- Increases muscular strength and endurance
- Allows for a higher starting point for anaerobic energy system takeover



## Build period – key concepts

- Develop/improve muscular endurance system
- Improve lactate threshold (LT2) / functional power threshold (FTP)
- Develop mental toughness 😊
- Key workouts are race specific intensity workouts and some threshold sessions
- Maintain aerobic fitness
- Maintain form and core strength exercises
- Finalize nutrition plan



## Peak/taper period – key concepts

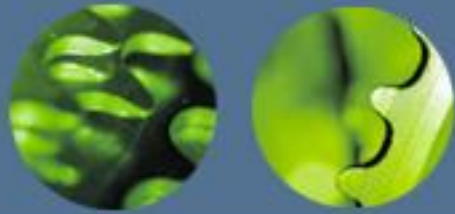
- Decrease total training time
- Maintain some race specific intensity sessions
- Focus on rest and recovery from training season
- Rehearse race day plan
- Execute according to plan on race day!



**Stay calm!!!**

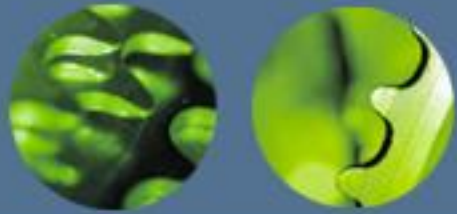


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## Sample key workouts

- Base period
- 40-60 mile ride at 65-75% threshold
- 1-1.5 hour run easy-comfortable pace
- 8 x 200 swim moderate on :20-30 rest
- Build period
- 55m bike w 1.5hr @ 80-88% threshold – 4/5 mile run build to mod-hard
- 12mile progression or negative split run (faster end)
- 3 x (15/20m bike – 3m run) progressively harder
- 4 or 5 x 500 swim mod-hard on :30



## General race nutrition guidelines

- 1.75-2.5 cal / hour per lb bodyweight on bike
- 1-1.5 cal / hour per lb bodyweight on run
- 20+ oz fluid per hour
- 300-800mg sodium / hour on bike
- 200-500mg sodium / hour on run
- Must be ready to adjust on game day



# Post race nutrition



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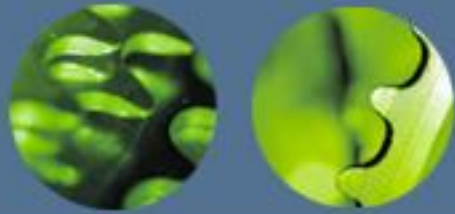
# Questions?



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# About One Step Beyond

- One Step Beyond is a multisport coaching company based in Cary, North Carolina. Coaches Marty & Brianne Gaal and Daniel Scagnelli provide online training programs, group coaching sessions, and individual training sessions to athletes of all levels.
- Marty Gaal is certified with USA Triathlon, US Masters Swimming, USA Track and Field, and is a NSCA Certified Strength and Conditioning Specialist. He began swimming competitively in 1981, raced his first triathlon in 1989, and has been coaching triathletes since 2002.
- One Step Beyond also produces the *Powerstroke®: Speed through force and form* freestyle technique DVD, available at [www.powerstroke-dvd.com](http://www.powerstroke-dvd.com).
- You can read all about One Step Beyond services, programs, and athletes at [www.osbmultisport.com](http://www.osbmultisport.com).

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