

HIIT or Miss?

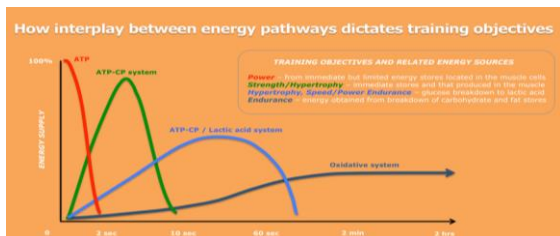
How to Properly Design Your Next Interval Class for Specific Training Adaptations

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What is HIIT?

“The training purpose is to systematically overload systems with intense training through repetitions and, then, take appropriate recoveries to enable near maximal performance or sustained intensities.”

Energy Development Systems at Work



What is Your Desired Training Effect?

The Issue

- Aerobic 'slop'
- Just because you are tired and sweaty after a workout does not indicate any athletic conditioning has taken place
- Musculoskeletal strain and injury
- Cellular damage beyond autophagy

How to Properly Perform HIIT

- HR monitoring does not always work to measure high intensity (work time) and lower intensity intervals (recovery period).
- WORK TO REST - This is a simple way of constructing your HIIT session, using a set work and rest time we can easily follow a timing system as an indicator as to when the work interval finishes and the recovery period begins. Typically rest for 2-5 times the work interval.

Designing HIIT for Maximal Performance

	Max	Work:rest	Work Volume
• ATP-CP			accumulated
• Glycolytic			accumulated
• Oxidative			accumulated

****work % MHR rest % MHR recovery % MHR****

Work to rest ratio will depend on fitness level of participants

High Intensity Interval Training (HIIT)

- Characterized by work intervals performed at the same intensity throughout the entire training session. Think **ATHLETIC PERFORMANCE**.
- The fast glycolytic system can only sustain 2 – 3 minutes of work at 75 – 90% of maximal performance.
- (:30w:60r*6)*2-3
- If sufficient recovery not given immediately prior to work set, each aggregated set would equal 3'w (6*:30) at which point work rate is most likely no longer sustainable, thereby justifying a longer recovery to regenerate the blood's buffer in order to maintain higher-intensity (performance, not effort) work rates.
- (:45w:45r*4)*2-3 **RBI 3'** light-active recovery, repeat.

High Intensity Interval Training (HIIT) (:30w:60r*4)*2-3

Speed/Power/Explosive Movement

- Wall Jumps.
- High Knees
- Broad Jump shuffle.
- Mountain climbers (transverse).
- Jacks/Star Jumps.
- Fast feet and drop.

High Volume Interval Training (HVIT)

- Inappropriate recoveries = reductions in performance and decreased caloric burn.
- Continuing effort must be fueled by the oxidative system at a lower intensity, all other factors being equal.
- The body will switch to aerobic systems to use oxygen to produce ATP.
- Anaerobic intention is now 'aerobic slop' with high potential for poor form.
- If sufficient recovery not given immediately prior work set, work rate is most likely no longer sustainable, thereby justifying a longer recovery to regenerate the blood's buffer in order to maintain higher-intensity (performance, not effort) work rates.
- The sky is the limit for program design – Complete recovery, incomplete recovery, Fartlek, Pyramid, Ladders, Copenhagen etc

High Volume Interval Training (HVIT)

(:60w:30r*6)*2 3' RBI

- Wall Jumps.
- Burpees (push up optional).
- Side plank dip and knee up.
- Heisman.
- Scorpion.
- Agility Circle.

Variable Intensity Interval Training (VIIT)

- The perfect solution to general population group fitness classes?
- Focus remains on work completed within glycolytic system however emphasis is on variation within work sets and active recovery sets
- Recovery needs to remain active to help expedite metabolites
- Target the type I fibers with stabilization exercises for balance and postural control
- Provides a great challenge to athletes to demonstrate good postural control through low-active stabilization exercises to ensure good form and technique, while concurrently allowing the lactate buffer and muscles the needed time to recover.

Variable Intensity Interval Training (VIIT)

- Hops to Tuck Jump :45 Front Lunge to skiers :30
Balance exercises: Alt Breakdancers, Alt Lunge with rotation
- Semi Circle eccentric push up :45 Bootstrappers :30
Balance exercises: SLDL with extension, Get ups
- Right knee repeaters :45 Left Knee repeaters :45
Balance exercises: Alt Tabletop circles, Reverse Tabletop Toe touch
- Froggers :45 Side shuffle to double Jacks :30
Balance exercises: Hip Hinge Extension, Side cross stretch

True HIIT training holds a purpose of improved performance and is orientated around movement quality.

What we perceive to be HIIT, but is actually more aligned with HVIT, is focused upon volume or movement quantity

Workouts where the total work interval performed before taking a recovery interval that exceeds 3 to 4 minutes, or one that is performed at intensities below 75% of maximal performance, is most likely HVIT and should be defined as such.

As the leaders of individuals’ fitness journeys, it is important to understand the difference in the quality of fitness programming we offer and shape it to ensure our classes are offering the desired intent.

Never confuse maximal performance with maximal effort.

One represents performance – **intensity**.
The sub-maximal, sustained work represent something else – **volume**.
