

# HIGH INTENSITY INTERVAL TRAINING (HIIT)

Tabata & Rest Based Training



Home Study

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## TABLE OF CONTENTS

COURSE OVERVIEW		
Home Study Description .....	1	
Course Objectives .....	1	
REST-BASED TRAINING		
Introduction.....	2	
Exertion and Recovery Scales.....	2	
Overview .....	3	
Benefits .....	4	
Components .....	5	
Sample Training Workout .....	6	
Cues .....	6	
Role of the Instructor .....	7	
Example Class.....	8-12	
EXERCISE SCIENCE REVIEW		
Oxygen Consumption – VO <sub>2</sub> Max .....	13	
Oxygen Deficit and Debt.....	14	
Excess Post-Exercise Oxygen Consumption .....	14	
Energy Systems .....	15-17	
Anaerobic Threshold .....	18	
Muscle Fiber Types .....	19	
HIGH INTENSITY INTERVAL TRAINING		
What is HIIT?.....	20-22	
Guidelines .....	23	
Exercise Selection .....	24	
Benefits .....	25-26	
Program Design Activity .....	27-28	
TABATA TRAINING		
What is Tabata? .....	29	
Notes .....	30	
Incorporating Tabata .....	30	
Guidelines .....	31	
HIIT AND TABATA EXAMPLE CLASS .....		32-34
REFERENCES .....		35
POSSIBLE ANSWERS TO HIIT PROGRAM DESIGN ACTIVITY .....		36
CEC EXAM .....		37-41
CEC EXAM ANSWER SHEET .....		42
COURSE EVALUATION FORM.....		43



## HOME STUDY DESCRIPTION

### HIIT, Tabata and Rest-Based Training

Looking to boost exercise capacity and fat-burning potential? Recent research has demonstrated the many benefits of high intensity interval training (HIIT). Tabata and Rest-Based training are among the HIIT protocols that have gained recent popularity. Discover the truth about HIIT and learn how to develop interval workouts to accommodate participants with a variety of goals. This course will help you to bridge the gap between exercise science and interval programming.

Note: Don't let the name scare you, high intensity is relative to fitness level. Everyone can push to their "maximum" and rest as needed. Instructors need to teach to all levels, and demonstrate multiple exercise options/modifications.

### ***Course Objectives***

- Explain the difference between HIIT, Tabata and Rest Based training
- Define EPOC, Anaerobic Threshold, Aerobic and Anaerobic energy systems and describe how each relates to interval training
- Create interval training programs and classes designed to meet your clients' or participants' goals

## INTRODUCTION

Rest-Based Training is a training principle developed by Jade and Keoni Teta. It was created to be the opposite of the militant, boot-camp style of training seen in the 'The Biggest Loser'. Instead of having a trainer yelling into a participant's face, RBT allows the participant to be in control of their own workout by deciding when and for how long they rest. Since RBT allows the participant autonomy over their own workout, this format of training is suitable for all fitness levels.

### REST-BASED TRAINING (RBT) EXERTION AND RECOVERY SCALES

*Teta, J. (2011). Rest-Based Metabolic Training.*

Retrieved from <http://www.ideafit.com/fitness-library/rest-based-metabolic-training>

To help novice exercisers tap into their inherent ability to self-regulate, RBT relies on a 1 - 4 scale. This scale, which works as both an exertion score and a readiness/recovery rating, helps exercisers and/or trainers recognize more clearly when they should rest and when they may want to resume training. Research has shown this to be a reliable tool in maximizing work and rest to generate optimal intensities for results. It also keeps workouts safe and manageable.

#### **RBT Exertion Scale**

1. At rest.
2. Can talk, no burning.
3. Can't talk, there is burning in the muscle.
4. Exerciser must rest and recover.

#### **RBT Recovery Scale**

1. Ready for full exertion
2. Can attempt full exertion.
3. Unable to attempt full exertion.
4. No exertion/effort is possible.

The goal of the workout for an advanced participant is to reach a 4 on the RBT exertion scale repeatedly. Rest is then taken until the exerciser reaches a 2 on the RBT recovery scale. In time, the scales are no longer required, as participants quickly learn to hone in on their self-regulating abilities.

Please note that beginners are encouraged to move from a 3 on the exertion scale to a 1 on the recovery scale.



## REST-BASED TRAINING OVERVIEW

Rest-based training is a form of training that makes rest the primary goal of the workout. It allows the participant to have control of their workout by deciding when and for how long they rest. This results in an *increase* in exercise intensity as participants can strategically use rest to work harder than they could without it.

*Teta, J. (2011). Rest-Based Metabolic Training.*  
Retrieved from <http://www.metaboliceffect.com>

Rest and exercise are usually thought of as opposites, but they are actually complimentary and dependent upon one another. Rest is the single biggest determinant of exercise intensity. Without intense workouts, fitness results will be lacking and without rest, intensity will be compromised.

Example: a champion sprinter who attempts two 100-yard dashes immediately back to back with no rest will see a serious drop in stamina during the second race. The intensity generated in the first run would severely impede the performance of the second. With no rest between races, the sprinter could not physically or mentally muster the same effort. Resting between the two races is required to reset the body. Only with rest would the sprinter be able to push his body to its max for a second time.

The above example illustrates the concept of rest-based exercise. By focusing attention on rest during training, it is possible to reset both mental and physical capacity to achieve more than would be possible without it. It preaches that rest in a workout is not only a good thing, but should be the primary goal of any training program focused on delivering real results.

The more you rest, the harder you will push. The harder you push, the more you will have to rest. Rest and work in exercise are dependent upon one another and together deliver far better results than can be achieved with pacing.

The language we like to use in rest-based training is “push until you can’t, rest until you can”. Some people take lots of shorter rests, while others prefer longer periods of rest. With rest-based training you use rest strategically to generate just the right intensity for your individual metabolic needs.

Push hard, rest hard and then do it again. That’s how you conduct Rest-Based Training.

### Side Note

RBT can also be applied to resistance training, assuming each exercise is completed to fatigue (or to a level 3 for beginners and 4 for intermediate to advanced participants on the RBT exertion scale).



## REST-BASED TRAINING BENEFITS

- Provides a workout that everyone can do regardless of fitness or ability level as movements are basic and can be modified.
- Allows participants to push themselves harder as they have autonomy over their work, rest, and exercise difficulty (regressions and progressions).
- The workout reflects what our bodies were created to do – moving in short natural bursts and then resting. This is what children do when they play, as well as what animals do when they dart from bush to bush and then rest. You don't see children or animals voluntarily going for a 3-5 mile run on their own.
- The workout is client-focused and not trainer-focused. Individuals usually want to avoid pain, and all-out exercise is eventually going to lead to pain. Using a hot stove as an analogy for all-out exercise, a trainer focused workout is similar to the trainer placing the participant's hand on a hot stove and holding it there until the trainer-decided interval of 20 or 30 seconds is complete. In RBT, the participant is able to decide how long they want to keep their hand on the hot stove (push to their maximum), which results in the participant being able to keep it there longer. Also, the participant's interpretation of the pain from all-out exercise is less because they have control over when to pull their hand away from the hot stove (stop and rest).
- The participant feels more successful as they have been coached using positive affirmations instead of being yelled at.
- Participants are able to decide when to rest which creates a perception of "I can do anything" for a few more seconds.
- Provides a safe workout as participants rest whenever they choose so they avoid overexertion.

### Side Note

Have you ever known of a trainer or instructor that walks into a training session or class where their main goal of the workout is (rhetorically) "to kill the participants"? If so, they may not only be putting the participant(s) at risk, but also be placing themselves at risk for a lawsuit. Rhabdomyolysis is a term for when a trainer or instructor works a client or participant too hard (regardless of whether they are deconditioned or fit), and the complications can result in death.

Acute Exertional Rhabdomyolysis is the medical term for pushing a client/participant too hard, and it is caused from skeletal muscle injury that alters the integrity of the muscle cell membrane to allow the release of the muscle cell content into the plasma. Complications include renal failure, cardiac arrest, compartment syndrome and death. Trainers are now being sued for client death because they worked their participant too hard. Remember, it is not our responsibility as fitness professionals to force participants to their limits, let each individual be responsible for their own workout!