

The Importance of Recovery in Triathlon Training

Truth or blasphemy, you decide. Written by Sam Nicaise, MIT Triathlon President, Summer 2013, with help from the rest of the Triathlon Executive Committee

No training plan is complete without a good recovery plan. The ideas below are meant to help MIT Club triathletes direct their own recovery and start them on the path to making the most of their training plan. Just as training plans can be personally engineered, recovery is also personal. Use the below ideas as guidelines.

Cliff Notes:

- 1) Take a rest day every week, and make it as important as your workouts
- 2) Don't always go the same speed/intensity. Build, push, build, and then rest.
- 3) Pamper yourself with sleep, mental recovery, physical recovery, and nutrition
- 4) Understand yourself physically, nutritionally, and mentally. Push your limits, but don't sabotage your body, brain, or health.

My most recent apropos quote: "Don't recover to train, train to recover."

Rest Day:

For many new triathletes (and veterans), it may seem "best" to train every day of the week. But this can lead to overtraining, mental burnout, and injury. At a minimum, take one day per week as a recovery day. On this day, forget about training, and focus on recovery.

- Sleep in! Get that extra hour or two of sleep
- Stay off your feet. Give your legs some time to rest and recover
- Eat for nutrition. Focus on putting food in your mouth that is nutritious, anti-inflammatory, and muscle building
- Prevent injury. If you feel a physiological injury coming, target your typical training time towards eliminating the problem spot
- Mental boost. Do something to recover mentally, giving you more willpower and mental focus in the rest of the week

Periodized Training:

The Training Plan that MIT Triathlon has endorsed is based on the idea of fitness periodization. Each period is broken into 4 weeks, and many 4 week periods can be employed. For each period, the first 3 weeks include prescribed amounts of training at particular intensities. The 4th week prescribes a "rest

week”: a full week where the training intensity and volume is low, in order to allow for more of a focus on recovery.

During training weeks:

- Employ recover strategies as needed. If you are feeling fatigued, sore, or injured, take a step back and heal yourself. If you are feeling strong, keep pushing the workouts.
- The workout load will build. By the end of the 3 weeks, the idea is to be slightly over-reached, aka you have pushed your body more than you have in the past. This excess in training will set your body up to make the physiological adaptations which improve your fitness.
- Train to recover. Make your workouts good, and your recovery better. If you have time to recover so well that each workout feels fresh, you are doing it right.
- Many people will feel slow/tired/unfit after coming back from a recovery week. This is normal, and you can expect to “feel good” again within a few days. The body needs time to switch modes.

During the recover week:

- The workouts are your last priority. The prescribed volume and intensity is simply in place to keep you from losing fitness and form. Keep your feel for the water/rubber/pavement and mentally excitement.
- Sleep in excess. Instead of working out, always sleep an extra hour. Don’t set an alarm on the weekend. Nap if you can.
- Eat like a champion. Make sure that all of your food has the highest nutritional profile possible. Work to reduce inflammation, build muscle, help your sleep, and top-off micronutrients
- Physiologically repair your body. This is your chance to work on that nagging knee pain, correct your poor posture, get a massage, increase your muscle mobility, increase your balance/proprioception, or do drills
- Mentally relieve yourself from the stress of training. Allow your mind to recover from triathlon – the mental stresses and strains of worrying about workouts. Do things socially, physically, mentally, and nutritionally to support your brain.

Workout Polarization and Recovery Workouts:

While triathlon is definitively 3 sports, it can require so much more than training for 3 sports. With so much fitness to gain, it’s no wonder that people can burnout on training if you go are pushing the intensity in every workout. It is important to understand the idea of polarization, a concept that is not necessarily foolproof, but a general guideline for most athletes.

When training for triathlon, most workouts can be done at “low intensity” or in an aerobic zone. This pace should be easy enough to set you up for performing the remainder of your works outs at “high intensity” or more anaerobic. A good starting point is to do 80% of your time at low intensity, and 20% at high intensity.

While high intensity is a subject of separate discussion, low intensity can include some recovery workouts. Recovery workouts should be short to moderate in length, not fatigue your muscles, and can be used as a tool for recover as opposed to accumulating junk miles. Such workouts can serve a number of functions:

- Give you an opportunity to do drills
- Move your body to improve blood flow
- Put you through the motions to keep your mentally and neuromuscularly familiar with the movements.
- Let you mentally focus on improving your coordination/mobility/balance/movement
- Give your fitness pursuits a social outlet – go for a bike ride to the coffee shop, or take a hike in the woods
- Again, these shouldn't fatigue you mentally or physically, and should focus on recovering instead of adding miles/hours to your training week.

How to recover:

1) Sleep

- a. Most athletes will tell you how important sleep is. While the number of hours is important, most people require different amounts of sleep, from 6-9 hours. Generally, 7-8 is the best target, especially for time-crunched MIT athletes.
- b. Instead of focusing on number of hours of sleep, consider your quality of sleep. Do you feel well rested when you wake up? Do you fall asleep quickly? Do you get REM sleep, or is it light? How many times do you wake up at night (a few times isn't a problem, more is though)?
- c. Improve the quality of your sleep so you don't need as much:
 - i. Avoid caffeine, UV light (computer/tv screens), loud noises, or food close to bed-time
 - ii. Improve your sleeping environment for what you prefer: temperature?, no light, no abrupt noises, mattress/pillow?, "gentle" wakeup?
 - iii. Make sure you sleep deeply. Don't go to bed hungry/thirsty, or drink tons of water, consider sleep aids such as magnesium, melatonin, or herbal teas, don't drink alcohol, relax your mind with mediation or breathing exercise
- d. As a general rule, if you are falling asleep during the middle of the day, skip/shorten your workout and take a nap instead. On rest weeks, "treat" yourself to an extra hour of sleep

2) Mentally

- a. Your brain needs recovery just like your body. In training, we produce stress hormones, deplete macronutrients also used by our brain, use up willpower to perform the training, and distract focused time away from other important activities.
- b. I think this area is personal for everyone, but find ways to boost your mental recover outside of training times. This can include walks in the park, yoga/meditation, social activities with friends, getting ahead on school/lab work, doing another hobby, focusing

on brain nutrition, or simply sleeping. Find what works for your, and don't forget about this aspect

- c. How do you know when you are overtrained or burned out? Sometimes writing off poor performance to stress makes you over look other problems! Pay attention to your body and try to understand when you are capable of putting in the effort, and what is too much.
- d. "Mentally" also means that life stresses can be affecting your training. School, classes, personal situations can make your body react poorly to a previously-healthy-exercise

3) Physically

- a. Physical recovery starts during the workout. In most cases, a complete warm-up and cool-down are very important.
- b. Static and dynamic stretching are points of contention, but see what works for you. Pay attention to if you are tight or perform motions incorrectly.
- c. I highly recommend a foam roller for working out fascial adhesions, knots, and increasing range of motion. Talk to a veteran on how to use one. It is worth the investment.
- d. Considering doing easy drills in your resting periods to help you offset any movement imperfections
- e. Compression and ice are arguably tools that you can consider for helping your muscles feel better days after a workout
- f. If you feel pain, stop, ice, rest, and compress. Pain is usually your bodies way of telling you that something is wrong.
- g. If you need an injury checkup, MIT Club Sports Council has set up a way to see the Orthopedic nurse quickly; <http://web.mit.edu/athletics/sportsmedicine/kasser1.html>

4) Nutritionally

- a. This is a very personal topic, and I suggest you find what works for you, seek out resources, and talk to teammates.
- b. Fuel your training with what is required. Your body will recover and perform better if you are giving it the fuel it needs while training. This is inclusive of pre-, during, and post-fuel.
- c. Eat real food for overall health. Ready-to-go fuel and recovery foods are good when you are time-strapped. See what works for you and read up on it.
- d. Overload your body with whole-food sources of micronutrients. Seek out vegetable sources as much as your stomach can handle. Pay attention to getting in the required minerals for energy metabolism and body repair.
- e. See some great resources out there: Racing Weight by Matt Fitzgerald, Triathlete's Training Bible by Joe Friel, Nutrition for Endurance Athletes by Monique Ryan, and other online blogs.