



TIP # 8 AVOIDING OVERTRAINING OVERLOAD!

As our mileage build-up continues and our speed workouts become more challenging, the possibility of overtraining increases. The body responds positively to training though the breakdown of muscle proteins and other physiological responses to exercise and grows stronger through the subsequent buildup. When the rate of breakdown, however, exceeds recovery it leads to the black hole known as overtraining. Temporary soreness or fatigue is not necessarily an indication of overtraining. If cutting your mileage and intensity for a few days restores your energy and performance levels, you are not over training, but simply adapting to the stresses of normal training. That is why it is important to alternate “hard days” with easy recovery days, to allow for these natural adaptations.

- Overtraining is chronic condition that often arises out of too much high intensity training and racing. It is often linked to over stimulation of the sympathetic nervous system which regulates your body’s reaction to stress. Try combining a couple of speed sessions with a race and a long run each week, and you will most likely soon find yourself on the road to chronic overload. For some it takes more, for some less, but in all cases performance suffers, fatigue sets in, and motivation vanishes into thin air. Other factors in your life outside of training and racing can also contribute to the overload, causing your mind and body to be constantly engaged, which compounds the mental and physical exhaustion.
- How do you distinguish normal fatigue and soreness from “real” overtraining? Take heed to the warning signs. The earlier you can diagnose and treat the effects of overtraining, the more quickly you can recover and return to normal training and racing. The most common symptoms are:
 1. Trouble sleeping
 2. Increased resting heart rate
 3. Frequent colds
 4. Weight loss
 5. Poor racing and training performance
 6. Slow recovery from training
 7. Loss of motivation for running (and other things that normally interest you)
 8. Soreness that doesn’t subside after a few days of rest
- The most common methods of identifying overtraining involve monitoring heart rate; either your resting heart rate taken first thing in the morning, or your heart rate while running at a certain pace. For either of these methods, you need to know your normal resting and training heart rates **before** you become over trained. If your resting heart rate first thing in the morning is 5 + beats per minute higher than usual, it can be an indication of overtraining. Likewise, if your heart rate increases more than 4- 5% while running at a given pace (for example, your heart rate for an 8:00 min mile goes from 150 to 160 beats per minute), it can also be an indication.
- Other factors such as illness, dehydration or low carbohydrate and protein intake can also lead to similar symptoms so it is important to rule these factors out. During a 3 – 5 day

period, try drinking plenty of fluids, and eating sufficient carbohydrates (60-70% of your calories) and protein. Combine this with adequate sleep and 3 – 5 days of low, easy mileage. If these don't eliminate your fatigue and you are not ill, then most likely you are over trained.

- Recovery from overtraining can only be accomplished by cutting back on your training. Training intensity is more important than training volume in recovering from overtraining, so cut back more on speed work than distance. Most cases of overtraining can usually be remedied in 10-14 days. Long term overtraining syndrome, however, may take several months to fully recover. This is usually rare, and can often be related to additional stresses or medical conditions. If you don't feel better after two weeks, it is recommended that you see a physician for a full evaluation.
- How do you prevent overtraining? The Beyond training schedules incorporate a gradual build-up in training volume and intensity to allow your body time to adapt. Everyone, however, has a different threshold of the amount of training they can positively adapt to. This depends on your genetics, your fitness level and the total stresses in your life. The High Intensity training schedules may be appropriate for one person, while for another who runs the same pace, the Moderate or Low Intensity regiment may provide the best stimulus for adapting positively without overtraining. The semi-elite program came with high base mileage recommendations designed to reduce the risk of overtraining from ramping up mileage too quickly. Effective training manages your body's ability to recover and adapt. It is possible to train very hard, as long as you allow adequate time between hard workouts for recovery. Know yourself...know where your threshold is; keep a training log, pay attention to hydration and carbohydrate replenishment, and sleep!

Reference: Pfitzinger, P., and S. Douglas. 1999. *Road Racing for Serious Runners*. Champaign, IL: Human Kinetics