Avoiding and Overcoming Burnout

by Shawn McDonald

As with many other aspects of life, it is easier to spot overtraining in others than in ourselves. In this article, we will examine the causes of overtraining and how to get back into a rested state, ready for further training and racing. Depending upon a number of factors, a particular level of training may be too much for a given runner at that stage in his or her running career, or it could be just the right amount to prepare for an upcoming race. Keep in mind that each individual and each situation is different. We will try to identify truths applicable to most ultrarunners.

Definition

An overtrained runner will often have a feeling of malaise about his or her running. The legs may feel heavy during the day, as well as when running. Runners past the point of diminishing returns in training are more susceptible to illnesses such as flu and colds (Gabriell, HH et al., 1998). These runners will have difficulty running either long or with much quality, and their recovery will be lengthened after runs of longer duration or speed than in the past, when they were not overtrained. There are certainly different levels of overtraining. As described by Tim Noakes in chapter 10 of the 1991 edition of Lore of Running (Noakes, 1991), these levels include "the plods" or "mini-burnout," or the "super plods," which includes persistent muscle soreness, and finally the fully overtrained state, "maxi-burnout" in which the runner has several of the symptoms of overtraining.

Diagnosing Overtraining

There are a number of signs to help diagnose overtraining in yourself or others. The first is motivation level. Are you enthusiastic about your training runs planned for the next few days or about an upcoming race? Or do you have an uninterested point of view about your running and lack a desire to train or compete? If it is the latter, you might want to look at your recent training and racing to see if you are overtraining. There are physical measures of overtraining as well, which tend to occur in a common sequence as the level of overtraining increases. First, post-workout afternoon weight will often fall. Fluid intake in the evening will likely increase, and the runner will go to bed later than normal, but awaken at the normal time or a bit earlier. These signs were observed by Richard Brown, coach of the Athletics West Track Club (Brown and Henderson, 2003). Other physical symptoms to be on the lookout for include an increase of morning/awakening pulse rate of five beats per minute from normal, an increase in heart rate at a given level of exertion

or pace during a run, extensive and lasting muscle and joint pain, lowered ability to finish normal training runs, and an incidence of a recent or current injury or illness, such as a head cold. In addition, quantity or quality of sleep may be reduced in the overtrained runner, such that he or she awakens not feeling rested.

Tips to Prevent Overtraining

There are two main ways to prevent overtraining. First, monitor signals from your body, as well as your mood, as you train each week-and especially following races. Signals to observe include how you feel a mile or two into each run in terms of your energy level and degree of leg muscle soreness. This information can be included in your running log, which should be reviewed a few times each week. Also note in your log your resting and waking heart rate and weight (at the same time each day), as well as your sleep patterns and quality (Taylor, SR et al., 1997), as these can be the first signs of overtraining.

The second way to avoid overtraining is to build rest into your training program, both on weekly and yearly bases. Try to take at least one complete day of rest each week, to allow your body to recover from previous training and to prepare for upcoming long and faster training runs. You can take a rest day if you feel a lack of enthusiasm about running and instead do a short cross-training session at a sport that does not put much stress on your legs. Including one or more days of cross-training per week is also a form of rest, whereby you are still active but give your legs a break from the pounding of running, while doing something different that refreshes your mind and outlook.

Planned Rest Periods

An additional way to design rest into your training program is to incorporate one or two "off seasons" per year. These periods should last three to eight weeks, during which you cut back on mileage by about a half or more from your peak mileage. Training time should be reduced about 30 percent or more from your peak; in addition, take one to three days per week totally off from exercising. The frequency of running in the off-season can range from two to four runs per week. One to three cross-training sessions included per week will maintain an aerobic base of fitness and address strength issues as well.

When to take an off-season is a matter of personal preference; there are a number of options. You can rest following a big race that you just completed to allow for adequate recovery and repair of your muscles, energy stores, and any blisters or hydration problems you developed during the race. A second option would be to rest based on the calendar. Runners in hot climates might want to schedule a rest

season for the summer and focus on cooler sports such as swimming or biking at those times. These athletes can train and race more in the fall, winter, and/or spring. Runners in areas that have cold winters might want to take their off-season in the winter, doing more training indoors in the gym during a three to five-month period, and then build up running mileage in the spring, and compete in some races during the summer and fall. A short off-season could then be included between the spring and fall racing seasons.

Cutback Weeks During Training

As you progress in a training program towards a goal race, a week of relative rest can be added to your plan about every four to six weeks. A good plan is to include your final cutback week before a key race about four to five weeks before that race. Then you can train for another two weeks at a high level after the final cutback week, and then rest during a two-week taper leading up to the race. During your cutback weeks, reduce your running mileage by nearly a half, and training time by a quarter or more. The long run duration during the cutback week should be kept under two hours. This should provide adequate rest, allowing your body and mind to "catch up" to your recent training and undergo a significant level of adaptation.

The cutback week has three main purposes. First your legs will rest from the stresses of running and become fresher throughout the week, and the following week as you return to "normal" training. Second, the processes of rehydration and refueling are easier when your training level is reduced compared with a full training schedule. Finally, the rest week gives you a mental break from having to focus each day on the details of training; thus, you can devote more energy to other areas of your life.

Cross Training

Including cross-training into your running program is one way to add variety and aerobic conditioning to your training plan. Select sports that work your legs, main trunk muscles, and/or a combination of the two, in a non-pounding manner. Crosstraining provides the three benefits mentioned in the previous paragraph. In addition, you develop muscle strength in the legs and other areas that affect hill running form and power, along with an ability to maintain good posture late in an ultra. Short cross-training sessions can be incorporated into your cutback weeks and during your annual or semi-annual rest period. Include these workouts on days when you are doing a short run, or on days by themselves.

Sample Training Schedules

Two sample weekly schedules are given below. The first is for a cutback week for a runner who has been training about 10 hours per week for a number of weeks prior to the cutback week. The second is for a runner in the middle of his or her off-season, who lives in a cold climate and does the bulk of his or her winter training indoors.

Cutback Week

Monday: off for a rest day; Tuesday: five-mile run on flats; Wednesday: cross-train one hour (one hour on bike or 30 minutes on bike and 30 minutes weight lifting); Thursday: 10-mile run on slightly rolling roads or trail; Friday: one hour cross-training (30 minutes on elliptical trainer or stationary bike, 30 minutes weights); Saturday: one hour run on flats; Sunday: off for a rest day.

In this cutback plan, the runner completes about 23 miles of running and does two short cross-training sessions; there are two days of complete rest. The days with weightlifting are separated by at least one non-lifting day to allow for muscle recovery and repair. The number of hours of training is just over five for this cutback week. The athlete should come out of this week feeling energized and with freshness in the legs and enthusiasm for upcoming training weeks. General guidelines for the cutback week include reducing running mileage by about 50 percent from previous levels, taking one to three days of complete rest, and doing no speed work or super hilly running.

Off-season Sample Week

Monday: cross-train for 45 minutes (20 minutes on stair climber to warm-up, then 25 minutes total body weight lifting); Tuesday: five-mile run outdoors on flats; Wednesday: off; Thursday: six-mile run on a treadmill with running some one to two-minute inclines at four-percent grade; Friday: one hour cross-training (30 minutes stationary bike, 30 minutes total body weights); Saturday: one to 1.5-hour run on treadmill with five pickups of 45 seconds each at one minute/mile faster than normal in middle of run; Sunday: cross-train for 45 minutes (20 minutes stationary bike, 25 minutes on stair climber).

This program involves about six hours of exercise during the off-season week, consisting of 17 to 20 miles of running and three cross-training sessions. Wednesday is a complete day of rest. Most of the running is done on flat ground except for the small simulated hills during the Thursday run. The work the runner does on the bike and stair climber as well as during the weightlifting sessions will help maintain most of the strength developed during the previous running season. General guidelines for the rest period are to run about 25 to 60 percent of normal

training mileage, to mix in two to four cross-training sessions per week, and to keep running sessions at aerobic effort levels and at durations less than two hours. Exercise time per week is reduced by about 30 to 60 percent from the peak in the previous running season.

Causes of Overtraining

There are a number of possible causes of overtraining. Keeping and reviewing a running log on a regular basis can help you spot these problems before you develop a full bout of burnout. One of the most common causes is too quick a buildup in training mileage, either after an injury or race, or after signing up for an upcoming race. You get overeager and do too much before your body is ready to handle a high training load. Generally speaking, only increase running mileage by 10 percent every other week as you increase your training levels. The second common cause is running a number of long (over half marathon distance) races in a period of a few weeks to three months, without any rest weeks between races. This can drain your energy stores and leave you with "dead" legs. Try to allow for at least two weeks of relative rest (doing only three to five short training sessions per week) following a long race, and then return to training at a reduced level compared with your previous peak. Other causes of overtraining include not adequately rehydrating and refueling after a long training run or race, running multiple hard sessions several days in a row, and trying to train at high levels while undergoing a stressful time in your life, such as when you have a newborn baby, have just moved to a new city, or are planning a wedding.

Overcoming Full burnout

Keep in mind the symptoms of overtraining as you progress in your training program and you will be able to spot the start of a burnout and make an adjustment to your plans by adding a rest day or two, a cutback week, or even off-season period that combines rest, shorter running sessions and cross-training. If you do develop full blown overtraining syndrome, then you will need to rest for three to eight weeks or more. During this time, training volume should be reduced by 50 to 80 percent, with no faster or long distance running sessions planned. It is important to not run any races during this recovery period and to not do any workouts at more than an aerobic level (75 percent of maximal heart rate). Be very mindful during the recovery weeks of your hydration levels and refueling, and ensure that you get adequate quality sleep. After a few weeks, you can slowly start to build your training load and running mileage, and then to slowly add in some workouts at higher intensity.

References

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