

Science-Based Performance Improvement Training

Designing Your Program

July 5, 2006

The program is predicated on the assumption you have a particular racing goal [e.g., a new 10K PR, qualify for Boston, etc.].

Before we begin, I suggest you will find it helpful to print a copy of “Cardinal Rules” to use as a checkoff list.

Selecting the Target Race

The first step is to select a particular race as your target. Use care in making this choice. For example:

- Don't pick a very hilly course for a PR attempt.
- Make certain the course is USATF certified, many in this area are not.
- Make certain you will have enough recovery time between your Boston qualifying race and the race itself, etc.
- It is very helpful to have a group to train and run the race with. Group support can be very beneficial.

And now the tricky part: Provide adequate time for improving your running economy and fatigue resistance. This requires good judgement. Dr. Daniels claims it takes 6 weeks to reach a new performance plateau. I think that is a minimum. It is probably adequate if you are already racing frequently and want to improve your 10K PR by 15 seconds, or .6%. [The math: current 10K PR= 44:00; new PR= 43:45; % needed: $15/60/44 \times 100\% = 0.57\%$].

However, if you haven't been racing much lately and you want to aim high or you are new to racing, then schedule a longer time for training, [e.g., 12 weeks, 16 weeks, etc]. In addition to working on your VVO₂max and fatigue resistance you must run several practice races. Running a race takes almost 2 weeks out of your normal training routine, 1 week of taper before the race and almost a week of recovery afterwards.

Marathons require a long training time, e.g., 4 months, because you must plan on spending a lot of time on fatigue resistance workouts. You'll need some long-distance weeks [e.g., 70 miles] and some CG training runs of 30 miles, or so. In addition to just running these, you'll need to devote some time to resting before and recovery afterwards. Further, you should include several 5K, 10K, and 10mile practice races; each of these requires about two weeks, as described in the previous paragraph.

A note about practice/training races: As I said in “Practical Considerations,” practice races are a terrific workout and CG training drill. There are additional important benefits. These races provide an excellent tool for learning how to prepare and execute a detailed race plan. [There is an article on race planing] They are the best measure of your performance progress. And, if Donna R's and Anne-Marie S's experience is typical, you may make some new Prs in the process.

Donna's experience: [DR_blurb.php](#).

Anne-Marie's experience: [AMS_blurb.php](#)

Laying Out Your Plan

Start with first week or two. If you've been training hard and/or racing a lot recently, you should refresh your systems by resting, jog, bike lightly, whatever.

Next, schedule in your training/practice races. Now add a taper week before and a recovery week after each one. The taper week is necessary to optimize everything for the race and the recovery is to insure your systems recover stronger than before.

Then schedule your super long runs, a couple of 30 milers for marathons, a few 12 milers for 10Ks, etc. Now schedule a couple of days light jogging before the runs and a recovery week following.

Finally, add your interval, interval-hill, and long-distance weeks. Generally, I recommend a ratio of about 3 running economy [$\dot{V}V\text{O}_2\text{max}$] weeks to one fatigue resistance [CG] workout week.

Use good judgement in scheduling in the interval, interval-hill drills, obviously they should be relatively light at the start and increase in intensity and duration as your schedule progresses. Some typical interval weeks and interval hill weeks are below.

By now, you see why I said you generally need 3 or 4 months to optimize your performance to the next level. But, don't be discouraged. It is very likely you may set a new PR or enjoy your performance improvement with the practice races.

More to come on the topic.....

Check back in a couple of weeks