## Essay on Peaking

## by Rio King

Ever experience a period when you had a string of performances that kept getting better each week, and you seemed to be doing it with less effort than your training? If you have experienced such a time, you were fortunate to have attained a peak performance period. If you don't know what I'm talking about, then perhaps you have not been training for a peak.

What I'm telling you about are not my ideas, but they were first introduced by Arthur Lydiard of New Zealand in the mid 50s. Peter Snell won Olympic gold medals in the $800(1960,1964)$ and the 1500 (1964) as Lydaird's star pupil. Some of you may have met Dr. Snell at a local running or orienteering event. Our own local, very successful coach of international athletes, Robert Vaughn trains his athletes to reach peak performances for specific events. Anyway, you can enjoy one period of peak performance about every 12 months (give or take a couple of months). After that you have to re-enter the training cycle by resting, then rebuilding your base. You can sustain this period of peak performance for only 5-6 weeks. If you try to compete after that, no matter what you try, your performances will decline and you end up discouraged, burned out, or worse, injured.

So, I try to train each of you to a peak period that coincides with the USCAA Nationals. How do we get there? (No, not to the track). Four "easy" steps to PEAK by mid July:

| Phase | Duration | Start Date |
| :---: | :---: | :---: |
| 1. Base | 8 weeks | December Nov |
| 2. Strengthening | 6 weeks | February Jan |
| 3. Capacity | 7 weeks | April Feb |
| 4. Speed | 5 weeks | June Apr |
| 5. PEAK | 6 weeks | July May |
| What do I mean by these terms? |  |  |

## Base

Sprinters (100, 200, 400): Running 3-4 times a week for a minimum of 20 minutes. Moderate upper body, quads, hams and calves weight work. This is NOT "body-beautiful" work. It's running specific. Consult with your weight trainer and let him/her know your running goals.

Middle Distance runners (800, mile, 2 mile): Running 4-5 times a week for a minimum of 30 minutes. Light weight work. 2-3 sets of 15-18 reps with light weights.

Distance runners ( $5 \mathrm{~K}, 10 \mathrm{~K}$ ): Miles and miles and miles. Try to work up to 40 miles a week by the end of the 8 weeks; 50 would be a bonus if you can do it without risking injury. Don't try to race every weekend, either! Once a month during the base stage is fine.

This base stage gets your body used to the pounding your muscles and joints will receive in the following weeks. If you do not have a base, you are likely to be injured early in the next phases and be behind in your training for the rest of the season. Not the thing to do. Go pound some pavement or track.

## Strengthening

Primarily, this is adding hill training to your base training. Find a hill that you can evenly "push" up for a duration of 70 to 100 seconds. Be sure and take a 1-2 mile warmup. Begin the first week "pushing " up the hill 2 times, then jogging back down the hill and finishing with at least a 1 mile
warmdown. Increase the repetitions by one a week. By the $3^{\text {rd }}$ or $4^{\text {th }}$ week, you'll find you're able to charge the hill a little faster the first couple of runs. Take this to be your new effort level as you increase the hill repeats to 6 per workout over the remaining weeks. Do not continue this training period for more than 8 weeks.
A vigorous exercise class can be substituted for the early phases of the hill training, but a minimum of 4 weeks of hills is still recommended.
Do not race and hill train within any 4-day period. Once again, continue the base running and weight training. This is the phase that prepares you for the rigors of Capacity training.

## Track Capacity Training

The capacity phase begins to utilize the musculo-skeletal conditioning of the previous two phases, and builds the oxygen processing and conditioning. This is the workout phase that I have been personally guiding for the last (mmmmphhhh) years. Go to the CAPACITY TRAINING PAGE.

The idea is to build your oxygen carrying capacity by using over-distance training at about $80 \%$ of goal pace with minimal recovery periods. The total workouts increase over the 7 -week period, until your body has adapted to the load. Your muscles will be trained to endure the specific loading you are tasking them with, and your oxygen uptake will increase to match it.

This is the phase that will determine how successful your season will be. You will only be able to add a certain amount of speed after this phase. You will either be limited or boosted by the training level you establish here. The greater your capacity, the stronger you finish the 400 . You won't die at the 500 meter mark of the 800 . You will have the strength to hold off that closing runner. You are able to run three events in one day because of all those painful (and seemingly slow) repeats with the short recoveries. You have a half-mile kick at the end of the 10 K and still have two more speeds in the last 200.

## Speed

This is the phase everybody thinks of when they think of training. The purpose of this phase is to fine-tune the machine. You will now take near maximum efforts in your workouts and give your body more time to recover and adapt. This means switching the runs in practice from over-distance for capacity, to under-distance for speed training. Time trials and low-key races are an integral part of this phase of training.

Adequate rest is essential between runs on workout days, as well as between stressful workout days. Back-to-back stress workouts are sometimes necessary but are strongly discouraged. This is a period of high risk for injury.

If you are a sprinter or a middle distance runner, you will be concentrating on two things: increasing your tolerance for running anaerobically (without oxygen), and training the smaller muscle groups to hold your sprint form together. You will not avoid oxygen debt. You will not be successful unless you learn to carry it with you through a string, smooth finish.

If you are a distance runner, the anaerobic aspects are not as important as being able to move to a sprint form after an extended period of a steady but fatiguing pace. Also, a second aspect of speed for a distance runner is running intervals at goal race pace, in order to train the body to feel relaxed at the desired race pace.

## PEAK

If you have patiently followed this training program, you will now find yourself in the rarified air of a PEAK. You will not have to "train" during this period. You will feel naturally fit. You can go to the track and workout like sprinters wish they always could: stretching in the warm sun, jogging around a little, effortlessly getting up to race pace, looking cool, socializing, drinking a cool, refreshing drink, toweling off and heading for the house with a bounce.

On race day, you will think back on those darned repeats and KNOW you can get through the last 200. When the bear jumps on your back coming out of the last curve, you KNOW you can carry him right past those other runners because of your oxygen debt training. You will be running at your PEAK. And it will feel GREAT!

See you on the top step.
Rio King, Coach
http://www.enerjazz.com/track/files/training.pdf
Also see the Capacity Training file at http://www.enerjazz.com/track/files/capacity.pdf

