

Importance of Hill Training for Boston

- Hill training is critical for Boston
- Other than the long run, it is the single most important workout
- The course has significant downhills early in the race which causes internal muscle damage, particularly in the quadriceps muscles.
- The reason for this damage is because of the braking force the quadriceps muscles apply when you descend (called eccentric loading)
- This internal damage is not realized until you begin to climb hills after mile 16 (Heartbreak Hill)
- Even though the downhill portions of the race allows you to run faster, it creates muscular damages causing the last ten miles to be much more difficult
- *The big question is: How do you best prepare for this?*
 - **Answer: Train on hills!!**
- Both meshed into the long runs and as hill repeats
- A 2 minute hill repeat may be the single most beneficial workout to someone running Boston. Beacon Street is perfect. The incline is ideal (5 degrees) and the downhill portion of the hills allows for that specific adaptation of the quadriceps muscle without putting excessive load on the knee.
- 3 of the top running coaches of all time, Dr. Joe Vigil, Dr. Jack Daniels, and Arthur Lydiard all agree that the 90 second to 2 minute hill run with a moderate incline is the single best workout a marathoner or cross country runner can perform
- The hill climb should be run hard, not a sprint, but maybe an 8.5-9 on a 1-10 scale of difficulty.
- The recovery back down the hill should be done at a normal pace. Do not try to hold back, but stay in control.
- Make sure you really stretch and foam roll the calves well.
- Even though the 2 minute hill run is ideal, any hill from 30 seconds to 2+ minutes will work fine. Very steep hills are not ideal due to changes in the mechanics.