

Hill Work

Running hills breaks up your rhythm and forces your muscles to adapt to new stresses. The results? You become stronger.

--Eamonn Coghlan

Why Hills? Hill repeats are the most efficient way to simultaneously build strength and improve aerobic and anaerobic capacity. Running hills, like lifting weights, is a form of resistance training. Hills strengthen the leg muscles to meet the specific demands of running, and by working hard on hills, you force the muscles to overcome the incline and the resistance of gravity. This strengthens the driving muscles—the hamstrings, calves, buttocks, and particularly the quadriceps, which, unfortunately, don't get much work when you run on flat terrain. Fatigued quads can be a problem late in races, especially marathons. Also, you will get a solid workout for your ankles (from the push-off) and your upper arms (from the pumping motion).

With hill training, you'll increase your resistance to fatigue during races. That will help you maintain good running form and a steady pace. Since you have to concentrate on driving the arms, lifting the knees and pushing off the feet to get up hills in training, running form will be exaggerated and improved. It should also boost your confidence!

Why Hill Repeats? Hill repeats allow you to structure your workout and measure your pace and improvement. By adding it at the beginning of our early quality/strengthening phase of training, we are pouring a strong foundation for future speed/track work. By strengthening muscles before we start speed work, we'll minimize the possibility of injury and increase the quality of future training!

O.K. What do I do? First, find a hill, a fairly steep hill. The perfect hill will have a 4-6% incline, be fairly consistent from bottom to top, and will take you between one and two minutes to run. Follow these guidelines:

1. Before starting to do a hill workout, you will want to warm-up by running easy for 10-15 minutes;
2. Before starting your hill repeats, be sure to stretch. Concentrate on your hamstrings and quads.
3. Plan on running four or five (4-5) hill repeats the first week; the amount of repeats will go up as your fitness level/comfort with hills improves;
4. You want to run at about 85% intensity (as if you were running a 10-K as hard as you could—fast, but under control). Your intensity and effort should be consistent across each interval;

5. Each interval should take the same amount of time to complete. If you slow down over the last couple intervals, you started out too fast. The time of your first interval should be the same and the time of your last interval. Don't get frustrated if it takes a while to get your pacing down—it takes some practice to push yourself hard enough, but not too hard;
6. If there is a flat area at the base of the hill, give yourself a 20-30 meter “head start”, so that you are not starting on the incline from a dead stop. This eliminates the strain of a standing start on a steep slope;
7. Maintain good form running up the hill: head up, arms moving front-to-back, and a slightly exaggerated knee-raise (tongue hanging out is optional). Make sure to shorten your stride so that your leg turnover is the same as it is on flat land;
8. At the top, don't stop! Run through the “finish line” at the top of the hill. Use the lap timer on your watch to record each uphill/downhill interval. Record these times in your running log;
9. Run back down the hill slowly and gently to recover from the uphill and to reduce the impact on your knees and quadriceps (running downhill is demanding on your body, as it causes 30-35% more impact on your body than flat land running). It should take at least twice as long to find your way back to the base of the hill. You do want to make sure you have at least moderately recovered before beginning your next interval;
10. After finishing your last interval, cool down by running easy for 10-15 minutes. As with any workout, be sure to fully stretch after your workout.

That's it! We encourage everyone to try to make the group sessions on Thursday evenings. As with the Saturday runs, hill repeats are much more fun with a group cheering you on! If you can't make it, find a nice hill near home and incorporate this workout into your training. If your hill is too long, you can simply “mark” the top with a tree, fire hydrant, piece of sidewalk chalk, etc.

Words of Caution. Running hills can cause or prevent injury. Ease into hill training. Be sure to warm up and stretch before and after the workouts. Run easy the day after a hill workout (Most of you have a rest day on Friday).

BE WARY OF AUTOMOBILE TRAFFIC. It's very easy to forget you're on a road when you turn around to come back down the hill. Also, make sure you stay hydrated during the workout.

Don't forget. . .hills are your friend!