

Hit the Hills

They're a necessary evil for all runners

BY ALAN CULPEPPER

Just a mention of the word "hills" causes some runners to shudder. Hills should not be thought of as an enemy that slows the average pace of your run, increases your heart rate or causes agony to your comfortable outing. Although they're not easy, they are very necessary and should be planned for and embraced as a positive training element.

THE BENEFITS

Hill work is an extremely effective way to gain more power, increase running economy and improve speed. The repetitive nature of hill workouts forces the muscular system to develop in response to the stress being placed on it, while the nervous system increases firing patterns to fast-twitch muscle fibers. Completing hill workouts also increases speed and endurance because of the resistance inherent to running up hill and the associated increase in heart rate.

Hills should be thought of as a form of speed work and included intentionally; they help introduce the body to faster work with less impact at a slower pace. Injury-prone runners who struggle with adding faster work will find hills provide the same stimulus with less risk. It might seem a bit counterintuitive, but, if done properly, running up a hill at a slower pace with lighter footstrikes is actually a much safer approach than jumping on the track and hammering out speed work. Hills are also a great way to keep your heart rate up for an extended period of time, thus increasing overall aerobic development.

TIP:
HILL WORKOUTS
BUILD POWER,
SPEED AND
ENDURANCE.



Photo by Chad Riley

HILL WORKOUTS

Below is an overview of several different types of hill workouts that can be added to any training program.

1 | SHORT HILL SPRINTS

These entail doing very short, hard sprints on a steep hill, with a full recovery jog back to the starting point between reps to maximize the effort of each sprint. These are best done at the end of any easy run to increase stride power and speed while also developing hip and leg extension. A possible workout may include 4-10 reps of 8- to 10-second sprints up a 7-8 percent grade with an easy jog back to the starting point.

Short hill sprints should be the first hill element added into your training plan. These can be done once baseline fitness has been established and performed one or two days a week at the end of an easy recovery run. They should be kept in the weekly routine throughout a training program but limited to one day a week once your training is in full swing.

2 | HILL REPEATS

Hill repeats mean running hard up a fairly steep grade for 45 seconds to 2 minutes, followed by a recovery jog back down the same hill. Hill repeat workouts are similar to speed training in nature where turnover, mechanics, power and consistency are the primary focus. Sample workouts might entail running 8-15 x 45 seconds, 6-12 x 1 minute, 5-9 x 90 seconds or 4-8 x 2 minutes. This workout should be run on a hill with a 5-6 percent grade with good footing and low-traffic volume. In an ideal world, the uphill would be on pavement and the downhill on grass or dirt next to the road.

Hill repeats should be included as part of almost every type of race preparation, including training plans for cross country, road racing, trail running or half/full marathons. The second type of hill work added to a training plan, hill repeats should be performed about once every 2.5 weeks or so (depending on where other workouts fall during a given week). Once in the racing season, hill workouts are not as critical but can be used as a nice break from track workouts.

3 | HILLY UP-TEMPO RUN

This 5- to 8-mile run should be run on a rolling course with a variety of short, moderate and long hills. The pace should be roughly equivalent to half-marathon race effort with the focus on working the uphill fairly hard (but not all-out), running the flat sections at a moderate pace and going slightly easier on the downhill sections. In this case, the hills can be steep, but they should be roughly 400m to 800m in distance.

An up-tempo hilly run should be included during periods of higher mileage and in training for longer events such as the half-marathon or marathon. These types of workouts do not have to be quite as structured, but instead executed over the natural profile of the route that you're running. They can be included as a second or third hard workout during the week and executed once every two to three weeks.

4 | TEMPO + HILLS

This workout includes a continuous tempo run of 3 to 6 miles at half-marathon race effort on a mostly flat course, followed by some hill repeats on a fairly steep grade immediately afterward. An example would be running 4-10 hill repeats in the 45-second range with an easy jog back to the starting point. This type of effort is less common but a great way to maximize the time spent completing a workout while mixing up your training.

The combination tempo run/hill workout can be included at almost any time during a training plan for all distances.

After reading this, hopefully you'll give hills a second chance or maybe embrace them for the first time. Mixing up your training is critical to your improvement as a runner, and hill workouts not only help you in your overall development, but also will make you faster. If done properly, you'll see results after only a few workouts and will reap the benefits on race day. **CM**



Two-time U.S. Olympian Alan Culpepper helps runners of all abilities through www.culpeppercoaching.com