

Hills

Based on: Sports Performance Bulletin



There are 3 major benefits of sprinting hills for a distance runner.

1. Mental toughness.
2. Stronger push off
3. More flexible hips



Including hill sprints in your program will give you all three of these. And, here's how they will help you to run faster.

First, **mental toughness**. There is probably nothing a distance runner dreads more than a hilly course. Seeing that hill looming ahead of you in a race can make your heart sink because you know that your heart rate is going to shoot up and your pace is going to suffer as soon as you start up the hill. But, hey, if you've sprinted up hills, you will know that you can conquer one at a lesser pace. This mental shift alone will improve your performance and make hill sprinting worthwhile.

But, that's not all. Another key factor in your distance times is your **stride length**. The farther each stride goes, the less strides you have to take in your run and the faster you will finish. So, what does hill sprinting have to do with this?

First, hill sprinting forces you to lift your knees high which increases the flexibility of your hips. More flexible hips equal longer stride lengths

Other resistance / power development activities are available on request; nwa@iinet.net.au

Second, hill sprinting strengthens your ankles enabling you to push off the ground with more force on each stride. This propels you forward farther on each stride. Again, longer stride length.

Sample Sessions for Developing Runners

(Quality is more important than Quantity)

Gen. Conditioning: 1-2 sessions/week; Pre-Comp: 1 / week

Session assume a thorough warm up and warm down .. at least 15 minutes of drills, jog, accelerations; remember the different focus of a w/u and w/d ... (Hint: what do you do after a w/u? What do you do after a w/d?)

Session 1

(General Conditioning Phase)

2 x 4 x 150m; 70-80%; w/b; 5-8 mins.
3-5% gradient
3-5%; w/b; 5-6 mins. between sets

i.e. select a 3-5% up-slope; firm surface;
3% = 3m rise in 100m
4 runs: walk-back recovery (w/b) .. repeat,
i.e. a second set of 4 runs;
5-8 mins between sets

Session 2

(General Conditioning Phase)

2 x 4 x 250m; 70-80%; walk-jog back:
6-10 mins; 3-5 % gradient

Session 3
(General Conditioning Phase)
150m (80-85%), then uphill for 100m (fast)
walk-jog back .. repeat x 5
(pulse after recovery should be 120 bpm .. recovery accordingly)

Session 4

(General Conditioning Phase)

Short Hills .. faster
2-3 x 5 x 40-60m; 90%; 5-8%;
w/b; 8-10 mins. between sets

Sessions 5

(Pre-Competition Phase)

2 x 3 x 120m; build speed to 90%
walk-jog back; 3-5%
8-10 mins. between sets

Session 6

(Pre-Competition Phase)
Short-Fast Hills

Plan your sessions to meet what you require and aim to achieve; **Pre-Comp phase** .. near or complete recoveries; A quality session once a week or fortnight.

Vary your session within the general guidelines; e.g. a very good session is to find a slope where you can run fast, upslope for 100-150m, then jog or run easily along a relatively flat surface (80-100m), and then run upslope again (100-150).

Make it challenging .. accept the challenge; plan your session; jog/walk your recoveries .. make adjustments to reflect your needs and experience.

Quality Runs.

Every athlete is an experiment of one .. choose or modify the above