

## **Hill Training**

**The Benefits of hill training are every runner's secret weapon!**

**What does it do.....?**

- Helps to develop power and muscle elasticity
- Improves stride cadence and length
- Improves co-ordination, encouraging the proper use of arm action during the driving phase and feet in the support phase
- Develops control and stabilisation as well as improved speed (downhill running)
- Maximises strength endurance
- Develops maximum speed and strength (short hills)
- Improves lactate tolerance (mixed hills)

### **Technique**

The technique to aim for is a "bouncy" style where the athlete has a good knee lift and maximum range of movement in the ankle. They should aim to drive hard, pushing upwards with their toes, flexing their ankle as much as possible, landing on the front part of the foot and then letting the heel come down below the level of the toes as the weight is taken. This stretches the calf muscles upwards and downwards as much as possible and applies resistance which overtime will improve their power and elasticity. The athlete should look straight ahead as they run (not at their feet) and ensure their neck, shoulders and arms are free of tension. Many experts believe that the "bouncy" action is more important than the speed at which the athlete runs up the hills. For the athlete, when competing in their sport/event, it can mean higher running speeds and shorter foot strike times ।

### **Types of Hill Training**

Not all hills are the same therefore training will consist of short, medium and long hills. There will also be varying gradients and terrain and a mix of different training schedules.

### **Diet and Nutrition**

Hill training will put your body under stress therefore it is essential when you prepare for the training that you ensure you are well hydrated and have fluids at hand. I would advise that you have eaten approximately 2 hours prior to turning up and have with you one gel in case you "bonk" at anytime during the training phase.

## Hill Training Preparation

- Ensure you are well hydrated and fuelled.
- Hill training will stress your calves and Achilles so ensure you are adequately warmed up.
- Wear appropriate footwear for the terrain you will be training on. Advice will be given.
- Ensure you warm down properly after training.
- Adopt a good core training programme as this will help reduce injury occurrence and support your training.
- If you have any current injury issues in particular calf, Achilles or ankle please let me know. I would also encourage you to consult an approved physiotherapist, we would recommend Cowal Physiotherapy.

## Reference

- 1. MACKENZIE, B. (2004) *The ups and downs of hill training* [WWW] Available from: <http://www.brianmac.co.uk/articles/scni16a5.htm> [Accessed 22/5/2014]