



# **Strength Training for UTA100**

By Andy DuBois -Mile 27

Strength Training has been proven to improve running performance. For a race like UTA100 with so many stairs and hills, I feel strength should be a vital part of your training routine. The question is what type of strength training will benefit you the most?

The benefits of strength training are dependent on the exercises you do. The more similar the exercises are to the task, the more the benefit. So for example hiking uphill with a weighted pack on will have a lot more benefit for UTA100 than sitting on a machine in a gym. Simply working the legs muscles any random way is not necessarily going to help your performance. We need to think about how the legs are going to be used in UTA100 and choose exercises that work your legs in a similar way.

#### **Exercises**

There are a huge range of exercises you can do and a complete discussion of them would fill a book but I'd like to share what I think would help you at UTA100.

#### **Weighted Stair repeats**

Hiking up stairs 2 at a time with a weighted pack on is an extremely beneficial workout for UTA100. The weight of the pack should be a few kilograms heavier than the maximum weight in your pack on race day. If you are using uniform concrete stairs then I recommend mixing up your foot positions to simulate the random nature of bush stairs. Turning your feet out or in a little, taking wider steps and narrower steps will help recruit lots of different muscle fibres that won't be used if you stick to straight up and down. Start with 3 x 10 minutes with a few minutes rest between and build up to 3 x 20 minutes once a week.

#### Lunges

These are the staple of any strength program for runners and can be done in a variety of different ways. Walking lunges and jump lunges are two of my favourites.

-Walking lunges are done simply by stepping forwards and lunging down at the same time then stepping forward again onto the opposite leg. If you have the room

do 10 steps with each leg. If space is limited then do as many as you can and turn around and repeat. You should also mix up foot placement, long strides, short strides, feet turned in/ turned out slightly, stepping wide or stepping across in front of the other leg. These variations help simulate the random nature of trails. The lunges should be performed in one movement - ie don't step forward pause and then lunge down - make it one fluid movement.

-Jump Lunges are when you start in a lunge position, spring upwards, swap legs mid air and land again before quickly springing up again. The lower you go the harder they are.

If you have never done lunges before then start with fixed up and down lunges or some 2 leg and 1 leg squats first to build strength before you add walking and jumping lunges.

Look to build to 3 sets of 20+ reps adding weight when it feels starts feeling comfortable.

## **Plyometrics**

Jumping, skipping and hopping type exercises can increase the elastic recoil we get from our calves and Achilles tendons and make us more efficient, more economical runners. UTA100 has a number of sections that are very runnable so increasing running economy means you can run those sections either faster or at the same speed but with less effort, thus saving your energy for the bigger climbs.

Start easy and build slowly as tendons take longer to adapt than muscles. I recommend starting with jumping for a minute or two and then gradually progressing into hopping. Mixing up the directions you hop and jump help to load the feet and calves in different directions similar to what you would experience on the trail. For example imagine you are standing in the centre of a large clock then jump out and back to each number.

### **Box Jumps**

Box Jumps are simply jumping and landing on top of a box - high enough to be a challenge but low enough that you can do 15-20 reps without missing the box. From the top, step back down and repeat.

Once you can comfortably do 2-3 sets of 15-20 reps you can also include jump downs. Jump up, jump down (in a forwards direction), land lightly, turn around and repeat. The jumping down loads the legs significantly more so take your time building strength before including them.

You might start with a box as low as 20cm and develop co-ordination. Then gradually progress to a higher box.

Adding in 2 x 30 minute strength and plyometric sessions per week can not only improve performance but also decrease your chances of injury so its well worth making strength work a regular part of your training routine.