

## Restriction in ankle mobility? What exercises should I do?

So we have identified a restriction in ankle mobility. Where the athlete feels this restriction is vitally important and will help identify what corrective strategies are prescribed.

Poor dorsiflexion can be the result of several factors. One reason is due to reduced length of the muscles in the back of the lower leg (gastroc/soleus/achilles complex). If they are tight, obviously they will cause a dorsiflexion restriction. These athletes will feel a restriction at the back of the ankle during dorsiflexion testing as in the picture below.



One such exercise to reduce tightness in the soft tissue structures in the back on the calf is using an active isolated calf stretch. I have found this technique to provide long lasting mobility and flexibility benefits in my practice as opposed to static based stretching protocols.

The athlete keeps one leg straight and places rope along the balls of the foot. The athlete leans forward slightly to increase stretch and tension on the sciatic nerve. Bringing the chin to the chest will maximise the tension.



The athlete must keep the back of the knee on the floor throughout the stretch. The knee will want to lift to help shorten the calf muscles. Do not allow this happen as this will not stretch the muscle!

The athlete initiates movement by lifting the foot upwards towards the knee with the muscles on the front of the shin and helps with slight overpressure using the rope for a hold of 2 seconds, exhaling during the stretch.

The foot can be turned inwards or outwards to isolate the outer and inner portions of the calf respectively.



Above I spoke about what exercises might be useful if a restriction in ankle dorsiflexion is limited by the muscles at the back of the lower leg. The example exercise I used was the calf active isolated stretch (AIS).

If the restriction is in the front of the joint, as felt during ankle dorsiflexion testing, joint based mobility exercises should be conducted. One great exercise I often use is the half kneeling stick ankle mobilisation.

The first picture shows the starting position. Begin in half kneeling, place the stick/dowel directly in front of the second toe. Cue a tall chest position. Hand position can be modified to allow for the correct start position.

### **Half kneeling stick mobilisation: Start position**



Next, drive the knee of the foot in front to the outside of the stick as far as possible, whilst not allowing the heel of the foot to lift from the floor.

As an additional bonus this exercise provides a good stretch of the rear leg (hip flexors/quad), but be sure this extension is coming from the hip and not

from the back. To do so, cue glutes tight and ensure the lower back does not extend as the knee drives forwards.

**Half kneeling stick mobilisation: End position**

