

Running Adaption and Safe Progression:

Adapting your Running Volume

Your body will adapt with any given training but only so quickly. Different tissues adapt at different rates. Skeletal and cardiac muscle can adapt to an increase in running volume (mileage per week) quicker than bone. Therefore if you increase your running volume too quickly you will be at an increased risk of developing a stress fracture in your weight bearing bones.

To successfully change your running volume and avoid such injuries it is advised that your volume (mileage per week) increases by no more than 10% per week.

Adapting your Running Intensity

Your heart rate is typically used to measure your exercise intensity; this is essentially an indicator of the challenge on your cardiovascular system and will vary with each individual.

In order to safely adapt to an increased running intensity it is important to only increase by 3% (of total volume) per week.

Adapting the Running Surfaces

Vary your running surface as much as possible. Each type of surface produces different biomechanics and imposes different mechanical stresses on your anatomical structures (bones, ligaments, muscles). Therefore by altering your running surface such as in trail running and cross-country courses you will reduce the level of repeated stress through the same tissues, which will reduce your exposure to overuse injury.

Adapting to Hill running

Running uphill increases the force of propulsion and, therefore, the stress on the posterior chain e.g. Achilles tendon and plantar fascia. Whilst running down hill increases the impact and the braking phase thus increasing stress on the heel, the iliotibial band (located at the lateral thigh) and the patella (knee cap). It is therefore advised that you gradually incorporate hills as part of your training, this will allow your tissues to adapt safely and reduce your chances of injury.

Adapting to New Shoes

If wearing a new shoe:

- Walk at home for 2 weeks
- Short jogs for 1st week
- Intervals 2nd week
- Longer jog 3rd week
- Weekly long run on 4th week