

Injury Prevention

What causes an injury?

Injuries can occur through a traumatic injury (falling, getting hit) or atraumatically (overuse injuries, muscle injuries). Thankfully typically in athletics we do not get many traumatic injuries but rather atraumatic injuries. These occur when the body's bones, ligaments, muscle, or tendons can no longer absorb the amount of force or load going into the body.

To prevent injuries we therefore need to:

- 1. Make the bodies tissues (bone, ligament, muscle, tendon) more resilient to the forces and loads in athletics*
- 2. Make sure that we do not apply excessive force to the bodies tissues*

Improving Tissue Strength

To improve tissue strength we need to put a force or load into the body. This can be applied in the way of training, competition, strengthening or mobility exercises. The body will then adapt to make itself stronger. It can take weeks to months to adapt to the sports we want to play, which emphasizes a gradual increase in weekly training or competition load, rather than a sharp increase in activity levels.

Just as we can make the body stronger, we can weaken the tissues in the body by over resting. This is the cause for many injuries to occur when starting a new sport or following a break from sport for example into a new season or after a holiday. This highlights the importance of regular consistent exercise.

Applying Loads To The Body

As stated previously excessive force that the body cannot absorb will cause an injury. We can manipulate the forces applied to the body through various means. Greater speeds result in greater forces, running on grass will have a different effect on biomechanics as compared to harder surfaces, types of running shoes being joggers, flats, or spikes will alter lower limb loading patterns. One key way to minimize excessive loads in the body is through correcting biomechanics. Correcting your biomechanics emphasizes efficiency in your movement patterns to spread the loads throughout the body. Again this stresses the importance for proper coaching for technique and weekly programming of session loads.

Advantages of training

To prevent injuries it is therefore important to participate in regular training. This helps the athlete develop greater tissue strength to absorb greater amounts of force and helps develop better biomechanics to minimize dangerous or harmful body positions. Track and Field incorporates numerous events with varying technical challenges. By participating in a range of disciplines the athlete can also add versatility to their body's ability to handle load. This stresses the benefits of varying the activities in training and competition at a young age.

Key Points

Gradually increase training and sporting demands over weeks to months. The body takes time to adapt to new activities and can break down if it is overloaded.

Where possible avoid prolonged periods of rest so as not to overweaken the body. For example when on a break try and replicate the training and competition demands.

At a young age participate in a variety of events and sports to adapt the body to a variety of different loads.

Use training to develop the biomechanics and skills necessary to compete in the sport with greater technical ability and strength.

For more information on how to adapt the bodies tissues to athletics loads or on how loads can affect injuries please feel free to contact me on the number below.

For coaching information please speak to Camberwell Malvern Little Athletics Club for suitable training programs and times.



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