



Injury Causes and Prevention

- by Tudor Physiotherapy

Intrinsic Causes

1. Warm-up/Warm-down

- a. Facilitates the transition from rest to activity and vice versa
- b. Helps maximise performance and reduce risk of injury
- c. Warm-up – general warming, static stretching and sport specific drills
- d. Warm-down – cool down jog and static stretches

2. Hydration

- a. Dehydration of 2% body weight can lead to muscle cramps
- b. Important to respond to body signs such as thirst and urine colour
- c. Optimum fluid contains sodium and carbohydrate
- d. Sports drinks or water should be used

3. Management of previous injury

- a. Poor rehabilitation gives risk of injury recurrence
- b. Importance of physiotherapy assessment and rehabilitation

4. Fitness to perform/Over-training

- a. Lack of fitness leads to early fatigue and increases injury risk
- b. Training should be progressive and include adequate rest
- c. Stability exercises should be routinely performed
- d. Sessions should have individual variation

5. Technical error

- a. Technical fault may result in repetitive/overuse injury
- b. Athlete must work closely with coach and respond to early symptoms

6. Skeletal structure/Muscle imbalance

- a. Variation from normal may predispose toward injury
- b. Early symptoms must be fully investigated
- c. Comprehensive stretching and strengthening programs

7. Psychological factors

- a. Mental preparation must be included in warm-up

Extrinsic Causes

1. Equipment/Surface

- a. Surface must be suitable and of sufficient quality
- b. All areas must be free from dangers
- c. Equipment should be in good condition

2. Footwear

- a. Ill fitting/non appropriate footwear may provide an injury risk
- b. Must be supportive, sports specific and in good condition
- c. Must fit properly, be well secured and chosen according to foot type
- d. Must be appropriate to the surface

3. Temperature

- a. Extremes may lead to injury and or serious medical conditions
- b. Appropriate clothing and skin protection must be worn
- c. Hydration must be adequate