

Principles of Injury Management

For prevention of sports injury of discuss of the important principles which may assist the prevention of injury –

1. warm up
2. stretching
3. taping and bracing
4. protective equipment
5. suitable surfaces
6. appropriate training
7. adequate training
8. Psychology.
9. Nutrition.

❖ **Warm-up:** Warm-up prepares the body for exercise. The type of exercise to be performed determines the type of warm-up. General and specific warm-up:

1. Increase blood flow to the muscle.
2. ↑Oxy-haemoglobin breakdown, O₂ delivery to muscle.
3. ↑Circulation of blood.
4. ↑ Speed of nerve impulses.
5. ↑ Sensitivity of nerve receptors.
6. ↓ Injury due to ROM
7. ↑ Relaxation and contraction
8. ↑ Cardiovascular-response.
9. ↓ Stiffness of muscle.

❖ **Stretching:**

The ability to move a joint smoothly throughout a full range of movement is considered of component of good health.

Benefit: Increase flexibility, decrease musculo-tendinous injuries, and minimize alleviate muscle soreness, Specific injury prevent particular injury type.

❖ **Taping and Bracing:**

It is used to restrict undesired potentially harmful motion and allow desired motion. Taping is used for facilitates and inhibition muscle. It is to prevent injury and to decrease to excessive load on the effective area. Support the injured parts and to prevent further injury.

- Taping is use as a preventive measure in high risk activities. Example – Basket players' ankle.
- Bracing is used as a protective mechanism during the healing and rehabilitation phase.

❖ **Protective Equipment:**

Protective equipment has been designed to shield various parts of the body against injury without interfering with sporting activity. Protective equipment can also be used on return to activity after injury institutions where direct contact may aggravate the injury.

The role of equipment is to protection against injuries. It can may provide a psychological benefit by increasing player confidence.

❖ **Suitable Equipment:**

Running shoes, football boots, ski boots and tennis rackets are important elements that contribute to prevent sports injuries.

❖ **Appropriate Surface:**

In a particular type of game and sports require specific type of playfield which give the advantage to the player with less injury. Inappropriate surface and weather give more disadvantage and maximum chance of injury.

❖ **Appropriate Training :**

Training is the pursuit of activity that will ultimately lead to an increase in performance in a given sports. A number of general principle of training apply to all sports –

- Periodization.
- Specificity
- overload.
- Individuality

❖ **Adequate Recovery:**

Adequate recovery is essential if the athletic is to benefit fully from training and prevent injuries from occurring. Because without adequate recovery a player cannot perform next game and sports with full energy.

❖ **Psychology:**

Excessive psychological arousal can not only impair sporting performance but is also likely to increase the risk of injury. Over arousal is associated with impairment of natural technique, which players describe as a loss of rhythm. Loss of concentration can also predispose to injury.

❖ **Nutrition:** Inadequate nutrition may increase the risk of injury due to its effect of recovery.