

ST. MARYS HIGH SCHOOL, MOUNT ABU

CLASS : X

Physical Education

Chapter : 4 Sports Training

Read the topics carefully

DEFINITIONS OF SPORTS TRAINING

The following definitions may be helpful to understand the meaning of sports training:

According to Matwejew, " Sports training is the basics form of preparation of sportsmen."

According to Martin, " Sports training is a planned and controlled process in which for achieving a goal , changes in complex sports motor performance ,ability to act and behaviour are made through measures of content ,methods and organization."

According to Harre, " Sports training is based on scientific knowledge , and a pedagogical process of sports perfection which, through systematic effect on psycho- physical performance ability and performance readiness , aim at leading a sportsman to top level of performance."

IMPORTANCE OF SPORTS TRAINING AND ITS OBJECTIVES

Importance of Sports Training

The following points clearly indicate the importance of sports training:

1. **Builds up strength and endurance : We are well aware** that strength and endurance are significant components of physical fitness. Different means of sports training such as isotonic and isometric exercises , circuit training, continuous training ,interval training ,weight training , fartlek training , etc. , help in building strength and endurance.
2. **Improves Skill Levels** : Technical training forms a vital component of sports training which aims at acquiring skills of the specific sports . The role of technique and the amount of technical training differ from sports of sports. Sports training not only helps in learning the various techniques of the game but helps in the perfection of skill levels.
3. **Builds Motivation , Ambition and Confidence** : **Sports** training helps in building motivation in sportspersons, specially the intrinsic motivation. In fact, when athletes indulge in a systematic and scientific way of training in sports they are motivated to reach at the top in the field of sports . They become ambitious As a matter of fact, an effective sports training programme gives sportsperson the confidence they need and show them how to train properly.

4. **Improves Knowledge of the Sports** : Sports training helps sportsperson gain more knowledge about their respective sports. Indeed ,sports training imparts technical knowledge of the game / sports so the sportsperson learn thoroughly the details of their game.
5. **Increases Muscle Tone** : Sports training helps in improving muscle tone. Muscle tone is also known as muscle tonus or residual muscle tension. It is an conscious low level of contraction of muscle while they are at rest . In this state, muscles feel somewhat firm during resting position.
6. **Facilitates Good Circulation** : Sports training boosts blood flow in our body because sports training improves cardiovascular health which means more efficient blood circulation .
7. **Improves Agility and Flexibility** : Sports training helps in the development of flexibility and agility necessary to protect joints from injuries . Proper sports training can reduce or alleviate incidence of injury.
8. **Improves the Rate of Waste Product Disposal** : Whenever sportspersons engage in playing any game ,sports or exercise , waste products are formed. The disposal of waste products is essentials. If these waste are not excreted or disposed immediately , the efficiency of sportspersons is affected badly .Sports training help in improving the rate of waste products disposal and finally leads to the improvement of sports performance.
9. **Speeds up Recovery Time** : Sports training speeds up the recovery time following physical exercises or competition . This enables the body to cope with the demands of training more effectively.
10. **More Resistant to Injury and Illness** : Sports training is more resistant to injury and illness AS a matter of fact , most of the sportsperson are not well aware that sports training is essential for injury and illness prevention . Sports training helps in the development of strength, Flexibility and agility necessary to protect joints from injury.
11. **Improves Concentration**: Sports training improves concentration which ultimately enhances the sports performance . Indeed , in most of the sports and games ,concentration play a very significant role in enhancing sports performance.
12. **Increases Self-esteem** : A good sports training programme gives sportspersons the confidence and show them how to train properly . They gain ability to understand their limits and to perform activities that they had earlier thought was difficult .

Objectives of Sports Training

1. **To Improves Physical Fitness** : One of the major objectives of sports training is to improves physical fitness i.e . strength , speed ,endurance , flexibility and

coordinative abilities like reaction ability , balance ability, adaption ability , rhythm ability , orientation ability etc.

Different levels of these components are required in different sports.

2. **To acquire Technical Skills :** To acquire technical skills is another significant objective of sports training. Without acquiring technical skills in a specific sports \game , it is impossible to attain a better performance . However, the role of technique and as well as the amount of technique differ from of sports to sports. For example ,gymnastic require a number of technical skills whereas weight lifting require one or two techniques.
3. **To Improves Tactics :** To improve tactics is another important objective of sports training , in fact , tactics is carrying out a competition in such away that the sportsperson can completely utilize his abilities , skills while at the same time hindering the opponent to do so. The role of tactics is different in different games and sports.

PRINCIPLES OF SPORTS TRAINING

1. **Continuity :** According to this principle , training should be a continuous process. There should not be any break. In fact , should not be a long period of inactivity . It has been observed that discontinuity of training reduces the physiological capacities of sportspersons.
2. **Overload :** The principle of overload states that there should be greater than normal load on the body as required for training adaptation to take place. It means that the training load should be increased for improving the performance of sportspersons. The normal training load cannot improve the performance .If the training load remains static , the effectiveness of the load diminishes with the passage of time. It can only maintain the achieved adaptation of load.
3. **Individually :** According to this principle , every sportspersons is different due to individual differences .Each sportspersons response to exercise or load will definitely vary. So, a training programme should be modified to take individual difference into following consideration.
 - a) Large muscles heal slower than smaller muscles.
 - b) Recovery of fast twitch muscle fibres is quicker than slow twitch muscle fibres.
4. **Progression :** According to this principle , the overload should not be increased rapidly .If the overload is increased rapidly , it may result in injury or muscle damage. Exercising above the target zone can be dangerous. The principle of progression also makes us realize the need for proper rest and recovery.

5. **Specificity** : This principle states that exercising a certain part or component of the body primarily develops that part. It means that to become better at a particular exercise or skill, you must perform that specific exercise or skill regularly . For example, a runner should get trained by running , a swimmer by swimming and a cyclist by cycling.
6. **Active Participation : The performance** of an athlete is the result of athletes efforts and coach's skill. The principle of active participation means that for an effective training programme , the athlete must participate actively and willingly.
7. **Variety : Training is a long term** process and thus load and recovery can become boring for both the athlete and the coach. So , a successful coach should build in variety in the training programme to maintain the interest and motivation of the athlete . Sometimes , change and variety may be done by changing the nature of exercise time of the day of the session , training group and the environment.
8. **Recovery** : We are well aware of the fact the body regenerates during rest and becomes better and stronger than before. So, the training programme should be conceived in such a way that there should be proper rest and interval between training activities so that recovery may take place easily.
9. **Adaptation** : The principle of adaptation refers to the process of the body getting used to a training programme through regular repetition . As the body adapts to the stress of the new training programme, the programme becomes easier to perform. This adaption results in improved efficiency , less effort and less muscle breakdown at that level. That is why the first time you can ran two miles you were sure after, but now it is just warm up for your main workout. Only due to that you need to change the stimulus with higher intensity or longer duration in order to continue improvement.
10. **Frequency : Frequency is refers to how** often do you take exercise . After training or exercise your body completes a process of repairing. So, determining the frequency of exercise is important in order to find a balance that provides just enough stress for the body to adapt and also allows sufficient rest time for healing. Frequency is increased by training a greater number of times each week.
11. **Periodisation** : Periodisation is an organized division of the training year in pursuit of the three objectives viz. to prepare the athlete for achievement of an optimal improvement in performance, to prepare athlete for a definite climax to the competition season and to prepare the athlete to main competition . In periodisation , the year is divided into three period Preparatory period ,competition period and transitional period . In fact , periodisation is the systematic formulation of the training process in a training cycle or in a year for the purpose of achieving top form in the main competition. The complete training is performed through various training cycles such as . macro cycle, meso cycle and micro cycle .Macro cycle is the longest cycle of training , the duration of which is 3 to 12 months approximately . Meso cycle is a training

cycle for medium duration and it may be for 3 to 6 weeks. Micro cycle is the shortest duration cycle which may be for 3 to 10 days.

EXERCISES

1. **What** is adaptation ?
2. **Define** sports training.
3. **How** does sports training builds strength and endurance ? Discuss in brief.
4. How does sports training helps in developing physical fitness of a sportsperson? Discuss in brief.
5. **Discuss** the principle of overload in sports training.
6. What do you mean by the principle of recovery ?
7. What do you mean by the principle of active participation ?
8. What is "frequency " in sports training?
9. **What** is the principle of continuity ?

Note : Write the questions and answers in your physical education notebook.