

## **The second lecture: Fundamentals of Sports Training:**

II.1- Definitions of the Concept of Training

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II.5- Main Training Methods

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## II.1- Definitions of the Concept of Training

MARTIN (1971) defines training as a process that produces a change in physical, motor, cognitive and affective state. From the point of view of the physiology of effort, training is in general terms a permanent process of adaptation to the workload, (YAKOVLEV, 1972, cited by WEINECK, 1990, p. 39)

MOREHOUSE AND MILLER (1974, p. 156) define training as the frequent repetition of an exercise with the aim of improving power or endurance. It aims at improving physical capabilities in general, rather than the performance of a particular act.

According to ASTRAND AND RODAHL (1980, p. 297) physical training involves exposing the body to a workload of sufficient intensity, duration and frequency to determine a measurable effect, i.e. an improvement in the functions subjected to training. It is associated with a number of catabolic processes, such as the degradation of energy substrate stocks followed by an intensification of anabolic processes leading to an increase in the production of molecules used during work. If we refer to the definition of MATVEEV (1980, p. 71) sports training is the preferred means of concretization in the broadest framework of sports training: it constitutes physical training, which is done by means of specific exercises.

The concept of "training" encompasses the various aspects of an athlete's training, namely physical, technical, tactical, moral, and volitional training. It is spread over several years, characterized by very specific work periods, hence the term "periodization of training."

According to WEINECK (1983, p. 17), training is a process that aims to achieve a more or less high level in the area of the objective considered. He adds that "the degree of training" expresses the degree of adaptation to training loads. This adaptation depends on several endogenous (age, sex, physical constitution) and exogenous (metalogical factors) factors.

As for PLATONOV (1984, p12) "sports training includes all the tasks that ensure good health, education, harmonious physical development, technical and tactical mastery and high development of specific qualities."

EDGAR THILL et al (1990, p156) define it as the sum of adapted exercises, with progressively increasing and controlled intensity, which result through biological, psychological and technical modifications in the achievement of the highest possible performance.

CAZORLA (1990, p156) considers it as the only way for an athlete to be able, based on his genetic potential, to achieve the quality of the desired performance.

Through this set of definitions we can say that training is a process that aims to achieve a sporting performance through means specific to a sporting discipline, these are the exercises of the different forms of physical technical tactical preparation, while taking into consideration the biological effects induced by these means of preparation so that the training load can respond to that of performance.

Preparation for athletic performance is a complex process involving training and all the conditions in which the player or athlete performs.

The state of training, which reflects the body's general biological adaptation, must be distinguished from the state of readiness, which expresses the body's ability to perform at its peak during a competition. This state of readiness determines athletic fitness. Within the state of training, we distinguish:

- General training aimed at improving overall functional capabilities.
- Specific training aimed at developing skills in a specialized area of activity (PLATONOV, 1984, pp. 12-13).

Maintaining athletic fitness and perfecting motor skills for the game must take into account:

- a gradual increase in load,
- an appropriate ratio between the different training factors,
- a judicious choice of exercises. This choice must be in complete harmony with the competition exercises. These are the so-called specific exercises. Training direction is all the more motivating if the exercises meet the players' level of ambition on the one hand, and the harmonious arrangement of the different components of the exercise on the other, namely:
  - its intensity,
  - the duration of the effort,
  - the nature and duration of recovery,
  - the appropriate method.