ITF Coaches Education Programme Level 2 Coaching Course

Principles of training



Principles of training

- <u>Progression</u>: making improvements slowly
- Reversibility: if you don't use it, you lose it
- Overload: how the body responds to hard work
- Variation: avoid boredom and staleness
- Individuality: training to meet the needs of the individual

- Specificity: fit for what? to the demands of the game and the player's style
- Adaptation: the effect training has on the body
- Long-term planning: it may take years
- Recovery: Both during the weekly cycle and the annual cycle

Principles of training Progression

- Too quick an increase in training load:
 - Body has no time to adapt, which may result in injury
- Basis for the progressions:
 - Moving from easy to difficult
 - Gradually increasing the frequency, intensity, time, weight and duration of the exercises, drills or sessions
- Record every training session to measure progress

Principles of training Reversibility

- Loss of improvements produced from training
- It can be caused by:
 - Reducing the training load
 - Stopping the activity
- Long periods of inactivity should be avoided
- Recuperation is needed before returning to the previous level of training



Principles of training Reversibility (II)

- It takes a lot longer to improve fitness than it does to lose it
- It can take between 6-8 weeks to develop a significant aerobic base, while a significant decrease can occur in 10 days of inactivity
- The best way to stay fit is never to be unfit!



Principles of training Overload

- Increased the specific demands on the body
- Use overload by adjusting:
 - Frequency: Number of training sessions per week/month/year, number of repetitions of a particular stroke within a training session
 - Intensity: Level of exercise (high = 80% of maximum level, low = 50%)
 - Time: Duration of training, (not the rest intervals!)
 - Type, quality and quantity



Principles of training Variation

- When training is dull ---> danger:
 - Lack of concentration, poor performance, mental burn out, more possibilities of injury
- Vary activities and training routines:
 - Change the training site
 - Incorporate friendly competition
 - Work on different aspects of performance
- When training becomes dull, change it!



Principles of training Variation (cont.)

- Hard sessions should be followed by easier ones
- Work should be followed by rest and recovery
- Long workouts should be followed by short ones
- An intensive session should be followed by a relaxed one



Principles of training Individual differences

- Factors which affect individual fitness:
 - Hereditary factors
 - Age and lifestyle
 - Training and fitness level
 - Illness, injury and diet
 - Rest and recovery
- Change the programme as the player grows and develops



Principles of training Specificity

- The training programme must suit the specific demands of tennis and of the player
- Tennis requires short bursts of intense work interspersed with frequent periods of rest within a long period of intermittent physical effort
- Simply playing tennis will not provide the workloads needed



Principles of training Adaptation

- Muscles, tendons and ligaments adjust to the stresses caused by the training
- The body adapts slowly
- Start by working within the fitness levels of the players



Principles of training Adaptation (II)

- Types of adaptation:
 - Improved circulation, respiration and heart function
 - Improvements in strength and muscular endurance
 - Tougher bones, tendons and ligaments



Principles of training Long-term planning

- Needed to sustain the effort and commitment over a period of years to reach high achievement level
- Plan short-term and mid-term goals that will lead to the long-term objectives
- Discuss and agree a realistic training plan
- Each session should have a value for the player



Principles of training Recovery

- The effect of training is to destroy tissue, there will be little or no adaptation if training occurs every day
- There are two types of recovery:
 - Active recovery: other sports, etc.
 - Rest recovery: no activity

