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BOCCCE TRAINING MODULE





BETTER

Bocce together, active forever

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THE HISTORY OF BOCCCE

- It's hard to talk about the beginnings of bocce and certainly no one has actual real knowledge or evidence of it. 7,000 years before our era, archaeologists found circular objects in the excavations of the Turkish city that they estimated could serve for the game. Much better documentation of the bocce game was found in excavations in Egypt, where it was one of the basic games 2500 years before Christ.
- Boules is a collective name for a wide range of games similar to bowls and bocce in which the objective is to throw or roll heavy balls (called boules in France, and bocce in Italy) as close as possible to a small target ball, called the jack in English.
- As early as the 6th century BC the ancient Greeks are recorded to have played a game of tossing coins, then flat stones, and later stone balls, called spheristics, trying to have them go as far as possible. The ancient Romans modified the game by adding a target that had to be approached as closely as possible. After the Romans, the stone balls were replaced by wooden balls.

- The first written law regulating bocce was created in England, courtesy of King Charles II.
In Italy and France clubs were formed which joined the regional league in the 1880s and held the first official competitions.
- The first metal balls were made in 1923, and until that time, they used stone balls, big wooden balls, and then the balls with nails.
- It is quite certain that bocce in Croatia has been present since the seventh century and that it is a folk sport of all generations.

- In 1915, in Pula, the matches between the population and the army were played.
Five years later in the area of Rijeka there were several teams, the clubs were within the nearby restaurants, fighting for the prestige of the boss and the restaurants whose name they wore. (La Tappa, Le Rose, Dopo Lavoro..).
- The first clubs in the area of Rijeka (Zamet, Rikard Benčić, Torpedo, 3.maj, ...) were founded and then the first bocce meet between Rijeka Harbor and Trieste Harbor.
- Such a development in bocce was the foundation for the 1952 Bocce Association of Rijeka. That is when the official competitions started between clubs in Rijeka, cities and republics in the former SFRY. At the same time, the Bocce Federation of Yugoslavia with its headquarters in Rijeka is also being established.
In 1970, the headquarters moved from Rijeka to Zagreb.
- The first international match, our national team played, was held in France in 1952.
That same year the team played the first international match in Zagreb, against the very strong Italy.
With the fall of Yugoslavia, a new era begins in the bocce sport. Dominant forces in bocce, Italy and France, gain new rivals in the national teams of Croatia, Slovenia, Bosnia and Herzegovina, Serbia and Montenegro.

- The Bocce Association of Croatia joins the Bocce Confederation, which unites four associations: Volo, Raffa, Petanka and Lown Bowls. (over 400 registered clubs and 6500 registered players)
- This sport has experienced many changes. At first, stone balls, then clay balls or woods (balote) were played with, which are still used in some places in the Dalmatian Zagora. More recently, with the development of technology, the game is made up of synthetic and metal balls.
- The very difference between the material from which the ball was made, determines the rules and the way of the game, so there are different world associations separated accordingly. At the turn of 1955 in 1956, the rule was made in Italy to start playing metal bocce instead of pasta bocce (a kind of bakelite).
- The bocce balls were empty (hollow) until 1985 and they jumped in the outbreak, but they were very stable and accurate when rolling.
- The year 1984 was celebrated as a revolutionary year, because at the World Championship in Australia, Italian player Pasqualino Bruzzone played the first balls whose interior was filled with elastic ribbons. Such balls did not jump at the outbreak, and when they were rolled they had the character of the empty balls.

THE BASICS OF FUNCTIONAL ANATOMY AND PHYSIOLOGY

Speed Outbreak Analysis

- The rapid outbreak is the most interesting, dynamic and most accessible discipline for viewers.
- Thanks to the simple rules, but also the complexity of the game with regard to the required level of motor and functional abilities, as well as motor skills, this discipline has become more and more popular lately. The speeding outbreak has a long tradition in France, Italy, Slovenia and Croatia, the ones that fall into the very top of the world in bocce.

Structural Analysis

- The game of speed outbreak lasts for five minutes, and the athlete at that time has the task to break as many bocce balls from different distances ranging from 13 to 17 meters, with successive running of the 23 meters section, what is the distance between the stands in which the balls are. The top competitors, in that time, can throw 49 to 51 balls, or exceed 1100 to 1300 meters.
- The speed outbreak can be divided into several basic phases:
 - the phase of the run-up
 - throwing phase
 - running phase
 - the phase of taking the ball

Biomechanical Analysis

- *The aforesaid phases are the basis of biomechanical analysis of velocity scattering. Each of them has its own distinctiveness, but they all share a high level of economy and equality of movement.*
- *The speed of movement is variable. It is the largest in the running phase, it is slightly smaller in the phase of run-up and throwing, and in the phase of taking the balls it is necessary to perform an effective change of direction of movement.*

The running technique when performing this activity is the most similar to the athletics race on the midway.

Anatomical Analysis

- Speed outbreak as a monocyclic acyclic sports activity performed in standard form, with space overflow with its own body and projectile (bocce balls), indicates a relatively clear anatomical analysis.
- Considering the large amount of meters during the race (1100 to 1300), the leg muscles of great importance are the dominant extensors. Additionally, a large number of changes in the direction of motion condition the need to engage in the work of the muscles of the primer and the abducent, and of the hull rotator.
- The main objective of this sporting activity is to throw the balls from different distances, meaning that it should have a satisfactory level of repetitive strength of the arm and shoulder belt, since in five minutes the weight of about one kilogram should be ejected 49 to 51 times. From this body region most important are the shoulder muscles, especially the frontal lobe, which is most active during the throwing.
- When it comes to strength development, it is very important to maintain proper balance between the left and right side of the body.

Functional Analysis

- In a functional sense, speed outbreaks are part of a sport in which mixed, aerobic-anaerobic energy processes prevail.
- The same recurring motor activity is short, approximately 6 seconds, but in continuous performance, first of all, the athlete demands a high level of overall endurance. Athletes who deal with speed outbreaks are most similar to track runners on a medium length track.
- Functional abilities are determined by the following factors:
 - biochemical (degradation of carbohydrates and fats, lactates, hormones)
 - biomechanical (technique and tactics)
 - motor (short-term, medium duration and long-term endurance and repetitive power)
- There are two basic methodological forms of training work suitable for the development of aerobic abilities:
 - Continuous aerobic training method
 - Interval aerobic training method

An athlete's dimension Analysis

- By analyzing the anthropometric characteristics of speeders, it is apparent that at the very top of this discipline are athletes who look like track runners on medium and long tracks. Endurance, precision, coordination, and agility are a testament to successful speeding, of course with high quality technical training that allows players to show the features listed above.
- It can be said that the utmost importance for success in this sport activity is endurance and precision. In a speed outbreak, the need for a high level of endurance prevails, and morphologically speaking, athletes do not have a heavy weight or a high level of subcutaneous fat tissue, which omits the specific movement performance. In addition, fast and specific movements require a high level of motor skills and advanced optimized motor skills.
- Because there are different types of athletes due to different functional capacities, different training needs to be differentiated. It means adapting the plan and program to the specific needs of an individual athlete. Endurance should be trained optimally, not maximally.

**THE BASICS OF
POSSIBLE SPORTS
INJURIES AND HOW THEY
ARE PREVENTED**

- Due to championship lengths and national team demands, athletes do not have time for recovery and regeneration of the body, resulting in poor results or injuries and saturation.
- In performing the coaching job should stick to the basic principle: to train, but not overtrain. Overtraining leads to injury or disease, and undertraining, at most, delays the achievement of optimum sports form.
- Overtraining syndrome is a state of long-lasting feeling of exhaustion and inability to train at the level the athlete has come to before he or she has been overtrained. It occurs because of an imbalance between the performance of certain activities and rest.
- Introducing sports activities under the guidance of an expert enables a gradual lifting of the load we expose our body during training. In this way, the body gradually adapts to the increasing load.

- **Types of overtraining:**

1. **Parasympatic form:** manifested as a reduction of sympathetic activity. People are slow, have long periods of sleep and depression. This form of overtraining occurs after exaggerating in aerobic sports (running, swimming, cycling, hiking)
2. **Sympathetic form:** manifested by the increased influence of the sympathetic nervous system. Increasing heart rate at rest, lowering appetite, exacerbates physical and mental discomfort and irritability. It occurs after excessive load in the anaerobic sports (work with weights at the gym, sprint events in track and field and hard physical work)

Sports Recovery Measures:

- The relationship between consumption and recovery is an essential process of sports training. Recovery means restoring the ability of every organ and system, or establishing a functional balance of the entire organism.
- All recovery measures can be divided into four groups:
 - Pedagogical resources: the most important role is taken by the trainer through training methodology, training planning, etc.
 - Psychological agents: autosuggestion, autogenous training, yoga, etc.
 - Medical agents: nutrition, pharmacological agents
 - Physiotherapeutic agents: massage, electrostimulation

The most common injuries

Strains

- For light injuries, such as ligament and muscle spasms and mild hemorrhage, following the use of cryotherapy, non-steroidal anti-rheumatic drugs

Inflammation of the Achilles tendon

- Damage to tendons with bone on the heel, inflammation of the tendon sheath and tendon strain at the turn of the muscle.. Causes are inherent weakness of connective tissue, excessive strain, hard substrate, bad sneakers and weight of the athletes. The usual therapy is to put on ice, with a visit to a physician for rehabilitation.

Shoulder injury

- Shoulder joints are very complex and sensitive because they are made up of mainly the front, back and side muscles. The cause of injury and pain in the shoulder is mainly the rotation of the muscle of the rotary cuff during the outbreak (premature rotation of the body). Pain occurs during the execution of these actions and then at rest. It is recommended to pause and relax from training, and ultrasound examination.

The most common injuries

Partial fracture or complete muscle interruption

- Most commonly occurs in the area of the upper and lower extremities of the musculature. Common cause is misinterpretation or stretching, but most often muscle overload. When the muscle breaks, strong pain can be felt, with the possible bleeding of that part of the muscle. The trainer must immediately stop the activity, cover with ice, compression band and go to a hospital for an ultrasound (magnetic resonance imaging). If the muscle breaks, surgery is needed.

Sprain (distortion) of the ankle

- It occurs most often when the weight of the body is transferred to the outside of the joint at one time. There is a strong pain, swelling of the tissue and limited mobility, so a compressive bandage or ice should be placed immediately with anti-inflammatory agents and analgesics. With the leg, it should be kept in the elevated position and rest. Prevention involves exercising the strengthening of the lower leg muscles.

The most common injuries

Injuries of the knee joint

- The cause is the overload of the front thigh muscle or its tendon on top of the thigh bone. They can be followed by smaller swelling and pressure pain. Problems can be relieved by ice massage, some anti-inflammatory agents, ultrasound and magnetic tape. The basic examination is performed by magnetic resonance.

Damage to collateral ligaments

- A consequence of innumerable knee rotations (rapid outbreaks), and most commonly the medial collateral ligaments suffer.

Low back pain

- Due to a number of rotation and articulation of the body, can occur vertebral or verterogene ailments, when a player has to go to the examination at the doctor (orthopedist, physiatrist, neurologist) to determine diagnostic procedures and, depending on the findings, further treatment.

THE BASICS OF TRAINING THEORY AND THE METHOD OF TEACHING THE BOCCE GAME

- Like every other sporting activity, the bocce game has its own specific movement structures that need to be adopted at the very beginning of the game, and by constant repetition, so that all moves are performed automatically.
- The technique of bocce is divided into the **approach** and the **outbreak**.
- Approaching is divided into three types of styles we use in the game, and depending on the type of terrain we play, namely: low position, semi-standing position and high position.
- Outbreaking is divided into: premature, timely, and late-throw. When outbreaking, each bocce player adopts and uses the kick that suits him most, but the most commonly used is the late-throw, which is the most common, and the closest to daily walking and running.

Approaching

- Approaching means throwing a ball in the direction of an object or a "balina" in an effort to approach it as close as possible. Approaching methods depend on the terrain, so there are three kinds of approaches, which makes the necessary moves (swinging and exiting) in throwing the balls.
- For the performance to be of the highest quality, it is important to perfect all the ways of approaching:
 - Good bocce holding
 - Body position
 - Control direction
 - Remote control
 - Analysis of motion (with and without bocce)
- The position of the bocce ball in the hand or the posture, is between the small finger and the thumb, and with the rest of our fingers, we hold the ball to not fall. And so, the best way to do this is to aim for a goal.
- An important detail of the proper approaching technique is that the hand holding the bocce ball and leg on which we stand on, are on the same side of the body, meaning: right arm, right leg or left arm, left leg.

Outbreak

- Outbreaking means throwing a bocce ball towards a particular object (goal) after a longer or shorter run.
- Outbreaking is not a workout of strength rather than the smoothness and harmony of the movement, the synchronization of the upper extremities with the lower, with a normal dose of strength and endurance. We need to strive for the simplicity and economy of the movement.
- Technical characteristics and rules:
 - Running up easily and naturally
 - Movements simple and economical
 - The most subtle movements
 - Respecting the basic line of throw
 - Pay attention to the tolerance and allowance of 50cm distance from the goal
 - Try to adjust the blow to the current situation on the ground
- Outbreak training combines with the training of approaching. These two exercises should overlap, so the athlete does not neglect performance. It should strive for every athlete to be complete in the outbreak and approach phase. The second factor is psychological, especially in young athletes, who need to make their trainings diverse and interesting.

THE BASICS OF PROGRAMMING THE TRAINING PROCESS IN THE BOCCIE GAME

Pre-Competition Communication

- *Customize the comments for each situation because not all the competitions are equally important, nor are all the protagonists the same*
- *When giving suggestions, make sure that they are pronounced in a positive way*
- *Always make sure that your words are stimulating for the athlete's self-confidence*
- *Encourage athletes to give their all and to enjoy the competition*
- *Provide them with support and confidence*
- *Be clear in your expectations and point out that you only expect them to give their maximum*

Communication during the competition

- Evaluate yourself how much and what advice athletes can understand in stressful situations
- When they win, encourage them to continue with such intensity, be careful that their motivation remains high and give them just a few tips to make them even better
- When they are losing, advise them to calm down, slow down, and help them resolve the situation they are in
- Be positive authoritative, give them support and encouragement
- Do not criticize them too much, they are stressed anyway

Communication after victory

- Congratulate the athletes
- Highlight all that was good and praise them
- Avoid too much enthusiasm, be realistic and, if necessary, ground them slightly
- Encourage athletes to continue, encourage them that their victory is even more motivation for next competition

Communication after the defeat

- Control feelings, especially anger and frustration
- Keep in mind that in this situation the players are less open to communication, let them take a little bit of rest
- Be aware that the coach is more needed after the defeat than after winning
- For more complex conversations and competition analysis, wait for the emotions to cool a bit, both your own and your athletes
- First listen to the athletes' thoughts and feelings, and then make your assessments
- It is important to emphasize that your comments do not refer to the outcome but to the quality of what the athlete showed
- Restore self-confidence to athletes

Considering the preparation of athletes as a whole, four basic areas of sports preparation can be distinguished:

- technical
- tactical
- physical
- psychological preparation

In top-level sports, the disadvantage in one part of preparedness cannot be satisfactorily compensated by increased work and development in some other part.

This actually means that the upper limit of the performance (game) of an athlete, is determined by the weakest link in the chain of his preparation.

- **When it comes to a bocce player, saying he is prepared in terms of fitness, it means he's powerful, durable, movable and accurate, or capable of fulfilling the tasks you have to perform in the game.**
- **The purpose of fitness training is to allow a player to stay in the field for two or more hours and increase the level of play. Therefore, for the enhancement of the quality of the game, it is also necessary to introduce fitness training in the bocce training plan and program.**
- **Based on the knowledge and experience of world experts in the field of fitness training, we can say that fitness training is a process geared to improving motor and functional (energetic) abilities, morphological characteristics, health status and motor skills of athletes.**