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#### TECHNOLOGIES TO INCREASE THE PHYSICAL FITNESS OF YOUNG PLAYERS

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**ANNOTATION:** This article will analyze the main methods of improving the physical fitness of players, modern technologies and training methodologies. Fitness focuses on developing players 'strength, stamina, speed, and flexibility, which is important in increasing their effectiveness in the game. The article will also show the importance of innovative technologies used in the training of young players, heart rate monitoring, GPS trackers and virtual reality tools. Combined with nutrition, recovery, and coaching approaches, fitness is the foundation for players 'long-term success in the sport.

**KEYWORDS:** Players, fitness, physical development, strength and endurance, speed training, sports technology, GPS monitoring, heart rate, virtual reality, young players, sports training, recovery process.

#### INTRODUCTION

Football is one of the most popular sports around the world and requires not only technical skill, but also a high level of physical fitness. Players must continuously develop strength, stamina, speed, and movement coordination in order to succeed in the game. Fitness is important in that it increases the player's playing duration, protects against injury, and improves their effectiveness in the game. In particular, ensuring physical development in the process of training young players is the basis of long-term success in the sport.

For this reason, the use of effective methods and technologies to improve the physical fitness of players is important. This article will consider the methods of increasing the physical fitness of players, the training process and the role of modern technologies.

Football is a complex sport that requires high physical fitness and players must constantly develop strength, endurance, speed and flexibility to achieve success. Physical fitness not only increases productivity in the game, but also plays an important role in protecting against injury. Especially for young players, quality physical fitness is of great importance in ensuring their long-term success and healthy development in the sport. For this reason, the use of effective methods and modern technologies to improve the physical fitness of players is one of the important tasks.

## MAIN PART

## Improving the physical fitness of players

Football is a sport that requires not only technical skill and tactics, but also a high level of physical fitness. Each player must constantly develop their strength, endurance, speed and flexibility. A high level of physical fitness not only increases the duration of the game, but also helps to reduce injuries.

## 1. The main components of physical fitness

**Power:** To increase muscle strength, weightlifting exercises, plyometric exercises and special strength exercises are used.

**Durability:** Increase the respiratory system and overall endurance using walking, running and interval training.

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**Speed and agility:** Sprinter exercises are performed to increase speed, and coordination exercises are performed to develop agility.

**Flexibility and freedom of movement:** Increase the elasticity of muscles and joints through Stretching, yoga and exercise to improve movements.

## 2. Type and plan of training

- When drawing up a training plan for players, attention should be paid to their age, playing position and level of physical fitness. Training is divided into the following main blocks:
- Warming up and preparation: Each session begins with a warm-up, which serves to prevent injury.
- **Basic training:** Complex exercises aimed at increasing strength, endurance and speed.
- **Rebound:** Light movements and massage after training, speeding up the recovery process by drinking fluids.
- **Technical and tactical exercises:** Along with physical training, special time is allocated for the improvement of technical skills.

## 3. The importance of nutrition and recovery

A healthy and balanced diet plays an important role in maintaining the player's high level of physical fitness. The correct intake of Protein, carbohydrates and fats contributes to muscle growth and recovery. Regular fluid intake control is also essential.

## 4. Modern technologies in increasing physical fitness

In modern times, technologies are also actively used in the training of players. Heart rate measuring devices, GPS trackers, high-speed video analysis tools and other devices help to accurately monitor the training process and effectively control it.

## Technologies to increase the physical fitness of young players

In the process of training young players, increasing physical fitness is of great importance. Modern technologies are an important tool for developing athletes at an individual level, accurately assessing their capabilities and effectively organizing training. The main technologies used to increase physical fitness in the formation of the younger generation of football include:

## 1. GPS and motion tracking devices

For young players, special GPS trackers and motion sensors can be used to determine their coverage, running distance, speed and agility during training and play. This information allows coaches to analyze the status of each player and develop a personal training plan.

#### 2. Heart rate monitoring systems

By constantly monitoring the heart rate, the player's physical condition, load level and recovery process are controlled. This will help protect young athletes from overload and ensure effective recovery.

## 3. Video analysis and action revision

With the help of Video cameras, training and Game processes are recorded, and the movement techniques and physical condition of the players are analyzed in detail. This makes it possible for players to see their mistakes and fix them.

## 4. Virtual reality (VR) and simulators

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VR technologies allow young players to practice game situations in real-world conditions. Combined with exercise, it helps in the development of reaction speed, coordination, and decision-making skills.

#### 5. Smart clothes and devices

Clothing with special sensors measures the movement of players, muscle activity and body temperature. With this information, coaches analyze the state of the players and draw up individual training programs.

## 6. Mobile applications and online monitoring platforms

With mobile apps designed for young players and coaches, training schedules, nutrition, recovery and fitness are monitored. These systems help develop self-management skills.

#### **CONCLUSION**

Modern technologies make it possible to organize the process of physical fitness of young players at a much more efficient and special level. Creating a training program to suit the individual capabilities and needs of each player increases youth's interest in the sport and prepares them for future achievements.

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