



Faculty of  
Sport Sciences



# FACULTY OF SPORTS SCIENCES

E-BULLETIN

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# Women's Health and Equality in Sport Take Centre Stage in Europe

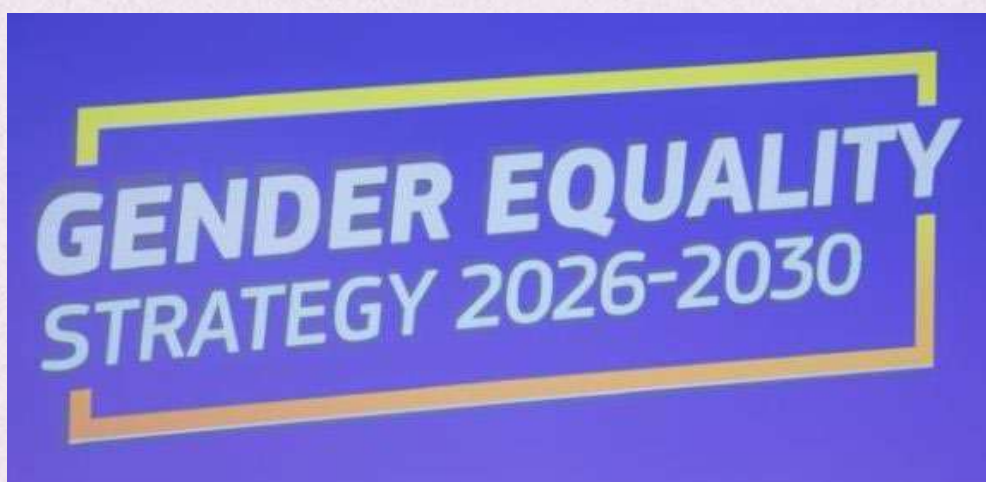
**Res. Asst. Ayşe Demet KARADAĞ**

In March 2026, two significant events of note took place in the context of European sports policy. The 'Active and Equal: Women's Health in Sport across Generations' project, launched in partnership between the Council of Europe and the European Union, was presented to the public as a new initiative aimed at placing women's health at the heart of sport.



The project aims to analyse the physiological, psychological and social barriers affecting women's lifelong participation in sport, to develop a science-based practical guide for coaches and physical education teachers, and to raise awareness of topics such as menstruation and the menopause, which are still not discussed sufficiently.

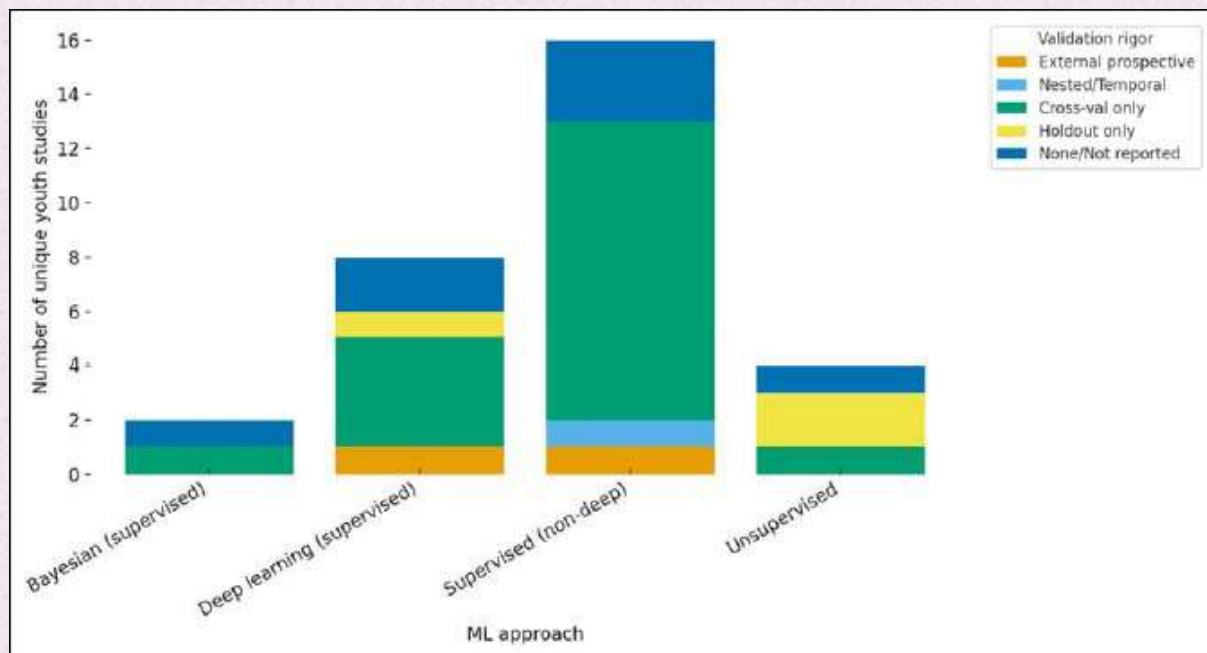
Immediately following this launch, the "Breakfast Roundtable on Women and Girls' Participation in Sport" event, held on 6 March 2026, discussed inequalities in women's and girls' access to sport. According to data shared at the event, only around 35% of members under the age of 18 in sports clubs and federations are girls, whilst only 27% of members aged 18 and over are women. This situation once again highlights the importance of inclusive programme design in coaching education, training plans that take women's health into account, and gender-sensitive sporting environments.



# A New Era in Talent Selection: Machine Learning Takes Centre Stage in Coaching

**Res. Asst. Ayşe Demet KARADAĞ**

One of the key topics in the sports science literature in March 2026 was a systematic review on the use of machine learning in talent selection and development processes in team sports. Published in the *Journal of Sports Science and Medicine*, the study examined machine learning-based talent identification research in young athletes (aged 21 and under), revealing that the field is growing rapidly, yet current evidence remains limited. The review indicates that the majority of studies have focused on selection prediction, particularly in team sports such as football.



One of the most striking aspects of the study was its emphasis on the fact that talent selection cannot be reduced to a single performance indicator; rather, anthropometric, physical, technical, perceptual-cognitive, psychological and socio-cultural variables must be assessed in conjunction. The study brings to the fore the importance of evidence-based decision-making, long-term athlete development and ethical talent selection approaches in the context of coaching education. In particular, the strengthening of a multi-dimensional assessment approach, rather than early labelling, in young athletes is emerging as a critical area of competence for future coaches.

# Another European Medal for İGÜ National Wrestler Ahmet Yağan

**Res. Asst. Bilgehan PEPE**

Ahmet Yağan, a student in the Department of Exercise and Sports Sciences at the Faculty of Sports Sciences, Istanbul Gelişim University, won a silver medal and finished as European runner-up following his successful performance at the U23 European Wrestling Championships held in Serbia.

Competing in the 86-kilogram freestyle category, Ahmet Yağan attracted attention with his outstanding performance throughout the tournament. Our national athlete advanced to the semi-finals after defeating his Belarusian opponent Artsiom Belavusau 3-2 in the first round and Moldovan Marius Retcoy 8-1 in the quarter-finals. Yağan secured his place in the final by defeating Ukrainian Artur Kostyuk 4-2 in the semi-finals, and concluded the championship with a silver medal.

We congratulate Ahmet Yağan, who has brought pride to both our country and our university with this significant achievement on the international stage, and wish him continued success in his sporting career.



# The Technological Transformation in Adaptive Sports: AI-Powered Exercise Systems Take Centre Stage

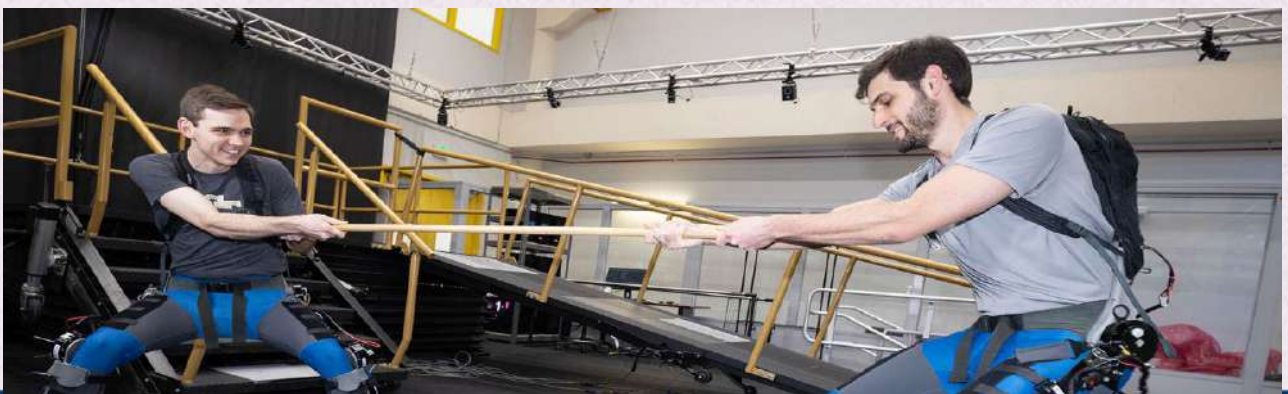
**Res. Asst. Bilgehan PEPE**

Exercise and adaptive sports practices for people with disabilities have undergone a significant transformation in recent years, driven by technological advancements. In particular, artificial intelligence (AI)-based exercise monitoring, personalised training programmes and advanced motion analysis systems are establishing a new paradigm in the field of adaptive sports.

Digital systems developed in this context can monitor individuals' physical capacity, movement patterns and performance data in real time, thereby enabling the creation of optimised exercise regimens tailored to each individual. These systems, which integrate with wearable technologies (accelerometers, heart rate sensors, etc.), enhance safety, particularly for individuals with disabilities participating in exercise, and make performance monitoring more objective.

Furthermore, thanks to motion analysis software, parameters such as posture, balance and coordination can be assessed in detail; this enables the scientific planning of rehabilitation and sporting performance processes. This technological integration not only enhances performance development but also strengthens the sustainability and accessibility of sport.

Recent reports published by the World Health Organisation and the International Paralympic Committee demonstrate that the increasing use of technology in adaptive sports improves the physical fitness levels of people with disabilities, enhances their quality of life, and significantly increases participation rates in sport. In this context, adaptive sports are viewed not merely as a field of physical activity, but as an inclusive health and performance ecosystem enhanced by digitalisation.



# AI-Powered The World Cup is Coming

Res. Asst. Muhammed Ali GÖKÇE

The 2026 FIFA World Cup is set to usher in a new era in sports technology. AI-based systems at the tournament will fundamentally transform both refereeing decisions and the spectator experience.

The “Football AI Pro” system, developed as part of the organisation, will provide teams with real-time performance analysis and tactical simulation capabilities. Furthermore, 3D player avatars created using artificial intelligence will provide clearer and more understandable visualisations, particularly in offside situations.

In addition, referees’ body cameras, combined with AI-assisted image stabilisation, will offer viewers the opportunity to experience key decision-making moments on the pitch directly. These developments are helping football evolve into a more transparent and data-driven structure.

**FIFA WORLD CUP 2026**

## AI TECHNOLOGY AT THE 2026 WORLD CUP

**FOOTBALL AI PRO**  
Real-Time Performance Analysis & Tactical Simulation

**3D PLAYER OFFSIDE VISUALIZATION**  
AI-Generated 3D Avatars for Offside Decisions

**REFEREE BODY CAMERAS**  
AI-Enhanced Referee Body Cams

**Transforming Football Through AI Technologies**

# The Era of Artificial Intelligence and Drone Technology at the Olympics

**Res. Asst. Muhammed Ali GÖKÇE**

The 2026 Milan-Cortina Winter Olympics will serve as a prime example of the integration of artificial intelligence and drone technology into sport. Thanks to FPV drones, the competitions will be broadcast to viewers from the athletes' perspective.

AI-powered analysis systems will measure athletes' speed, balance, jump height and landing performance in real time, thereby enhancing broadcast quality whilst providing coaches with detailed data.

Furthermore, thanks to artificial intelligence systems that combine different camera angles, matches will be viewable with 260-degree footage. These developments are making the sports viewing experience more interactive and data-driven.

The graphic features a dark blue background with a snowy mountain landscape. At the top left is the Milano Cortina 2022 logo. The central text reads 'AI & DRONE TECHNOLOGY IN THE 2026 WINTER OLYMPICS'. Below this, three panels illustrate different technologies: 1) 'FPV DRONES' showing a drone flying over a skier. 2) 'AI PERFORMANCE ANALYSIS & METRICS' showing a skier with overlaid data: 'AI POTEE', 'SPEED 61.7 km/h', '2.5m', 'LANDING ACCELERATION 22.5', 'BALANCE ALIGNED', '225 km/h', 'BALANCE NEIGNED', and 'SUMMARY 1657 LARGE'. 3) '260° IMMERSIVE AI FOOTAGE' showing a 360-degree view of a skier. At the bottom, the text reads 'Enhancing Winter Sports Through AI Technologies'.

**Milano Cortina 2022**

## AI & DRONE TECHNOLOGY IN THE 2026 WINTER OLYMPICS

AI POTEE	LANDING ACCELERATION	AGGUMENTITE AI FOOTAGE
SPEED 61.7 km/h 2.5m	LANDING ACCELERATION 22.5 BALANCE ALIGNED 225 km/h BALANCE NEIGNED SUMMARY 1657 LARGE	

**FPV DRONES**  
Athlete's Perspective & Dynamic Coverage

**AI PERFORMANCE ANALYSIS & METRICS**  
Real-Time Speed, Height, Balance, and Landing Metrics

**260° IMMERSIVE AI FOOTAGE**  
AI-Combined Camera Views  
260° Experiences

**Enhancing Winter Sports Through AI Technologies**

**Turkish Men's Deaf National Futsal Team**  
**Finished Fourth in Europe,**  
**Secured a Place at the 2027 Winter Olympics in Austria**  
**Res. Asst. Onur TOPUZ**

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The Turkish Men's National Team, competing in the European Deaf Futsal Championship held in Croatia, lost 6–2 to the hosts Croatia in the third-place play-off and finished the tournament in fourth place.

Our national team, who caught the eye throughout the championship with their fighting spirit, determination and team spirit, achieved a significant success with the ranking they secured, even though they missed out on the bronze medal. The Turkish team brought great pride to Turkish sport by earning the right to participate in the Winter Olympics to be held in Austria in 2027 through their performance in the tournament.

Although efforts were made to boost morale and motivation by meeting with the technical staff and athletes prior to the match, the desired result was not achieved in the battle for third place. However, the successful performance displayed throughout the tournament once again demonstrated our national team's ambition on the international stage.

We congratulate all our athletes and the technical staff who contributed to this significant achievement, and wish our star-and-crescent-adorned team every success at the 2027 Winter Olympics in Austria.



# A Level 2 Wellness Instructor Training Course is to be held in Ankara

**Res. Asst.Onur TOPUZ**



The Turkish Federation of Sport for All will be organising an in-person Level 2 Basic Wellness Instructor Training Course in Ankara from 13 to 18 April 2026. Applications for the course can be submitted via e-Government until 17:00 on 3 April 2026. The course fee for this limited-capacity training programme has been announced as 14,000 TL.

# 21 March Down's Syndrome Awareness Day: Together, We Are Stronger Through Our Differences!

**Res. Asst.Selim AKMAN**

Every year on 21 March, World Down Syndrome Awareness Day is observed; it is celebrated with various events aimed at raising awareness that individual differences constitute a source of social richness. Officially proclaimed by the United Nations in 2012, this special day is of great importance in terms of raising awareness of Down syndrome and strengthening the concept of an inclusive society. Down's syndrome is a genetic condition resulting from an individual having three copies of the 21st chromosome, and the date 21 March (21/3) symbolically represents this condition.

Individuals with Down's syndrome can participate as active, productive and successful members of society in all areas of social life when provided with appropriate education, support and opportunities. In this regard, sports and exercise activities in particular make significant contributions not only to physical development but also to social integration, self-confidence and the development of independent living skills. Initiatives led by organisations such as the Turkish Federation of Special Athletes and the Turkish National Paralympic Committee encourage the participation of special athletes in sport, thereby enhancing both performance development and social awareness.

One of the most notable events held worldwide to mark this special day is the 'wear different socks' campaign. Choosing socks of different colours and patterns stands out as a powerful symbol emphasising that individual differences are natural and valuable. In Turkey too, thanks to events organised by the Ministry of Youth and Sport, universities and local authorities, the participation of individuals with Down's syndrome in social, sporting and cultural life is increasing day by day.

Experts emphasise that for the full and equal participation of individuals with Down's syndrome in society, not only individual efforts but also social awareness and inclusive policies are of great importance. Ensuring equal opportunities across all areas—from education to employment, and from sport to social life—will contribute to the creation of a more inclusive and sustainable societal structure.

21 March, World Down Syndrome Awareness Day, is an important day that reminds us that differences are not a barrier, but a source of richness. It must not be forgotten that an inclusive society is only possible when equal opportunities are provided for everyone; because we are different, but together we are stronger.



# ONE RUN Istanbul: “For everyone, together with everyone””

**Res. Asst.Selim AKMAN**

ONE RUN, set to take place on 7 June 2026 in Istanbul on the Yavuz Sultan Selim Bridge, is being organised as a powerful social responsibility initiative that goes beyond sport. Held in collaboration with the Turkish National Paralympic Committee and the Turkish Foundation for the Support and Education of Disabled Athletes, the event will bring together thousands of participants under the motto ‘For everyone, with everyone’.

Held across 5K, 10K and Accessible Run categories, the event will see participants not only running across one of the world’s largest suspension bridges but also playing a part in generating social impact. Proceeds from the event will be used to fund educational grants, sports equipment, rehabilitation services and prosthetic/orthotic support for people with disabilities.

Placing social solidarity at its heart, ONE RUN aims to make a direct contribution to the lives of people with disabilities by harnessing the unifying power of sport. Participants in this run will not merely cover a distance; they will also be supporting a student’s education, an athlete’s development and an individual’s quality of life.

ONE RUN is much more than a race: it is a movement of solidarity.



# The 7th round of the Red Bull Cliff Diving World Series took place in Antalya

**Res. Asst. Sinan DEMİRCİ**

Red Bull's high-altitude challenge, the Red Bull Cliff Diving World Series, held its seventh round of the year in Antalya. Taking place in Antalya, where sea, sun, history and nature intertwine, the round stood out as one of the series' most crucial stops ahead of the season finale.

In the women's category, the day's winner was Australian Rhiannan Iffland. With the high scores she achieved in Antalya, Iffland secured the season title without waiting for the final round in Sydney. The women's podium was completed by Canadian athletes Molly Carlson and Simone Leathead.

In the men's category, the winner was British athlete Aidan Heslop. He was followed by Ukrainian Oleksiy Prygorov in second place and Italian Andrea Barnaba in third. The winning athletes received their awards from Antalya Governor Hulusi Şahin and Antalya Metropolitan Mayor Muhittin Böcek.

Turkey was represented at the Antalya stage by Kivanç Gür, who competed as a wildcard athlete. Gür, who set a Turkish record in the 10-metre diving discipline between 2013 and 2024, was among the standout athletes at the event. Red Bull athletes Kübra Dağlı, Bora Altıntaş, Berke Dikişçioğlu and Ali Türkkan also took part in the event.

The event's visual identity also featured striking details. The design on the ramp from which the athletes performed their dives bore the Les Benjamins signature, whilst Decathlon sponsored the athletes' preparation area. Segway Ninebot provided sustainable transport support on-site. Other sponsors of the event included Listerine, Migros and A.O. Smith.



# The Bornova Aşık Veysel Recreation Area Amphitheatre is set to kick off the new season with a fresh new look

**Res. Asst.Sinan DEMİRCİ**

Izmir Metropolitan Municipality has launched a comprehensive renovation project at the Bornova Aşık Veysel Recreation Area Amphitheatre. As part of the works, the open seating areas have been removed and 5,250 seats installed. The aim is to provide a higher-quality environment for both performers and audiences through improvements to the stage and technical areas. The amphitheatre will enter the new season with a fresh new look. Izmir Metropolitan Municipality continues to invest in the city's cultural, sporting and social facilities. As part of this, renovation works initiated at the amphitheatre within the Bornova Aşık Veysel Recreation Area are ongoing. The amphitheatre, which hosts concerts, theatre performances and various events during the summer months, is being refurbished in many areas, from the stage to the backstage, and from the seating areas to the toilets. 5,250 seats to replace the old wooden seating area. Tolga Kapiroğlu, Quality Control Engineer at the Department of Public Works, noted that the Aşık Veysel Recreation Area has been one of Izmir's key venues for approximately 15 years, and stated that they had launched the renovation work to ensure the continuity of culture and the arts in line with Mayor Cemil Tugay's vision. Kapiroğlu said, "We have replaced the existing wooden seating areas with more comfortable seats. We have completed the installation of a total of 5,250 seats," he said. "A more comfortable, healthier cultural and artistic service" Kapiroğlu noted that the Aşık Veysel Stage has been transformed into a structure where artists can perform more comfortably, adding that aesthetic, comfort and cost-effective improvements had been made to the stage layout. Kapiroğlu, noting that the area has been made more functional through improvements in the wings and backstage, said, "We look forward to welcoming all our fellow citizens to our renovated venue." Both indoor and outdoor spaces are being renovated. As part of the works, comprehensive renovations are being carried out in both the indoor and outdoor areas of the amphitheatre. Landscaping work is being carried out in the open areas, whilst toilets and other communal areas are being refurbished in the enclosed spaces. Furthermore, the technical infrastructure is being upgraded to ensure events can be held to a higher standard.



# A new computerised high school basketball ranking system has been launched in Nebraska

Res. Asst.Şevval ÖZKAN

As the use of technology and data in the world of sport grows in importance with each passing day, this transformation has now begun to extend to school sports. A new computerised ranking system developed in the US state of Nebraska aims to provide a fairer and more objective evaluation process in school basketball. It seeks to reduce the subjectivity found in human-conducted surveys and to uncover previously undiscovered strong teams.

Known as 'NebPreps', this system brings data-driven analysis, commonly used in university and professional sports, to the high school level. When evaluating team performance, it does not merely look at wins and losses. It also analyses a wide range of data, including the strength of opponents, the margin of victory in matches, whether games are played at home or away, and the timing of fixtures within the season. The aim is to obtain results that more closely reflect a team's true performance.

## How Are the Rankings Calculated?

Computer rankings go beyond win-loss statistics to measure a team's true strength. The model takes into account the margin of victory, the difficulty of the fixture list, home and away performance, and the quality of opponents. Rankings are recalculated after each week's matches; therefore, every result matters. A score of 50 represents an average team in each division; higher scores indicate stronger teams.

## Limitations

Computer-assisted ranking systems have certain limitations; they do not account for injuries or squad changes that affect team strength, treat all match conditions—such as weather or travel—as equal, and rankings at the start of the season are less reliable due to a lack of data. Furthermore, these systems do not replace human assessment; rather, they are used as a complementary tool.



RANK	TEAM	WINS	LOSSES	SOS	SOS RK	PPG	PAPG	RATING
1	Dundy County Stratton	22	1	55.0	15	521	32.5	92.98
2	Holy Springs	15	4	56.4	10	515	36.8	85.6
3	Red Cloud	17	3	51.2	35	50.0	33.0	83.04
4	Crawford	16	6	55.6	12	472	33.4	81.34
5	Milton	15	5	55.3	14	50.0	35.6	79.42
6	Paxton	15	6	52.6	25	53.2	34.5	76.35
7	Silver Lake	17	4	49.0	47	48.0	36.4	74.72
8	Falls City Sacred Heart	15	8	57.2	7	49.2	39.4	74.69
9	McCool Junction	16	5	50.1	41	50.5	38.3	73.79
10	Hyannis	13	8	56.2	11	42.5	36.3	70.97
11	Cambridge	16	6	55.2	15	48.2	41.7	68.19
12	College View Academy	11	7	48.0	52	38.4	29.4	67.88
13	Santee	13	8	56.6	9	57.0	52.0	67.86
14	Anselmo-Merna	15	8	52.3	27	44.9	38.6	66.73
15	Sandhills/Theftord	12	9	52.6	24	49.1	41.3	64.01

# “SportsInnovation 2026”, showcasing the latest technological developments in the sports sector, has kicked off in Düsseldorf

## Res. Asst.Şevval ÖZKAN

The event, held at the Merkur Spiel Arena in Düsseldorf, featured presentations on technological innovations, new perspectives and real-world experiences in the field of sport, alongside demonstrations, panel discussions and a variety of activities.

As the technology-driven transformation of the sporting world continues unabated, the SportsInnovation 2026 event, held in Düsseldorf, Germany, brought together the latest examples of this change. The event, which showcased the latest developments in sports technology, brought together clubs, technology companies and sports professionals on a single platform.

At the event held at the Merkur Spiel Arena, numerous innovative technologies set to shape the future of sport were unveiled. In particular, AI-powered analysis systems, performance measurement technologies and data-driven decision-making mechanisms featured prominently among the event’s highlights. Thanks to these systems, athletes’ performance can be analysed in greater detail, whilst training processes can also be optimised using scientific data.

Developments in broadcasting technology also attracted attention at the event. The aim is to offer viewers a richer and more interactive match experience through next-generation camera systems and real-time data integration. Digital solutions aimed at enhancing the fan experience demonstrate that sport is undergoing a technological transformation not only on the pitch but also off it.

SportsInnovation 2026 once again highlighted that sport is no longer merely a field based on physical performance, but has become intertwined with data, software and artificial intelligence. According to experts, this transformation will be one of the key factors determining the competitive strength of sports clubs in the future.

Held in Düsseldorf, this event is of great significance in showcasing the current state of sports technology and the direction it is set to take. In the coming years, it is expected that such technologies will become more widely adopted and actively utilised at every level of sport.



# A Pioneering Figure in Turkish Athletics: Süreyya AYHAN

**Res. Asst. Ünal Can GÖKMEN**

Süreyya Ayhan Kop, one of the most prominent figures in Turkish athletics on the international stage, has brought historic pride to Turkey, particularly through her achievements in middle-distance running. Thanks to her outstanding performance in the 1500 metres, Ayhan has established herself as one of the standout athletes in European athletics; she etched her name in gold in the annals of Turkish sporting history with the gold medal she won at the 2002 European Athletics Championships. This achievement marked a major turning point as she became the first Turkish female athlete to win a gold medal in the history of the European Athletics Championships, whilst also significantly enhancing Turkey's international profile in the sport of athletics.

Throughout her career, Ayhan stood out for her high-pace capacity, race strategy and powerful sprinting ability, becoming one of the few Turkish athletes capable of competing at a European level in middle-distance running. Her achievements have particularly boosted interest in women's athletics and served as a source of inspiration for young athletes. However, in the later stages of her career, she faced sanctions from international sporting authorities due to doping violations, and her active sporting career came to a controversial end. This process has once again highlighted the need for sport to be evaluated not only in terms of performance but also within the framework of ethical values.



# Common Dangerous Gym Mistakes Made by Beginners

**Res. Asst. Yalçın MARAŞLI**

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Health experts point out that common mistakes made by newcomers to the gym can both slow down progress and lead to serious injuries. Many people entering the world of fitness want to see quick results, but may unwittingly develop habits that reduce their performance and put their health at risk. According to experts, the majority of these mistakes stem from a lack of basic knowledge.

One of the most common mistakes made by beginners is starting a workout without warming up. Skipping warm-up exercises causes muscles and joints to be strained without proper preparation, significantly increasing the risk of injury. Furthermore, many people attempt to achieve rapid progress by selecting weights heavier than they can handle. However, this can lead to poor form and, in the long term, serious physical problems.

Performing exercises with incorrect technique is another major issue. Poor form prevents the target muscle groups from working effectively whilst placing undue strain on the joints. This paves the way for both ineffective workouts and injuries. Furthermore, the belief that exercise alone is sufficient is a common misconception. Experts emphasise that a balanced diet, particularly adequate protein intake, plays a critical role in muscle development and overall health.

Neglecting rest is also among the common mistakes. Training intensely every day can hinder muscle recovery, leading to a decline in performance. Similarly, excessive cardio can result in muscle loss and general fatigue. For this reason, creating a balanced training programme is of great importance.

Unplanned and random exercises are another factor that hinders progress. Training programmes not designed with a specific goal in mind can lead to a loss of motivation and the failure to achieve desired results. Experts state that an effective programme must be personalised, consistent and goal-oriented.

In conclusion, success at the gym depends not only on intense effort but also on working correctly and consciously. Avoiding these common mistakes helps beginners reduce the risk of injury and ensures a healthier, more sustainable development process.