

7. SPORTS MEDICAL & EXERCISE SCIENCE

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The Football Association takes a lead role in ensuring that those involved in the game, whether as players, medical or exercise science staff, benefit from the latest advances in the treatment and prevention of sports injuries and the development of youth and adult players.

The FA Medical Education and Exercise Science Department, based at Lillleshall National Sports Centre, is responsible for a wide range of activities from the provision of courses through to doping control.

Just a few of the Department's many responsibilities can be found below:

- **Medical and Exercise Science Courses & Conferences**

The FA Medicine and Exercise Science Department has the responsibility for the medical and exercise science education, training and co-ordination of courses for personnel representing over 37,500 affiliated amateur, youth, semi-professional and professional clubs (over 60,000 teams).

- **Health Education and Awareness for Youth Players**

The FA Medical Department is responsible for the production of health education/drug awareness pamphlets, involving extensive liaison with drug education agencies. The programme involved the administration and co-ordination of regional drug briefing seminars including invitations, venues/facilities and information packs.

- **The Charter for Quality - Football Academies / Football Centres of Excellence**

In 1997, The Football Association Medical Department formulated Medical Criteria governing Football Academies and Centres of Excellence.

- **Medical Research**

To organise, co-ordinate and conduct Association Football Medical and Exercise Science Research Programmes.

- **Recruitment of Medical Personnel for England International Teams**

The Football Association's Head of Medicine and Exercise Science is responsible for the recruitment and appointment of medical personnel for England Teams, FA, English Schools FA, FA's Women's International teams, Tournaments/Training Camps and FA Coaching Courses.

- **International Medical and Exercise Science Education**

To devise, organise and conduct Medical and Exercise Science Education Courses for International Football Associations through the strong links with The English Football Association.

- **FA Doping Control Programme**

The organisation, administration and co-ordination of The Football Association's compulsory Drug Control Programme. This area of work involves the education and awareness of up to 20,000 young and youth players (9-21 year olds) attached to professional club Academies or Centres of Excellence.

For more information on the Department's responsibilities use this link or send an e-mail to MESDinfo@TheFA.com.

7.1 EXERCISE SCIENCE & FITNESS

Football players spend only 2 per cent of matches in possession of the ball. When you bear that average in mind, it's easy to see why the physical condition of players has become crucial in the development of modern football players.

Today's top footballers face a huge workload with the games played at a faster pace than ever before. On top of that, matches come thick and fast with domestic, European and international commitments. This means when that when players are called up for England, physical conditioning is a major priority.

Every England youth team has a dedicated conditioning specialist who fills the role of Exercise Scientist and Fitness Coach. They are there to help the coaches and make sure that the players are given the best possible preparation for tournaments and international matches.

When the teams get together, the Exercise Scientist works with the coaching staff to systematically plan out the sequence of training and conditioning programmes. They then closely monitor each player's physical condition, workload and training using a variety of techniques. These include everything from recording heart rates to considering the use of the very latest GPS technology to develop individual programmes.

One of the most important parts of the job is the promotion and use of recovery techniques after matches and training sessions. Every player is different and the Exercise Scientists use a wide variety of techniques, tailored to the individual, all with the goal of helping the players mentally and physically to return to the same state they were before they started exercising.

This includes the use of various warm-up and cool-down protocols, deep water running, massage, stretching and the 'infamous' ice baths. Monitoring and advising the players on nutrition is a key part of the role. Menus are planned to ensure that each player has the best possible diet. Hydration is also very important and each player's status is regularly checked through the analysis of urine samples.

One of the particular challenges for players in international, and especially tournament, football is coping with matches played in close succession. In addition to the physical workload, the Exercise Scientist may have to take into account the effects of travel, jet lag and disrupted sleep patterns as well as environmental issues such as heat, cold or altitude. Any or all of these factors may impact on performance.

International football is also unique in that squads often assemble only a matter of days before fixtures. Consequently, for the coaches it is a matter of preparing teams with limited time and it is therefore vital that they make use of everything that can give them a potential advantage.

With all this in mind, The Exercise Scientists perform a vital role in helping every player perform to the peak of their ability and giving the England teams the best possible chance of success.

Example Daily Timetable:

08.50 Weight & urine samples	18.00 Recovery session
09.00 Breakfast	19.30 Dinner
10.30 Training	20.30 Meeting
12.00 Post training snack	21.00 Gym session
13.00 Lunch	21.30 Snack
15.00 Training	22.00 Bed
17.00 Snack	

7.2 THE FA DOPING CONTROL PROGRAMME

Although football in the UK has no history of cheating through doping, The Football Association runs a doping control programme in order to safeguard the integrity of the sport and the health and well-being of its participants.

Anti-doping is about stopping and combating 'cheating' through the use of drugs and techniques that the sporting community see as wrong. The CMS Select Committee report into 'Drugs and Role Models in Sport' said they were 'deeply impressed by the extent of the commitment of sports in Britain – especially football – to the communities in which they are based and to wider society.'

What football in England has found is an average of 1% positive finds, predominantly young professional players taking 'social drugs'. Statistics show this to be massively below the average for their peer group. This is a wider issue for society – and football plays a big role in seeking to address these and other issues.

The FA pays for and carries out more tests than any other sport in the UK and more than any other football governing body in European football. This is because the game believes it right to invest in ensuring that the game does not develop a 'cheating' problem.

The FA has been at the forefront of anti-doping initiatives for a great many years and has been praised for its approach to dealing with players who have been found to be using social drugs and the importance it gives to its wider education programme.

Players found to have used social drugs are dealt with in a way that looks to get them off drugs and concentrating on their career – but with a threat that if they do not heed the message and take the chance, they could be removed from the game.

The top players in English football may be tested by The FA in the domestic programme, by UEFA after matches in the UEFA Club Competition programme and by FIFA or UEFA in the post-match programme for international matches. This is a significant deterrent.

Some of the fundamental elements of the programme are outlined below:

- All tests are carried out randomly; however, there is provision in the guidelines for The FA to 'target' a player if this is requested by his club or the PFA and where there is significant evidence to do so.
- The Football Association works to a comprehensive set of Memoranda and Procedural Guidelines. There is a very tight set of Guidelines, Rules and Regulations covering this important area. In addition to this, guidelines regarding disciplinary sanctions for offending players have been formulated.
- The FA Doping Control Programme is carried out in conjunction with the UK Sports Council Doping Control Unit.
- All matches, training sessions and players are randomly selected for testing and at each visit two or three Independent Sampling Officers (ISOs) from The Sports Council are accompanied by an FA Supervising Officer who is either a Doctor or Physiotherapist approved by The FA.
- For 'In Competition' testing at a game, the drug testing team arrive unannounced at the chosen club. Two players are selected from each Club at random during the half-time interval.

- In the case of a positive find, a separate procedure is put into action. The FA Chief Executive, The Professional Footballers' Association (Union) and the FA Compliance Department are informed of the find.
- If a player's positive find is for performance-enhancing drugs, it is highly likely that he will be charged with misconduct for bringing the game into disrepute and would appear before an FA Disciplinary Commission.
- If the player's positive find is for any prohibited substance, The FA would seek an interview with the player. Depending on the outcome of the interview the player may be charged with misconduct and ordered to appear before an FA Disciplinary Commission.

Following a positive find, The FA Disciplinary Commission may decide that no action is to be taken, issue a warning as to the player's future conduct, administer punitive sanctions against the player (such as a ban) or request a clinical assessment of the player.

Subsequently a player may receive counselling, treatment and (or) rehabilitation for the condition and probationary target testing following treatment or rehabilitation as required.

Results of the FA Doping Control Programme:

SEASON	TESTS CONDUCTED	SIGNIFICANT POSITIVE FINDS
1994 / 1995	272	12
1995 / 1996	272	7
1996 / 1997	500	5
1997 / 1998	500	3
1998 / 1999	546	2
1999 / 2000	1016	5
2000 / 2001	1034	6
2001 / 2002	1107	7
2002 / 2003	1201	8

Full details of The FA Doping Control Programme and a link to the FA Doping Control Regulations 2005/06 (including a list of all banned substances) can be found on TheFA.com: <http://www.thefa.com/TheFA/SportsMedical-ExerciseScience/HealthProgrammes/>