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FINAL REPORT

SECTION 4 – RESEARCH FINDINGS

April 2012

The European Health & Fitness Association
Rue Washington 40
B-1050 Bruxelles
Belgium

www.ehfa.eu





Against Doping Project is grant-aided by the European Commission.
This report represents the views of the author and not of the Commission.



4.1 Desk Research

The project partners agreed that a combination of quantitative and qualitative research using the methodology of desk and field work would give the results to provide the evidence base for potential future targeted interventions for the sector and to start a new network of best practice to further the fight against doping in fitness.

The research on anti-doping policies was divided into the following:

- Identification of key project stakeholders

The key stakeholders seen as being integral to the research project were identified by the EHFA research team as being the lead national contact points in the field of anti-doping regulations, the lead national contact points for anti-doping in sports, and those international and European organisations with an interest in anti-doping matters.

- Current situation analysis

Anti-doping

It was rapidly found during the initial stages of the research on policies that anti-doping and law enforcement differs from country to country. Furthermore, whilst there is a growing level of inter-government and inter-sport cooperation such as WADA, the use of the WADA Code, UNESCO, International Convention in Anti-Doping in Sport, and Council of Europe Anti-Doping Convention, there is little information or activity in the area of amateur sport and fitness in the application of law enforcement or for specific education programmes.

The desk-based research which was undertaken during the project assessed the following issues in order to get a comprehensive summary in terms of the current anti-doping situation across Europe:

- Global and European governmental and official sources for information on policies relating to Doping within the health and fitness sector.
- Doping prosecution statistics to assess the

prevalence of doping violations.

- Inter-governmental bodies and other official international sources for information on policies relating to doping within the European Health and Fitness sector.
- National and international specialist trade press for information on policies and research relating to doping within the European Health and Fitness Sector.
- Websites of national and international trade associations for policies relating to Doping and potential role of the health and fitness sector.
- Reports produced by CSR teams of major manufacturers, distributors, suppliers, and training providers in the health and fitness sector and other relevant sectors for their views on policies relating to anti-doping.
- National, transnational, and international anti-doping regulation agencies for information for policies or research relating to doping within the European Health and Fitness Sector.
- Financial, business and mainstream press for opinions on doping and the potential role of the health and fitness sector

Below is a summary of the findings which are focused mainly on four of the partner organisations – Denmark, Germany, the UK and the Netherlands – though further research was undertaken throughout Europe to gain the widest possible picture of current anti-doping situations. It was felt that these countries were more likely to have the most developed policies in place yet also be representative of the rest of the European market.

Denmark

In Denmark it is illegal to, “manufacture, import, export, sell, distribute or possess with the exception of use for the prevention or treatment of diseases or for scientific purposes, Androgenic Anabolic Steroids (AAS)”.¹ The objective of the law is to prevent the use of AAS for doping purposes.

Regarding the use of AAS in fitness centres, which consequently is illegal, there is a two pronged approach, which consists partly of test and control and partly of information and educational campaigns. A unique feature of the Danish anti-

doping effort, compared with that of other countries, is, that since 2005 Anti-Doping Denmark (ADD), the organisation responsible for testing doping among elite athletes, has been required by the Danish Government to carry out tests in fitness centres and health clubs that have signed up to a national anti-doping scheme.

Gyms pay approximately 12,000 Kroner (approx. 1,400€) a year to be part of the scheme. They then receive a sticker with a 'smiling face' reading 'We test for doping in collaboration with Anti-Doping Denmark', which they are required to display on the entrance door.



Gyms that do not sign up for the testing scheme receive a sticker with a 'sad face' reading, "We do not test for doping in collaboration with Anti-Doping Denmark", which they are also required by law to make visible to their customer at the entrance. Therefore although the scheme is not mandatory significant political pressure exists to encourage gyms to sign up.



In June 2010, 50% of all commercial gyms in Denmark were part of the scheme, embracing

approximately 80% of Danish gym members² (550,000 members). For those centres that pay the annual testing fee inspectors from ADD will normally visit the centre twice a year to carry out doping tests on two subjects per visit. In 2008 507 tests were conducted and 111 individuals (22%) tested positive.³ However, it is important to note that the testing is targeted towards 'suspicious individuals', and therefore population projections cannot be made from these figures. A number of other fitness centre users were also banned because they refused a doping test.

Where a user is tested positive during the ADD visit (or refuses to be tested), he or she is immediately excluded from the centre in question. However, since it is illegal to store information on recreational athletes with drugs tests in a common database, individuals are therefore free to sign up as a member of another gym.

Along with the doping tests, ADD has tried to use educational campaigns and support services to address the use of image enhancing drugs in fitness environment. This included the traditional educational campaigns and support services. Additionally, ADD developed an anonymous counselling system accessible via the internet and a telephone service which received over 1398 queries over an 18 month period. Almost all questions (94%) that were posted by individuals training in gyms were from male enquiries while 6% were from females. The three most common performance and image enhancing drugs (PIEDs) were AAS (34%), creatine and or protein (22%), and other dietary substances in 16% of instances. Of the individuals enquiring regarding AAS, 61% originated from people training in gyms

Moves are now being made to lobby the Danish Parliament to change the law to make it compulsory for all fitness centres to join in the "smiley face" scheme even though there is no evidence that the present strategy has led to any significant reduction in the use of AAS. Any compulsory scheme would also have to overcome data protection issues, such as with the use of personal information of people tested positively being circulated through agencies and to other fitness centres. There are critics of

the current scheme citing that it is expensive (over 6,000,000 DKK has been paid by fitness centres to ADD) and that it has a too narrow focus.

Denmark remains alone in using an enforcement and control regime such as this, and the recommendations of the Expert Group to the Council and the findings of the Strategy for Stopping Steroids project⁴ do not endorse this direct form intervention.

Germany

In Germany 20,000 individuals are caught as illegal drug offenders every year⁵, whilst it is estimated that 37.6% of persons aged 18-39 have taken drugs at some stage. Additionally 2-3% of pupils and students in Germany have a lifetime experience with prescription stimulants for cognitive enhancement.⁶

The prevalence of illegal drugs in German fitness and leisure facilities is reported as 15.9%.⁷ A separate questionnaire which was used in the same fitness environment that was directed at 'suspicious individuals' reported that 41.3% individuals use illegal drugs.

German drug law states that medical professionals are not allowed to prescribe medications solely for performance enhancement, whilst the German Narcotics Drug Act prohibits the possession and use of narcotics.

As in many countries, anti-doping is promoted by the National Anti-Doping Association (NADA). The stated objectives of NADA align completely with those of the WADA. Whilst NADA does promote anti-doping specifically in amateur sport it places a greater emphasis on elite sport. Nevertheless, it has a preventative program aimed at ensuring that young athletes are appropriately informed of anti-doping policies. The programme targets key 'influencers' of young athletes including school trainers, teachers, parents, and medical profession to ensure that they all recommend safe anti-doping practices.

Supplement use in elite sport is discouraged by the German NADA because of the potential risks

of contamination within such products. There are a number of German supplement manufacturers who have quality control testing performed on their products in order to re-assure athletes that they are not contaminated. The products are tested for a number of steroids and occasionally for stimulants at a laboratory in Cologne.⁸

Within the German fitness sector the leading trade association (DSSV) strongly advocates anti-doping to its members and has developed an educational programme for trainers and athletes in which the dangers of doping substances are highlighted.

United Kingdom

In the UK there is an established governance structure within elite sport whereby national governing bodies of sport, such as UK Athletics, promote the work of regulatory bodies such as UK Anti-Doping and WADA. However, there is no established structure for investigating doping within the fitness sector, and there would appear to be little research to date on fitness centre users in the UK.⁹

It is estimated that 200,000 users in the UK take steroids for non-medical purposes i.e. to enhance their appearance or strength.¹⁰ The first nationwide AAS survey in the UK surveyed 21 gyms throughout Britain and found that 8% of respondents admitted having taken AAS at some time, 5% of which current users.¹¹ A separate survey of 100 AAS-using athletes was conducted in three South Wales counties, reporting high rates of polypharmacy (80%) with a wide range of other drugs amongst their sample.

With regards to AAS, the United Kingdom is often stated as adopting a 'harm reduction' strategy, relying upon education and awareness campaigns. The Home Office classify AAS as a Class C drug. This makes it an offence to supply the drug but does not make it an offence to possess or use them personally. As a result there has been an increase in internet sales channels, where companies based in locations outside of the EU can sell AAS legally to individuals within the UK. One of the more popular websites is www.anabolictroidsuk.net which states:

“Items you order are sent directly to the United Kingdom. All items are sent from outside the European Union and have delivery times usually in days. For other nationalities please be sure to check your countries laws before ordering. UK customers may also be liable for a 12.8% customs charge on imported items. If you would like more information about this please ask us as we will attempt to keep these charges to a minimum.”¹²

Such sales channels operate legally because possession without prescription is not illegal and it is also not illegal to import steroids as long as they are for personal use. However, possession or importing with intent to supply is illegal, and carries up to five years imprisonment. It was found that this ‘soft’ legislative approach has not resulted in increased levels of AAS use across the population in comparison to countries with more punitive legislation such as Denmark.

The UK Health and Fitness Industry (the Fitness Industry Association, the Register of Exercise Professionals, and the Institute for the Management of Sport and Physical Activity) has addressed the problem of steroid misuse by publishing an industry guidance note advising fitness providers and professionals on how to recognize the signs of steroid use within their organisations, the risk involved in the abuse of steroids, and the appropriate course of action to take if steroid use is suspected among gym members.

The guidelines recommend that exercise professionals should approach individuals by discussing general positive lifestyle choices rather than being explicit or confrontational about the use of steroids. The guideline also details the duty of care of club managers to the people using their facilities, and provides advice on ‘best practice’ for ensuring that duty of care is fulfilled¹³.

Netherlands

In contrast with a number of countries where legislation exists that criminalises doping, the Netherlands has no specific national legislation regarding doping. In 2008 the Dutch Minister of

Health, Welfare and Sport requested the Health Council of the Netherlands to investigate the nature and severity of doping use in unorganised sports, particularly with regard to the harmful effects on health both short-term and long-term, the implications of high risk drugs in terms of health risk, disease burden and care consumption, and to make recommendations regarding these topics.¹⁴

The review stated that within unorganised sports, doping is used not only to improve performance but also to enhance a slim, muscular physique. Within the report the council defined unorganised sport as, “any form of recreational sporting activity not organised by regular sports organisations”, fitness was considered the most common sport performed in this context, whilst the majority of this sporting activity takes place in gyms and fitness centres.

In the Netherlands about 2 million people engage in unorganised sports, and various studies have been performed into the prevalence of doping use in unorganised sports. Most recently, the Doping Authority, Dopingautoriteit, requested that a new study into the prevalence of doping in unorganised sports be undertaken.¹⁵ The study was performed among visitors to fitness centres aged 15 and older, 92 fitness centres and 718 individuals participated in the study. The study included a randomised response method, which allows for socially desirable responses, and a classical method. The classical method revealed a general prevalence whereas the randomised method yielded a prevalence of 8.3%. In terms of absolute figures, the latter percentage indicates 160,000 people had used doping in 2008.

A separate study stated that the prevalence of doping use among the general population was 2.1% in 2005 for ‘use at some point’ and 1% for ‘use in the past year’.¹⁶ According to the results gyms and fitness centres appear to be the most important places to contact dealers (36.4%), other listed sources include doctors (12.7%), drugstores/ pharmacy (21.8%).

With a subsidy from the Dutch government, the Netherlands Anti-Doping Authority Foundation focuses, amongst other things, on providing information and advice to athletes and their direct

environment. The prevention programme 'Eigen Kracht' (True Strength) developed by the Doping Authority in 2004 focuses specifically on athletes in fitness centres and gyms. Fitness entrepreneurs, gym owners and instructors are a key intermediate target group of the campaign which simply aims to prevent or reduce the use of doping by athletes in fitness centres and gyms. The campaign provides a number of pieces of information collateral such as the book, 'Op eigenkracht', a monthly publication in Sport and Fitness Magazine, and a series on seminars and appearances at trade shows.¹⁷

The fitness sector has also developed an anti-doping strategy whereby the sector trade association, Fit!vak, requires all members to be certified by the National Fitness Centre Certification (LERF). Among other things this regulation sets requirements in the area of doping. Fit!vak members also sign an anti-doping covenant. In doing so, the centre declares it will implement policy within the centre that combats the use of doping substances, on penalty of loss of LERF accreditation. Evaluation of these efforts have indicated that a split has occurred between bodybuilding centres, where more resistance has been identified, and fitness/leisure centres which Fit!vak represent and are therefore compliant with Anti-Doping policy.

Regarding use of nutritional supplements, some elite athletes in the Netherlands continue to use these and refer to a national program called the NederlandsZekerheidssysteem-VoedingssupplementenTopsport (NZVT) which allows users to look for products that have been tested for steroids and stimulants.¹⁸ Products that are signed up to this service can display the NZVT logo. The operators of the NZVT program also collaborate with the operators of the testing program Informed-Sport in the UK.

Other national doping strategies employed in Europe


The desk-based research was extended to examine the anti-doping policies and current situations across Europe. Anti-doping strategies in Portugal have recently been adjusted to conform to the principles of the WADA code. Although no

previous studies have been conducted to discern the levels of doping practice for general citizens, the Portuguese Fitness Association Associação de Empresas de Ginásios e Academias de Portugal (AGAP) has included anti-doping as part of their Code of Conduct for fitness centres, in order to "prohibit risky activities to the physical integrity of practitioners and the sale of harmful products to the health of clients". In terms of a regulatory approach, fitness facilities in Portugal are subject to a decree-law (n.271/2009 article 16) which prohibits and recommendation or sale of any substances or methods that are prohibited under Portuguese law.

The newly operational Bulgarian Anti-Doping Centre has also yet to establish an anti-doping strategy aimed at amateur sports people, as there are currently no legal grounds for the Centre to engage in an active campaign against doping practices among amateur athletes or general citizens.

Although Finland is not a partner country to this study, it has developed an anti-doping strategy aimed at amateur athletes in the form of an internet-based service which provides information and advice on doping issues. "Dopinglinkki", a service providing information and expert advice on doping issues and funded by the Finnish government, aims to promote awareness of doping issues and help reduce the health hazard relating to doping substances and their use. The service was launched in cooperation with the Finnish Anti-Doping Agency FINADA. The Finnish Sports for All Association also have a certification system designed to promote cooperation on anti-doping in recreational sports along social responsibility lines. 220 gyms have signed the certificate across Finland.

The STAD programme in Stockholm, Sweden, combines research and interventions to vulnerable people and users covering alcohol abuse, use of narcotics and steroids in a holistic approach. The model is based on co-operation between each of the key stakeholders around doping in fitness centres, aiming to change the environment surrounding doping rather than attempting to change individuals. The purpose of the STAD work is to create a long term doping prevention strategy within fitness facilities to educate each of the key players on the



effects of AAS and other substances. Participating fitness centres are given practical support and advice to provide the professionals, managers/owners, and ultimately the end users with greater knowledge of the risk of doping. Evaluation of this approach indicates that more facilities have anti-doping policies, the number of members being offered AAS has fallen, and the number of men stating they had used AAS in the last 30 days, 12 months and in their lifetimes, had all fallen. Speaking at the Sportvision 2012 conference in Copenhagen on March 20th, Maria Renström, Director of the Ministry of Health and Social Affairs said that in Sweden there are an estimated 10,000 AAS users from a national population of 9,300,000 people (0.10%).

Anti-Doping Norway has recently developed a new anti-doping programme focused on promoting a doping-free training environment through an emphasis on the positive values from training and physical activity. “Clean centres” identify a “clear and unambiguous commitment to a doping free training environment”, and promote awareness of this among members. There are internet-based education programmes designed to educate staff on how to communicate healthy values and the physical, mental and social side effects of doping. Anti-doping strategies in Norway also have an element of monitoring and policing, as fitness centres that adopted the anti-doping programme receive a license to carry out testing on members suspected of doping, with the consequences of terminating membership if proof of doping is established. Centres signed up to the strategy also receive an anti-doping certificate to be made visible to centre members in order to promote cooperation.

Recreational Drug Use

Despite the current lack of concise figures and data available on the prevalence of doping in amateur sports and the fitness sector, one area in which considerable research has been conducted on a regular basis is in “recreational doping” (see table 1.1).

Agencies such as the European Monitoring Centre

for Drugs and Drug Addiction (EMCDDA) and The United Nations Office for Drugs and Crime (UNODC) provide reliable data drawn from representative surveys on the use and misuse of a range of legal and illegal substances at national, regional and global levels, allowing for comparative analysis.

The prevalence of recreational drug use across Europe was identified as an area of interest for the purposes of this study in order to ascertain whether cultural and national attitudes towards recreational drugs, national prevention strategies, and drug policy have an impact on the prevalence of doping in the amateur sports and fitness sectors. It will also be possible to examine how consistent national and local authorities have been in developing strategies to tackle the separate problems of recreational drug use and doping in elite and amateur sport.

The European School Survey Project on Alcohol and other Drugs (ESPAD), a collaborative effort of independent research teams in Europe, forms the largest cross-national research project on adolescent substance use in the world. Trends in recreational drug use are of particular interest to this study as young people (and in particular young males) are believed to be among the most prevalent users of PIEDs, including anabolic steroids and stimulants as well as recreational drugs.

The data accrued also indicates the general prevalence of amphetamine use, which are occasionally used to enhance fitness performance despite the detrimental effect they have on health, with psychological and physical effects such as euphoria, hyper-alertness, emotional hypersensitivity with stress and anger known to occur to users.

Finally, the estimated number of intravenous drug users (IDUs) and infection rates for viruses such as HIV and Hepatitis B among intravenous drug users may be of interest as one method of taking AAS is intravenously, putting this group at substantial risk of infection.

Although data collated by the UNODC, ESPAD and the EMCDDA have led to some progress in standardised research methods relating to

recreational drug use in Europe and elsewhere, issues with quality and depth of research, particularly allowing for cross-national comparison, still exist as they do for research into doping in the fitness sector. This is generally due to a lack of co-ordination between agencies, and different methods being employed in the survey process.

- Interpretation and presentation of desk-based research findings

The findings of the desk-based research on the anti-doping strategies and policies across Europe were presented throughout the study to the management group of the project partners. The group agreed that it was important to have an understanding of the level of the use of narcotics (recreational drugs) in general population groups so that comparisons could be made with the results of fitness centre users – which would be tested in the primary research.

Following the desk-based research, the project team produced a series of interim reports for discussion and scrutiny within the fitness sector and with other experts. The findings were presented at a national level, notably the FIA in the UK presented these to its leading group of industry representatives.

The results of the desk-based research, as outlined above and disseminated to the partners, demonstrated that whilst there were evidently policies and strategies in place in some Member States, there was also a lack of clarity in many countries as to the level of doping in the unorganised sports and fitness sectors. It was therefore important for the field research to centre specifically on the health and fitness sector to understand the current level of doping practice within fitness centres.

4.2 Field Research Methodology

Consultation and design of field research methodology

Through discussions with the project team, the partner network, and with the assistance of other expert partner organisations, it was decided that the

most accurate and revelatory method to ascertain the current levels of doping in Europe would be through a series of surveys within fitness centres aimed at:


- Consumers of fitness centre facilities
- Exercise professionals based within fitness centres
- Owners and managers of fitness centres

Furthermore, unlike other research into doping and motivations behind the use of banned substances, the surveys in FAD asked participants about other habits such as their use of recreational drugs and of food supplements. It also asked exercise professionals whether they thought there was a doping problem in their work environment and whether they would be consider supporting an anti-doping campaign with their own facility.

With the assistance of the Department of Anti-Doping Research of the Institute of Sport in Poland (a WADA Agency), HFL Sport Science in the UK (now owned by LGC), and Leisure-net Solutions with the University of Hertfordshire (UK), the scope and content of the surveys were agreed by the partners. Expectations and targets were established for the number of survey returns required to generate statistically significant results and the three surveys (for consumers, exercise professionals and managers) then designed.

The content was developed in June 2011 and translated into the nine languages of the partners and based on two versions. The first was for controlled access through the internet, and the second in a face-to-face setting. Importantly, each partner also engaged the services of an independent research company to oversee objectivity and independence.

Three countries – Germany, Netherlands and the UK – were selected to undertake some additional face-to-face interviewing to check for any bias in the results of the main, web-survey which was completed in July – August 2011. It was felt these countries would be most appropriate due to the partner organisations delivering the service.



Partners were required to locate a company with an established track record in consumer surveys who could make direct approaches to clubs to participate in the survey. Where there was not a suitable (or known) company a “default” position was adopted. Partners were asked to liaise with EHFA and the Project Management Group if there was any difficulty in making an appointment.

The main survey was conducted through the internet, and comprised a total of 54 different versions to cover for languages, through the internet and for face-to-face. Each partner was given instructions on the method to be used, and they were required to use third party agencies to ensure independence and objectivity.

The partners agreed to aim for 95% accuracy in the findings giving a +/- 5% margin of error. Leisure-net Solutions took advice from the University of Hertfordshire on the numbers to be surveyed as follows – and these apply to all partners:

- Number of clubs (managers) 24
- Number of consumers 1,200
- Number Exercise professionals 120

Responses representative of the fitness industry in each country were sought. It was also agreed that within the consumer survey a minimum of 400 men and 400 women in the total of 1,200 would be surveyed.

Each partner had an allocation of grant money for their total staff time for the duration of the project to cover all time spent in delivering the outcomes – this includes reading documentation, translations, organising the research, preparing and attending conferences, dissemination etc.

Examples of partner survey methodologies are available in the appendix of the main report.

Throughout the process of designing the primary research methodology, the partner organisations were kept updated on progress and consulted to ensure that the most effective surveys were produced. This was done through the partner meetings hosted by EHFA and virtually, through

internet and email consultation.

4.3 Field Research Findings

Survey returns were reviewed and any “spoilt” papers were deleted from the database. When the main survey ended on 12th September 2011 there were:

- 8,238 consumer replies
- 1,850 exercise professional replies
- 261 manager/owner replies

A total of 10,349 were received which overwhelmingly came from the partner countries, although some further replies were received from Austria, Belgium, Czech Republic, France, Malta and Slovenia. The surveys were kept entirely confidential with no further tracking or reporting taking place. The structure of the three surveys ensured a 360° view with distinct perspectives on doping practices. .

The Fitness Against Doping survey for consumers asked questions about the location of their fitness centre, their fitness regimes, the type of fitness facility and their main reasons for fitness training. This helped to show the results were demographically representative of the European fitness sector. It also asked them to identify if they played other sports, and if so which. This provided context as to possible environment or contextual reasons for the use of doping products.

The key results of the study, which are statistically significant in their numbers are listed below. These show that the perception of the fitness sector being rife for the use of drugs is not substantiated as only 1.23% of respondents replied that they had used performance or image enhancing products which were banned or illegal, and a further 1.85% replied that they were using recreational drugs. This gave an overall total of 2.52% of those surveyed taking banned and recreational substances as some respondents replied positively to both categories of drug use. This demonstrates that doping use is fitness an exception across Europe rather than being common practice. Set against the use of recreational drugs across Europe by citizens, fitness centre consumers were found to be less likely to use them.

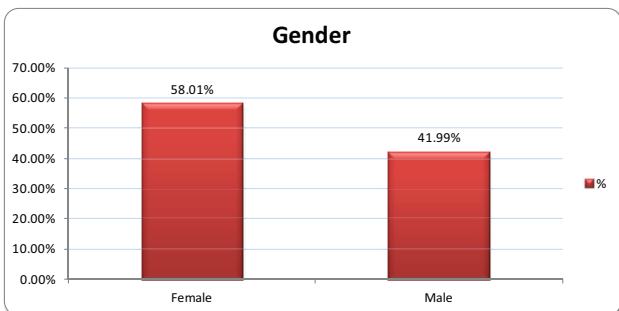
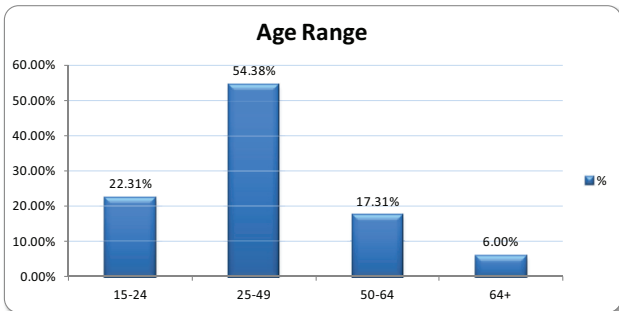
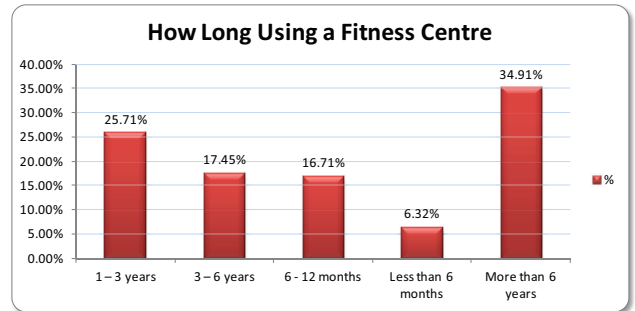
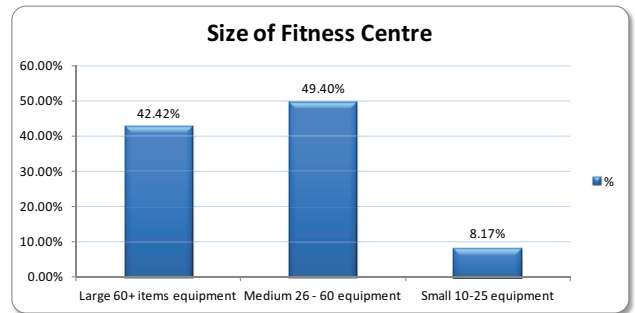
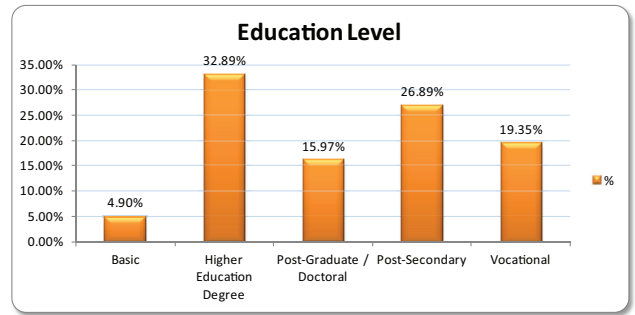
GROUP 1 Banned Doping Substances	GROUP 2 Recreational Drugs
Anabolic steroids	Stimulants (such as amphetamines)
Prohormones	Diuretics, clenbuterol
Nolvadex, Clomid, Proviron	"Designer" drugs , ecstasy, boosters, etc.

	All Respondents
GROUP 1	1.23%
GROUP 2	1.85%
TOTAL Original users*	2.52%

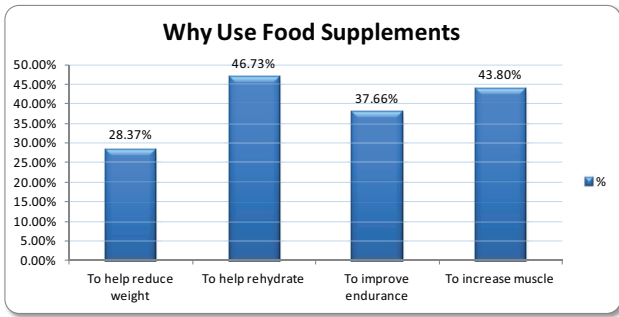
This does not however mean that the survey did not highlight areas which needed to be addressed to ensure that the prevalence of drug use in fitness centres does not increase. Indeed, it is clear that whilst the use of drugs in fitness centres is not common place, this does not mean that the sector should not aim to eradicate drug use altogether within fitness centres.

4.3.1 Consumers

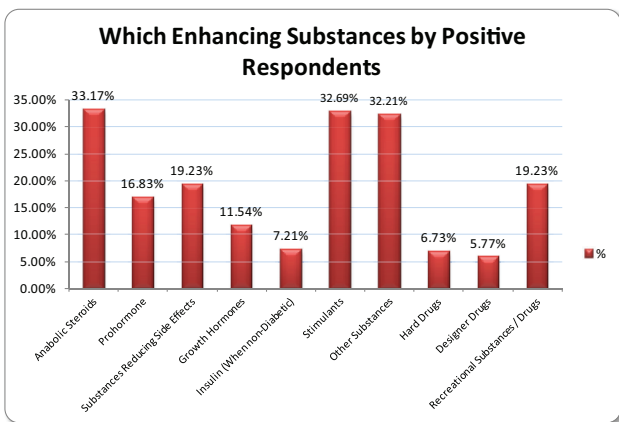
The following tables show some of the main results received to the questions posed by the Fitness Against Doping Surveys (the questionnaires can be found in the appendix).



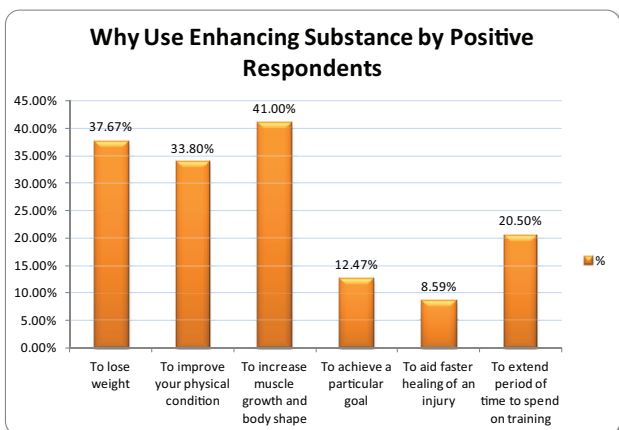
- 27.70% of customers reported using a food supplement. This included electrolyte drinks and their use was the most popular of all supplements as an aid to rehydration. To put this into context, in oral rehydration therapy, electrolyte drinks containing sodium and potassium salts replenish the body's water and electrolyte levels after dehydration caused by exercise. Athletes exercising in extreme conditions (for three or more hours continuously e.g. marathon or triathlon) who do not consume electrolytes risk dehydration (or hypernatremia).



- An overall 2.52% (208 people in total) of all respondents replied that they use performance and image-enhancing substances (banned substances and recreational drugs).



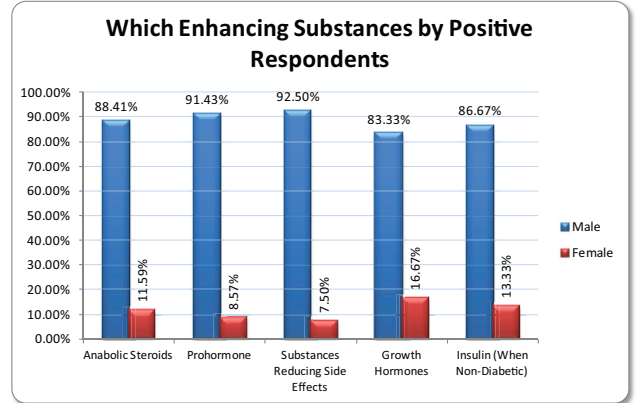
- In the more northern European countries this fell even lower (DK 2.10%, NL 1.81% and UK 1.61%). In Hungary, Bulgaria and Portugal their individual results were 9.13%, 12.6% and 4.2% respectively as the highest users.



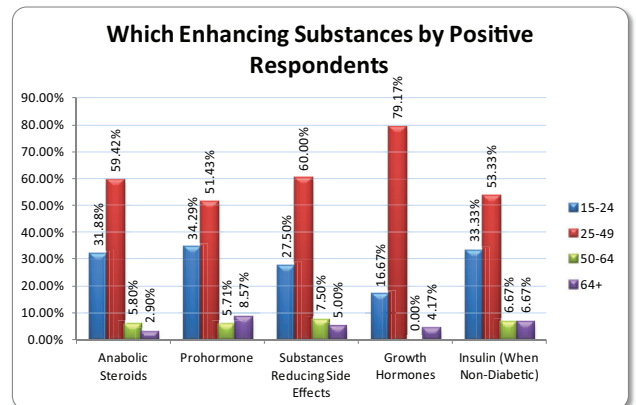
- Respondents could identify a number of substances, and the most popular were anabolic steroids, stimulants such as amphetamines and

“other substances” such as diuretics – almost in equal measure.

- Male users of fitness centres are much more likely to take banned substances and recreational drugs than women participants.



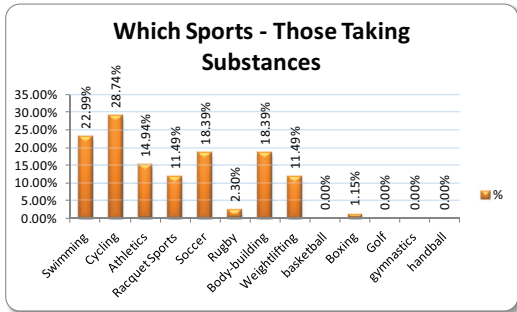
- The age “peak” for the use of substances is the group of 25-49 year olds and not the 15-24 group which has become the “target” in some previous research.



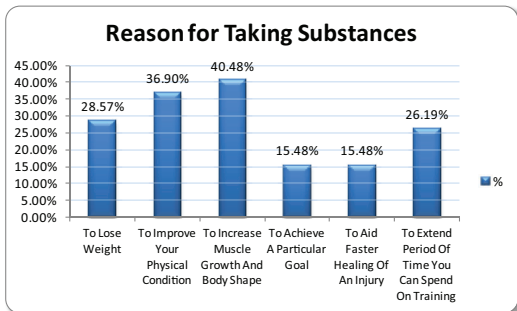
- The use of recreational drugs by fitness customers is very much lower than the general population statistics of usage taken from the European Monitoring Centre for Drugs and Drug Addiction.

- 37.16% of respondents reported that they played another sport, and of the 208 respondents reporting that they take a performance-enhancing substance 41.82% of them were in this group who play another sport. This starts to indicate a possible link that to improve an individual’s amateur

sport performance and competitiveness that fitness centres are used for their strength and conditioning training.

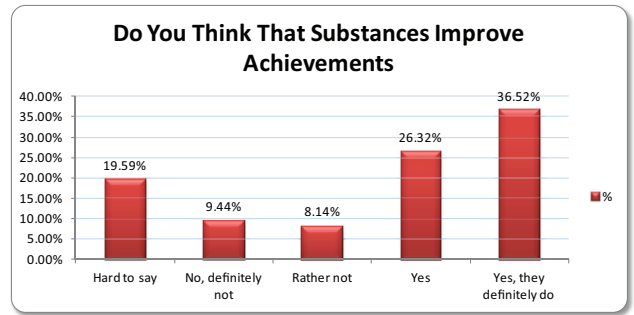
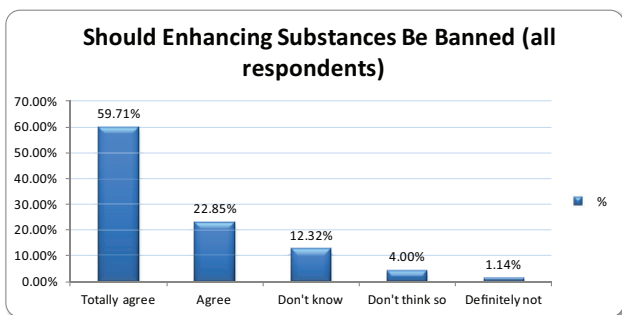


- The below table shows the motivations of the 41.82% of respondents who said they took substances and who also played a different sport. This further reinforces the link between the desire to improve performance in another sport and the prevalence of doping in fitness facilities.

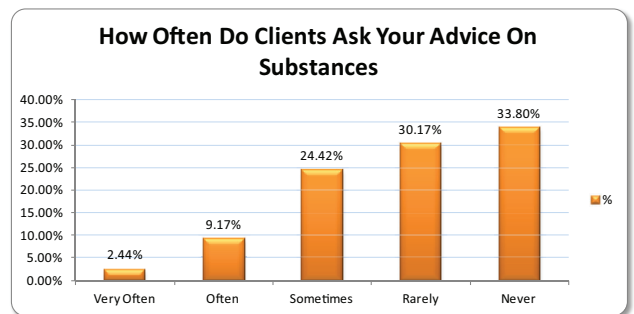
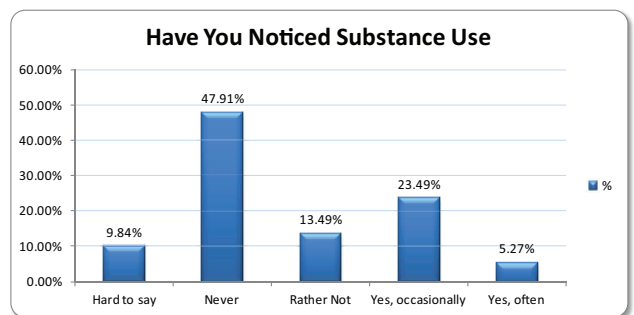


4.3.2 Exercise Professionals

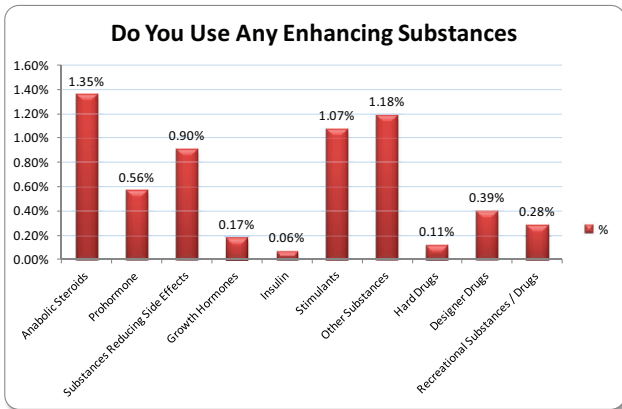
- There is awareness that substances can improve performance and achievements, but a majority of clients do not ask for advice and a big majority of exercise professionals would not give advice.



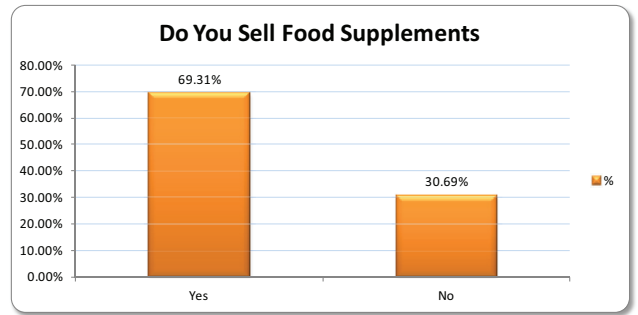
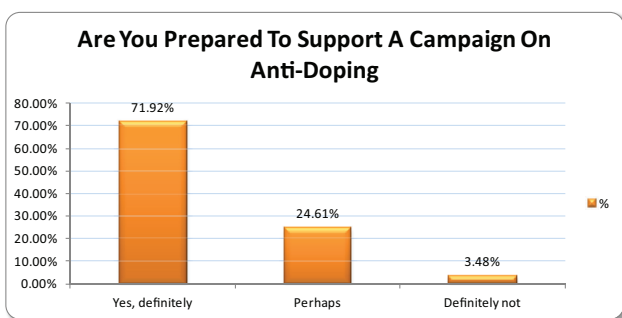
- There is awareness of some doping activity in fitness centres following the same pattern of consumer results, the highest levels reported were in Hungary, Bulgaria and Portugal.



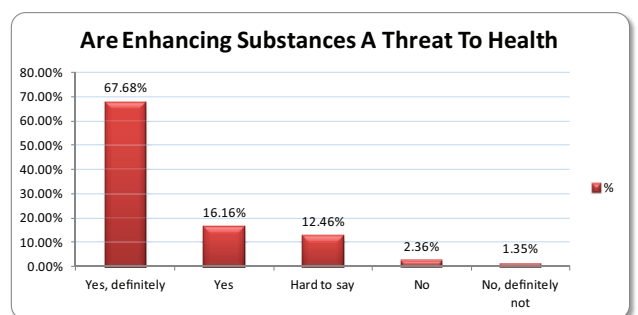
- Despite awareness that doping can improve performance only just over 3% of exercise professionals reported that they took any form of substance themselves.



- A substantial majority (81.82%) would be prepared to support an anti-doping campaign.

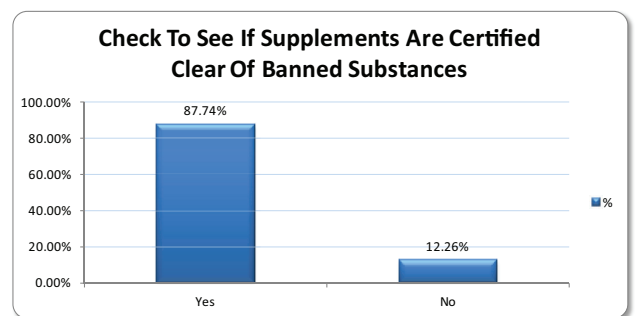
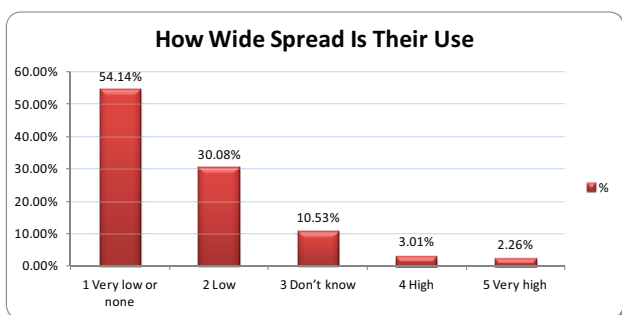


- Just over half of the respondents said they already operated an anti-doping policy with the highest in Denmark and the Netherlands and the lowest in Germany, Hungary, Switzerland and the UK.



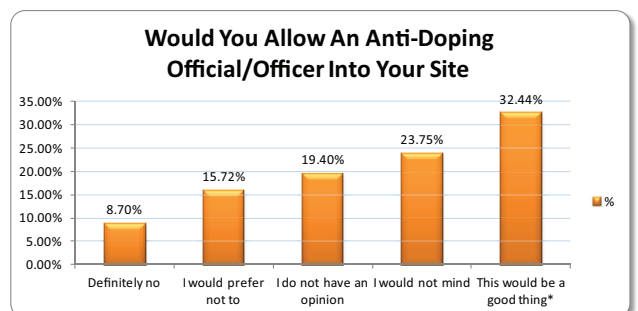
4.3.3 Managers/Owners

- 27% reported that they were aware of the use of performance enhancing substances which was consistent with the reporting from exercise professionals.



- A substantial majority (over 80%) reported that they would be prepared to support an anti-doping campaign, but there was less clarity on whether direct anti-doping testing in fitness centres would be a good thing.

- 69% sell food supplements at their fitness centre, and a majority check to see if there are certified to be clear of banned substances, but a significant minority of more than 12% were unaware or did not check. 34% of consumers purchase their food supplements at their fitness centre and the same percentage through the internet.



References

- ¹Retsinformation, retsinformation.dk (1999), 'Lovomforbud mod visse dopingmidler, Lov nr. 232 af 21. April 1999', (Law on the ban of certain doping drugs, Law no. 232 of 21 April 1999).
- ²A.V Christiansen, 'Bodily violations: Testing citizens training recreationally in gyms', Doping, 2010
- ³Anti-Doping Denmark, 2009, <http://www.steroids.dk/da/Dopingkontrol/Kontrolstatistik.aspx> [accessed 17.5.11]
- ⁴Preparatory Action in the Field of Sport project http://www.antidoping.dk/da/Aktuelt/2012/3/~media/antidoping_dk/filer/Undersoegelser/Strategy_for_Stopping_Steroids_Report_WEB.ashx
- ⁵Kraus et al, 'KurzberichtEpiemiologischerSuchtsurvey: Tabellenband: Trends der Pravlenz des konsumsillegalerDrogennach Alter 1980-2009', [accessed online 26.5.11]<http://www.ift.de/index.php?id=410>
- ⁶Franke et al, 'Non-medical use of prescription stimulants and illicit use of stimulants for cognitive enhancement in pupils and students in Germany' 2011, in *Pharmacopsychiatry* 44: 60-6.
- ⁷P. Simon et al, 'Doping im Fitness-Sport: Eine Analyse zwischenDunkelfeld und sozialerKontrolle.,2008, Baden-Baden, Nomos 2008.
- ⁸Products are listed on the website <http://www.koelnerliste.com>.
- ⁹J.S Baker, M.R Graham, B. Davies, 'Steroid and prescription medicine abuse in the health and fitness community: A regional study' 2006, *European Journal of Internal Medicine* 17, 479-484.
- ¹⁰D.J. Hall & C. Judkins, 'Supplements and Banned Substance Contamination: Offering an informed choice' *HFL Sport Science*, 2010
- ¹¹P. Korkia& G.V Stimson, 'Anabolic Steroid Use in Great Britain: an Exploratory Investigation', 1993, London: The Centre for Research on Drugs and Health Behaviour.
- ¹²Anabolic Steroids, 2011, <http://anabolicsteroidsuk.net/> [accessed 18.5.11]
- ¹³The Fitness Industry Association (FIA), Register of Exercise Professionals (REPS) & The Institute of Sports and Recreational Management (ISRM), Health & Fitness Industry Guidance Note, "Managing users with suspected health problems: steroid abuse"
- ¹⁴Health Council of the Netherlands.Doping in unorganised sports. The Hague: Health Council of the Netherlands, 2010; publication no 2010/03.
- ¹⁵Stubbe et al. Performance-enhancing drugs by athletes visiting Dutch fitness centres. *Dopingautoriteit/TNO, Capellea/dIJssel*, 2009.
- ¹⁶Rodenburg et al. NationaalPrevalentieOnderzoekMiddelengebruik 2005. IVO, Rotterdam, 2007.
- ¹⁷J.A Knottnerus, Presentation of advisory report Doping in unorganised sports, Health Council of the Netherlands, April 13 2010.
- ¹⁸See (<http://antidoping.nl/nzvt/zvt>)
- ¹⁹STAD, Stockholm Prevents Alcohol and Drug Problems <http://stad.org/en/>

The Project Partners:

AGAP - Portugal (Portuguese Fitness Asociación)
www.agap.pt

BAHF - Bulgaria (Bulgarian Association of Health and Fitness)
www.bahf.bg

DFHO - Denmark (Danish Fitness and Health Organisation)
www.dfho.dk

DSSV - Germany (German Fitness Association)
www.dssv.de

DADR - Poland (Department of Anti-Doping Research of Institute of Sport)
www.insp.waw.pl

FIA - UK (Fitness Industry Association)
www.fia.org.uk

Fit!vak - Netherlands (Dutch Fitness Association)
www.fitvak.com

HCA & ICCE - Hungary (Hungarian Coaching Association and International Council for Coach Education)
www.magyaredzo.hu & www.icce.ws

ISCA - Denmark (International Sport and Culture Association)
www.isca-web.org

QualiCert - Switzerland (Swiss Quality Assurance Company)
www.qualicert.ch