



# DOPING PREVENTION



## COACHES' TOOL KIT 2009

---

## Foreword

This document has been prepared with the aim to educate coaches with the best possible knowledge available on Doping Prevention in Volleyball and Beach Volleyball. The Tool Kit contains the description of relevant procedures on the WADA Code, the Prohibited List, Therapeutic Use Exemptions, the Doping Control Process, Results Management, Sanctions and Appeals, the Health Consequences of Doping and Nutrition of Players during FIVB Competitions.

In today's sporting world, it is vital that coaches and athletes are aware of the roles and responsibilities required of them. Each individual athlete is accountable for the status of his own health. Besides this, coaches hold a unique and influential position, fundamental in educating the athletes under their charge. This education must constantly embrace and reiterate the importance of an athlete's integrity in order to maintain the spirit of equal competition.

Our aim is to strive to keep Volleyball and Beach Volleyball coaches and athletes with the best possible knowledge from the FIVB Medical Commission, WADA and other relevant stakeholders.

We hope and trust that this document will be a useful guide for coaches and athletes.

If you have any questions or feedback, please contact the FIVB Technical Department on [technical.development@fivb.org](mailto:technical.development@fivb.org).

## Table of Contents

	<b>Pages</b>
The World Anti-Doping Agency.....	4
FIVB Medical Regulations.....	6
The World Anti-Doping Code.....	7
The Prohibited List.....	9
Therapeutic Use Exemptions.....	11
Whereabouts Information.....	13
The Doping Control Process.....	15
Results Management, Sanctioning and Appeals.....	18
Results Management at a Glance.....	20
Causes for Sanctions Under the World Anti-Doping Code.....	21
Health Consequences of Doping.....	23
Signs, Symptoms and Vulnerability Factors in Doping.....	29
Accreditation of Team Medical Doctors or Team Physical Therapists.....	31
Health Certificates.....	31
Nutrition of Players During FIVB Competitions.....	32
Checklist for Coaches.....	36
Anti-Doping Monitoring Form.....	37
Checklist for Athletes.....	38
Anti-Doping Guidance: Checking your Medication.....	39
Anti-Doping Guidance: Preparing for a Competition.....	40
Anti-Doping Guidance: Travelling Abroad – Be Safe.....	41
Fair Play References.....	42
Coach Pledge to a Doping-Free Sport.....	44
Athlete Pledge to a Doping-Free Sport.....	45

## THE WORLD ANTI-DOPING AGENCY

**Created** on 10 November 1999, pursuant to the Lausanne Declaration on Doping in Sport.

**Funded** equally by national governments and by the International Olympic Committee.

**Governed** by a 36-member Foundation Board and a 12-member Executive Committee, each composed by equal numbers of representatives from the Olympic Movement and from governments.

**Its mission** is to promote, coordinate, and monitor, at the international level, the fight against doping in sport in all its forms.

**Its logo** expresses the universal spirit of sport practiced naturally, within the rules, and free from artificial enhancements:

- the "equal sign" expresses equity and fairness;



- the "square" represents the customs and the rules that must be respected;
- black evokes neutrality and is the traditional colour of the referee;  
green evokes health and nature and is the usual colour of the field of play.

### Responsible for:

- Publishing the World Anti-Doping Code and monitoring its acceptance and compliance by sports governing bodies.
- Fostering the provision of education and of doping prevention information to athletes, coaches, youth and other relevant target groups.
- Providing certain funds for and managing scientific research and social science research programs aimed at developing new detection methods and improving doping prevention.
- Conducting some unannounced out-of-competition doping controls among elite athletes.
- Observing doping control and results management programs at major events.
- Fostering the worldwide development of national or regional anti-doping programs.

### Not responsible for:

- Performing analyses on urine or blood samples. These analyses are performed in laboratories that have been accredited by WADA to do so.
- Sanctioning for doping violations. Sanctions are imposed by the governing body of which the person violated the doping rules. These can be anti-doping organisations, event organisers, or sports federations, whether they operate at the international or national level. Should WADA have any concerns about the process or the result, WADA may exercise its right of appeal to the Court of Arbitration for Sport.
- Announcing the results of adverse analytical findings.

**Located** in Montreal, Canada (head office) with regional offices in Lausanne, Switzerland (for Europe); Cape Town, South Africa (for Africa); Tokyo, Japan (for Asia and Oceania); and Montevideo, Uruguay (for Latin America).

---

**Contact WADA:**

Website: [www.wada-ama.org](http://www.wada-ama.org)

Email: [info@wada-ama.org](mailto:info@wada-ama.org)

Telephone: +1 514 904 9232

Fax: +1 514 904 8650

# FIVB – International Volleyball Federation

## Medical Regulations

The quest for performance excellence and advances in the area of sports performance research has always prompted some individual's to seek external or artificial means to enhance their performance. Such behaviour runs contrary to the ethics of both sport and medical science, can be harmful to the athlete's health, and further more constitutes a clear attempt to cheat. For these reasons, the FIVB, along with other sports organisations, has promulgated certain rules regulating the use of certain substances, methods and procedures in sport competition. Anti-doping regulations, like competition regulations, are sport regulations governing the conditions under which sport is played. Athletes must accept these regulations as a condition of participation.

The FIVB Medical Regulations for Volleyball and Beach Volleyball can be found at the following links:

FIVB Medical Regulations:

[http://www.fivb.org/EN/Volleyball/Forms/Medical/FIVB\\_Medical\\_Regulations\\_2009\\_8thEdition.pdf](http://www.fivb.org/EN/Volleyball/Forms/Medical/FIVB_Medical_Regulations_2009_8thEdition.pdf)

Anti-Doping Control Form:

[http://www.fivb.org/EN/Volleyball/Forms/Medical/FIVB\\_VB\\_M-1.pdf](http://www.fivb.org/EN/Volleyball/Forms/Medical/FIVB_VB_M-1.pdf)

Volleyball Player's Health Certificate:

[http://www.fivb.org/EN/Volleyball/Forms/Medical/FIVB\\_VB\\_M-3.pdf](http://www.fivb.org/EN/Volleyball/Forms/Medical/FIVB_VB_M-3.pdf)

Therapeutic Use Exemption Application Form:

[http://www.fivb.org/EN/Volleyball/Forms/Medical/FIVB\\_VB\\_M-8.pdf](http://www.fivb.org/EN/Volleyball/Forms/Medical/FIVB_VB_M-8.pdf)

Beach Volleyball Player's Health Certificate:

<http://www.fivb.org/EN/BeachVolleyball/Forms/Athletes/WT-10HealthCertificate.doc>

### Contact FIVB:

Website: [www.fivb.org](http://www.fivb.org)

Email: [technical.development@fivb.org](mailto:technical.development@fivb.org)

Telephone: +41 21 345 3535

Fax: +41 21 345 3545

# THE WORLD ANTI-DOPING CODE

## History

- 2001: first draft submitted to an 18-month worldwide public consultation process
- 2003: adopted unanimously during the World Conference on Doping in Sport
- 2004: effective as of January 1st
- 2006: submitted to another worldwide public consultation process
- 2007: revised version planned to be adopted at the next World Conference on Doping in Sport
- 2008: revised version planned to become effective

## Essential Content

The Code establishes the fundamental principles on which all efficient anti-doping policies should be based. It also expressly sets out that the entire process leading to a sanction for a doping violation must respect human rights and principles of fairness and justice.

<b>VIOLATIONS:</b>	Description of various violations such as presence or use of a prohibited substance, evading a doping control test, administering or trafficking in prohibited substances or methods, etc.
<b>SANCTIONS:</b>	Description of sanctions applicable to different types of violation and of other circumstances, which may affect the sanction to be imposed.
<b>RESULT MANAGEMENT:</b>	Description of procedures to be followed from the time a possible doping violation is reported to a testing authority until a sanction is determined.
<b>APPEALS:</b>	Provisions setting out the right of all parties involved in doping cases to appeal decisions.
<b>WHEREABOUTS:</b>	Description of the requirements imposed on athletes who are subject to out of competition testing to provide whereabouts information to testing authorities so that mandated doping control officers can find them.
<b>ROLES AND RESPONSIBILITIES:</b>	Outline of the roles and responsibilities of WADA, governments and Code signatories with regards to doping control, education, research, sharing of information, mutual recognition of decisions, and other elements to ensure worldwide coordination and harmonisation.

In addition to the core document of the Code, the following four International Standards are an integral part of the Code, even if they are published as separate documents:

<b>PROHIBITED LIST:</b>	Lists, by category or by name, substances and methods which are prohibited in sport. Distinguishes those prohibited at all times from those prohibited in competition only.
<b>TESTING:</b>	Sets out all of the proper, step-by-step procedures to be followed for doping controls, from the selection of an athlete for testing to the transportation of samples to the laboratory inclusively.
<b>THERAPEUTIC USE EXEMPTIONS:</b>	Provides for the right of athletes to undergo medical treatment under certain conditions. While most common illnesses can be treated with medications that do not contain prohibited substances, the Code allows for athletes to apply for a therapeutic use exemption to enable them to use, for a legitimate medical condition, an otherwise prohibited substance or method.
<b>LABORATORY:</b>	Sets out all the proper, step-by-step procedures to be followed by laboratories accredited by WADA in performing analyses for doping controls, from the time the laboratory receives a sample, to the reporting of results to the testing authority, including the safeguarding of remaining samples.

### Adoption and Implementation

The signatories of the Code are listed on WADA's website (under Code/Code Acceptance).

# THE PROHIBITED LIST

## An Overview

Note: The text below is based only on a general and simplified overview of the World Anti-Doping Code in force January 1, 2009. For detailed provisions and for more information on interpretation, the reader should consult the full text of the current Code available at all times on [www.wada-ama.org](http://www.wada-ama.org).

### **What is the Prohibited List (the List)?**

It is the document identifying the substances and methods that are prohibited in-competition, out-of-competition, and in particular sports. Substances and methods are classified by categories (e.g. steroids, stimulants, gene doping).

### **Where does the List come from?**

The List was first published in 1963 under the leadership of the International Olympic Committee. Since 2004, as mandated by the World Anti-Doping Code, the World Anti-Doping Agency (WADA) is responsible for the preparation and publication of the List.

### **How is the Prohibited List prepared?**

The List is prepared by WADA's List Committee, a panel of eleven scientists chosen for their international expertise. The Committee consults recent scientific findings and prepares a draft List that is circulated to stakeholders (National Anti-Doping Organizations (NADOs), International Federations, governments etc.) for comments. The Committee considers the comments it has received before making recommendations on the contents of and revisions to the List. A final draft is presented to WADA's Executive Committee for discussion and final decision.

### **What are the criteria for substances or methods to be added to the List?**

To be considered for inclusion on the List, a substance or method must meet any two of the following three criteria:

- the substance or method has the potential to enhance or enhances sport performance;
- the use of the substance or method represents an actual or potential health risk to the athlete;
- the use of the substance or method violates the Spirit of Sport.

A substance or method that has the potential to mask the use of other prohibited substances or prohibited methods can also be added to the List.

### **How often is the List revised?**

The List is revised at least once a year. Each year, the updating of the List is finalised by WADA's Executive Committee at its September meeting. The updated List is published by October 1 and comes into effect on January 1 of the following year.

### **Why can't the List indicate the names of medications that are acceptable instead of listing prohibited substances individually?**

Medications are usually commercialized under different names in different countries. Even if a medication has the same brand name in different countries, it may nevertheless have a different composition (so as to conform with the relevant country's laws on the availability of certain substances). In one country, a product may be safe to take from an anti-doping perspective, while in another country a product sold under the same name may contain a prohibited substance.

---

### **Who can help me understand the List?**

Because the List refers to the scientific name of substances and to other medical terms, it may be difficult to understand for the average reader. It also includes categories of substances for which it is not practical to list all substances by name. This is why athletes should consult competent health professionals such as physicians or pharmacists to help determine whether the ingredients of a certain product might be on the List. Some NADOs offer an information service (telephone hotline, electronic mail, Internet database etc) to help athletes check the status of medications sold in their respective countries.

# THERAPEUTIC USE EXEMPTIONS

## An Overview

Note: The text below is based only on a general and simplified overview of the International Standard for Therapeutic Use Exemptions in force January 1, 2005. For detailed provisions and for more information on interpretation, the reader should consult the full text of the current International Standard for Therapeutic Use Exemptions available at all times on [www.wada-ama.org](http://www.wada-ama.org).

### What is a therapeutic use exemption (TUE)?

The World Anti-Doping Code provisions on therapeutic use exemptions (TUEs) recognise the right of athletes to medical treatment. If the medication or method an athlete needs to treat an illness or condition (as prescribed by a health care professional) is included on the Prohibited List, a TUE will constitute the authorization required by the athlete to use the otherwise prohibited medication.

### What are the criteria for granting a TUE?

- The athlete would experience significant health problems if he or she did not use the prohibited substance or method,
- The therapeutic use of the substance or method would not result in significant enhancement of performance, and
- There is no reasonable therapeutic alternative to the use of the otherwise prohibited substance or method.

### Who grants TUEs?

All International Federations and National Anti-Doping Organizations are required to have a process in place whereby athletes with documented medical conditions can apply for a TUE. Applications are to be appropriately dealt with by a panel of independent physicians called a Therapeutic Use Exemption Committee (TUEC). International Federations and National Anti-Doping Organizations, through their TUECs, are then responsible for granting or declining such applications.

### How can an athlete apply for a TUE?

The process for an athlete to apply for a TUE is fairly simple. Each athlete must:

- Contact his or her International Federation or National Anti-Doping Organization (whichever applies) and ask for a TUE application form.
- Have his or her physician fill out the TUE application form, produce the required supporting documentation and forward this form and documentation to the International Federation or National Anti-Doping Organization (whichever applies).

As required by the International Standard for TUEs, the TUE application should be submitted at least 21 days before the athlete participates in an event.

## What happens if an athlete is granted a TUE?

TUEs are granted for a specific medication with a defined dosage. They are also granted for a specific period of time and therefore have an expiry date. The athlete is required to comply with all the treatment conditions set out in the TUE application.

If an athlete with a TUE undergoes testing, he or she should, when filling out the doping control form, declare the substance or medication being used and specify that a TUE has been granted. In such case it is recommended, but not mandatory, for an athlete to have a copy of his or her TUE approval form at hand, to show to the doping control officer.

If evidence of the use of a prohibited substance or method is discovered, verification will take place to ensure that:

- the TUE is still in effect; and
- the results of the analysis are consistent with the TUE granted (nature of substance, route of administration, dose, time frame of administration, etc).

If the review proves satisfactory, the result of the test will be recorded as having been negative.

## FIVB Requirements for granting a Therapeutic Use Exemption

Athletes with a documented medical condition requiring the use of a *Prohibited Substance* or a *Prohibited Method* must first obtain a Therapeutic Use Exemption (TUE) form. Please refer to the following link for the Therapeutic Use Exemption Form:

[http://www.fivb.org/EN/Volleyball/Forms/Medical/FIVB\\_VB\\_M-8.pdf](http://www.fivb.org/EN/Volleyball/Forms/Medical/FIVB_VB_M-8.pdf)

Athletes must obtain a TUE from the FIVB (regardless of whether the Athlete previously has received a TUE at the National Level). TUEs granted by the FIVB shall be reported to the Athlete's National Federation and to WADA.

Athletes should apply to the FIVB for the TUE at the same time the Athlete first registers for FIVB competitions, and, except in emergencies, no later than 21 days before the Athlete's participation in international competition.

For more information, please refer to the FIVB website at the following link:

<http://www.fivb.org/EN/Volleyball/Forms/Index.html>

# WHEREABOUTS INFORMATION

## An Overview

Note: The information below is based only on a general and simplified overview of the text of the World Anti-Doping Code (the Code) in force January 1, 2009. For detailed provisions and for more information on interpretation, the reader should consult the full text of the current Code available at all times on [www.wada-ama.org](http://www.wada-ama.org).

### **What is the source of the requirement to provide whereabouts information?**

The Code sets out only general guidelines regarding the requirement to provide whereabouts information. The Code requires each National Anti-Doping Organization (NADO) or International Federation (in this case the FIVB) to decide on the exact terms of its respective rules, processes and administration requirements with respect to whereabouts information.

### **Why are athletes required to provide whereabouts information?**

For unscrupulous athletes, making themselves hard to find is a way of avoiding testing. The purpose of applicable whereabouts requirements is that athletes can be located at any time for unannounced out-of-competition testing. Failure to respect applicable whereabouts requirements may result in a sanction.

### **Which athletes are required to provide whereabouts information?**

Athletes who are named members of the testing pool of a NADO or the FIVB are required to submit whereabouts information. When athletes are advised that they are now part of a NADO or the FIVB testing pool, they should immediately find out from the relevant organization what the applicable process is for submitting their whereabouts information.

### **What level of detail is required for whereabouts information?**

In general you are required to provide your permanent address (where you live), the address(es) of your training venue(s), any alternate addresses with the times/dates at which you might find yourself there, your training schedule, your school or work schedule and other regularly scheduled activities. You must also indicate any travel plans or competitions, with accommodation details, dates, and times. The FIVB and most NADOs have produced forms that clearly set out the level of detail required in providing whereabouts information.

### **How often does whereabouts information have to be updated?**

How often you will have to update your whereabouts information will depend on the specific requirements of each NADO and the FIVB, with which you should ensure that you have thoroughly familiarised yourself. Many anti-doping organisations ask for forms to be submitted quarterly. Quarterly updates notwithstanding, timely updates must also be provided in the event of any changes to the athlete's schedule. Updates that are submitted too late may lead to an athlete missing a test, which may then lead to sanctions, unless the change in schedule is due to hospitalization or bereavement.

### **What can happen if an athlete fails to submit whereabouts information or fails to notify the NADO or the FIVB of a change of schedule?**

Failure to provide accurate, current whereabouts information is a sanctionable offence. Such a failure will result in the athlete's case being reviewed. If, following the review, it is determined that there was no reasonable justification for the failure to provide accurate, current whereabouts information, the athlete may be suspended from competition. In such cases, suspension may range from three months to two years, depending on the applicable regulations.

---

**Where can athletes find out more about whereabouts information?**

NADOs and the FIVB can provide athletes under their jurisdiction with all necessary information about whereabouts requirements, processes and possible sanctions.

# THE DOPING CONTROL PROCESS

## A Step-by-Step Overview

Note: The text below is based only on a general and simplified overview of the World Anti-Doping Code in force January 1, 2009. For detailed provisions and for more information on interpretation, the reader should consult the full text of the current Code available at all times on [www.wada-ama.org](http://www.wada-ama.org). For access to the FIVB M-1 Anti Doping Control Form please refer to the following link [http://www.fivb.org/EN/Volleyball/Forms/Medical/FIVB\\_VB\\_M-1.pdf](http://www.fivb.org/EN/Volleyball/Forms/Medical/FIVB_VB_M-1.pdf)

### 1 Athlete Selection

The selection of athletes is based on the requirements of the responsible Anti-Doping Organisation and may occur in three ways: random, based on established criteria (e.g. finishing position), or targeted.

### 2 Notification

A Doping Control Officer (DCO) or Chaperone will notify the athlete of his or her selection for doping control. The athlete will be asked to sign the form confirming that he or she has been notified for doping control.

### 3 Reporting to the Doping Control Station

The athlete should report to the doping control station as soon as possible after notification, taking into consideration the cool-down process of the athlete but within the time period specified by the doping control personnel (maximum one hour). The athlete will be accompanied by a DCO or a Chaperone from the time of notification until the completion of the sample collection process. The athlete has the right to have a representative accompany him or her at the doping control station.

### 4 Selection of Collection Vessels

The athlete is given a choice of individually sealed collection vessels and selects one. The athlete verifies that the equipment is intact and has not been tampered with. The athlete should maintain control of the collection vessel at all times.

### 5 Provision of Sample

Only the athlete and a doping control official of the same gender are permitted in the washroom during the provision of the sample. Athletes are required to remove any clothing from the knees to mid-chest and from the hands to the elbows. This provides the doping control official with a direct observation of the urine leaving the athlete's body to prevent possible manipulation of the urine sample. The athlete should maintain control of his or her sample at all times during the process. As provided for in the WADA Code, blood sampling may be requested.

### 6 Volume of Urine

The DCO shall use the relevant laboratory specifications to verify, in full view of the athlete, that the volume of the urine sample satisfies the laboratory's requirements for analysis. If the amount of urine does not meet the minimum requirements, the athlete will proceed with the Partial Sample Process.

### **Partial Sample Process**

When an insufficient volume of urine is provided, the athlete will proceed with the Partial Sample Process until the required volume is provided. During this process, the partial sample(s) will be sealed and secured using the partial sample equipment. The sealed partial sample should remain in the control of either the athlete or the DCO. While waiting to provide additional sample(s), the athlete shall remain under continuous observation and be given the opportunity to hydrate. When the athlete is ready to provide another sample, the process of sample collection continues as described before.

When the required amount of urine has been provided, the athlete will select a new, sealed collection vessel and combine his or her samples, beginning with the first partial sample provided and each subsequent partial sample until the desired volume is reached. The sample is then sealed according to the steps outlined below.

#### **7 Selection of the Sample Collection Kit**

If the athlete has provided the required volume of urine, the athlete will be given a choice of individually sealed sample collection kits and selects one. The athlete verifies that the equipment is intact and has not been tampered with. The athlete opens the kit and confirms that the sample code numbers on the bottles, the lids and the container all match.

#### **8 Splitting the Sample**

The athlete himself or herself pours the required volume of urine into the "B" bottle, then pours the remaining urine into the "A" bottle. The athlete will be asked to leave a small amount of urine in the collection vessel so the Doping Control Officer can measure the specific gravity and/or pH of the sample, in accordance with the relevant laboratory guidelines.

#### **9 Sealing the Samples**

The athlete seals the "A" and "B" bottles. The athlete representative (if any) and the Doping Control Officer should verify that the bottles are sealed properly.

#### **10 Measuring Specific Gravity and/or pH**

The DCO measures the specific gravity and/or pH using the residual urine left in the collection vessel. The values are recorded on the doping control form. If the sample does not meet the specific gravity or pH requirements, the athlete may be asked to provide additional samples.

#### **11 Completion of the Doping Control Form**

The athlete is asked to provide information about any prescription/non-prescription medications or supplements he or she has taken recently. These medications are recorded on the doping control form. The athlete has the right to note comments and concerns regarding the conduct of the doping control session. The athlete should confirm that all of the information on the doping control form is correct, including the sample code number. The person who witnessed the passing of the sample, the athlete representative (if any), the Doping Control Officer and the athlete will sign the doping control form at the end of the sample collection process. The athlete is given a copy of the doping control form. The laboratory copy of the doping control form does not contain any information that could identify the athlete.

#### **12 Transport to Laboratory**

Samples are packaged for shipping in such a way as to ensure that the security of the sample is tracked. The samples are sent to a WADA-accredited laboratory. The laboratory will inspect the samples upon their arrival to ensure there is no evidence of tampering. The WADA-accredited laboratory will adhere to the International Standard

---

for Laboratories when processing a sample, ensuring the chain of custody is maintained at all times. The "A" sample will be analyzed for substances on the Prohibited List. The "B" sample is securely stored at the laboratory.

Testing worldwide should follow the principles of these guidelines, although there may be slight variations in the procedures adopted by different anti-doping organizations, which will not affect the integrity of the process.

Different provisions (which are not addressed in this document) may apply in the case of minor athletes and athletes with disabilities. Ask your national Anti-Doping Organization or visit the World Anti-Doping Agency's website at [www.wada-ama.org](http://www.wada-ama.org) to obtain more information on those provisions.

# RESULTS MANAGEMENT, SANCTIONING AND APPEALS

## An Overview

Note: The information below is based only on a general and simplified overview of the text of the World Anti-Doping Code (the Code) in force January 1, 2009. For detailed provisions and for more information on interpretation, the reader should consult the full text of the current Code available at all times on [www.wada-ama.org](http://www.wada-ama.org). For further information on the FIVB Results Management, Sanctioning and Appeals please refer to the Medical Regulations at [http://www.fivb.org/EN/Volleyball/Forms/Medical/FIVB\\_Medical\\_Regulations\\_2009\\_8thEdition.pdf](http://www.fivb.org/EN/Volleyball/Forms/Medical/FIVB_Medical_Regulations_2009_8thEdition.pdf)

### **What organizations are involved in the doping control process?**

In the doping control process, there are generally three levels of involvement. The World Anti-Doping Agency (WADA), the FIVB for its sanctioned events and the athlete's National Anti-Doping Organization (NADO) are the most likely to authorize a test on a particular athlete. Once the test is authorized, it is possible that another organization could be contracted to do the sample collection. This sample collection agency will appoint a certified Doping Control Officer to find the athlete for testing. The accredited laboratory that performs the analysis will then report the results to the result management organization, which could be the FIVB for its events, NADO, or national federation (depending on the event). The result management organization will constitute the main point of contact of the athlete regarding the result of the test and possible hearings, sanctions or appeals.

### **What happens when the laboratory completes the sample analysis?**

The laboratory sends the result of the test to the organization responsible for result management and copies WADA. If the result is an adverse analytical finding (AAF), the result management organization will be notified and will conduct an initial review to determine whether a valid therapeutic use exemption justifies the AAF and whether there was any departure from the International Standards (for testing or for laboratory procedures) that could undermine the validity of the finding.

### **Who is entitled to be informed of an AAF?**

Once the initial review is concluded, the organization responsible for result management must communicate the AAFs to, and only to, the athlete, his/her NADO and/or the FIVB and/or National Federation, and WADA.

### **What is the difference between an “AAF” and a “confirmed doping violation”?**

The AAF is the result of a sample analysis that shows the presence or evidence of use of a prohibited substance or method in an athlete's A-sample. A confirmed doping violation occurs when the athlete does not contest the AAF or when the final appeal body establishes that there was a doping rule violation.

### **What is a “provisional suspension”?**

When an AAF is reported, the athlete concerned may be suspended by his/her NADO or FIVB until the entire result management process is completed. Regulations pertaining to provisional suspension can vary between NADOs and the FIVB.

---

**What is the process for requesting B-sample analysis?**

The athlete must direct his/her request for B-sample analysis to the organization responsible for result management. Some NADOs and the FIVB have in their rules that such request must be communicated by the athlete within a specific time frame. If the athlete has made a timely request for B-sample analysis, he/she has the right to attend the opening and analysis of the B-sample or to designate a representative to accompany him/her or attend on his/her behalf.

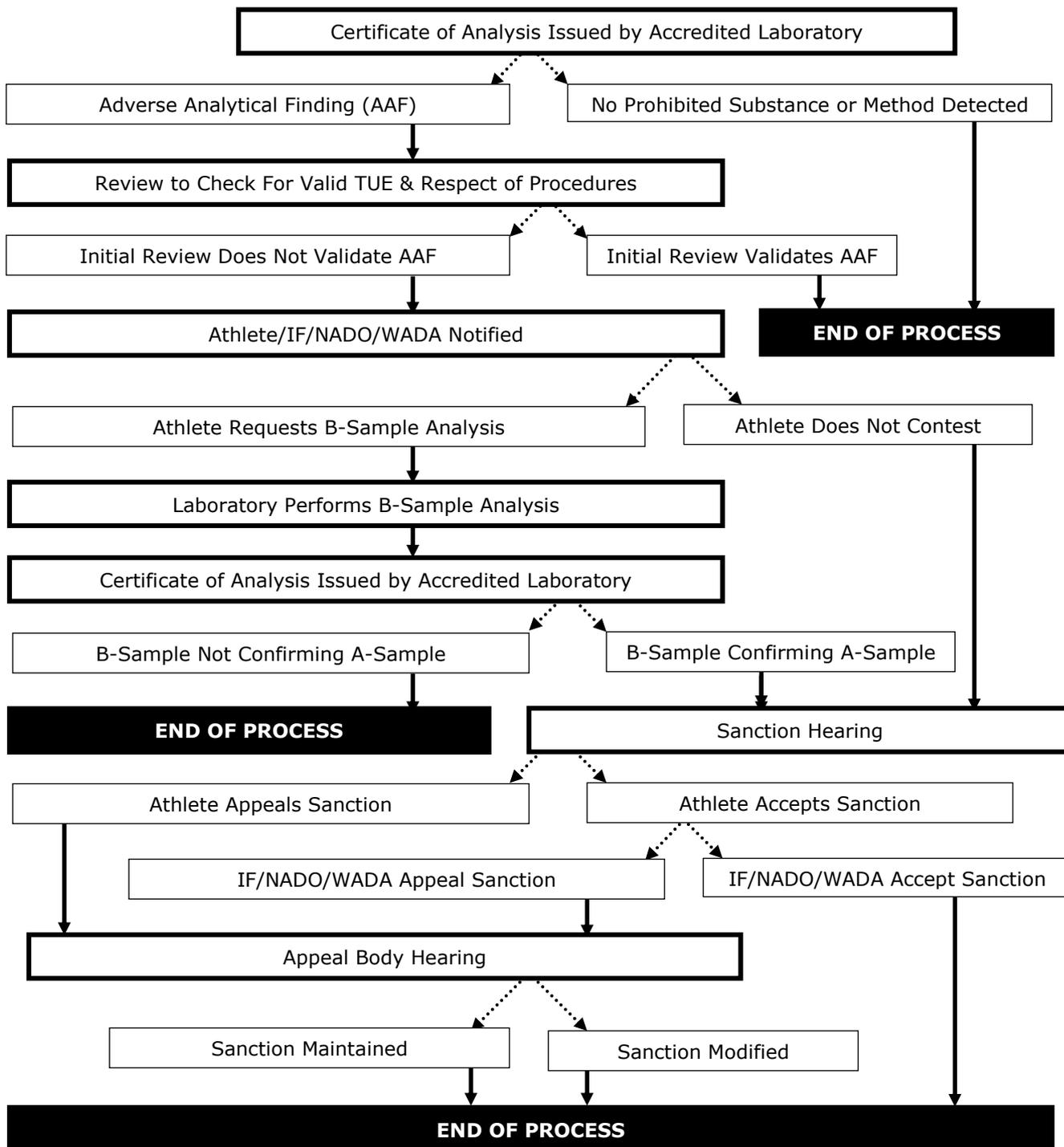
**Who can appeal a decision regarding an anti-doping rule violation?**

Subject to the applicable rules of the result management organization, the following individuals and organizations can appeal a decision regarding an anti-doping rule violation:

- the athlete or other person who is the subject of the decision being appealed
- the FIVB (event applicable)
- the relevant NADO
- WADA
- other parties involved with the case in relation to which the decision was rendered, including for instance the International Olympic Committee or International Paralympic Committee.

## Result Management at a Glance for AAF

Note: The information below is based only on a general and simplified overview of the text of the World Anti-Doping Code (the Code) in force January 1, 2009. For detailed provisions and for more information on interpretation, the reader should consult the full text of the current Code available at all times on [www.wada-ama.org](http://www.wada-ama.org).



# CAUSES FOR SANCTIONS UNDER THE WORLD ANTI-DOPING CODE

## FOR ATHLETES

### Who Can Be Sanctioned?

Under the World Anti-Doping Agency (**WADA**)'s World Anti-Doping Code (the Code) in force January 1, 2009, athletes and athlete support personnel alike may be sanctioned for anti-doping rule violations.

As an athlete, whether participating in national and international or in other sporting events, you shall respect the rules to avoid committing one of the violations described in Articles 2.1 through 2.8 of the Code.

### What may I be Sanctioned For?

- using or attempting to use a prohibited substance (listed in WADA's Prohibited List)
- using or attempting to use a prohibited method (listed in WADA's Prohibited List)
- refusing to submit to a doping control process
- tampering or attempting to tamper with any part of a doping control process
- failing to provide required whereabouts information
- possession of prohibited substances or of equipment that can be used for prohibited methods
- trafficking or administering to any athlete a prohibited substance or prohibited method
- assisting, encouraging, aiding, abetting, covering up or any other type of complicity in any of the above activities

Note: The above is based only on a general and simplified overview of Articles 2.1 through 2.8 of the Code. For detailed definitions and provisions, and for more information on interpretation, consequences and sanctions, the reader should consult the full text of the Code.

### What Else Do I Need to Know?

It is possible to be sanctioned even if:

- the use of a prohibited substance or prohibited method was unintentional
- the use of a prohibited substance or prohibited method did not improve your athletic performance
- the prohibited substance is detected in very small quantity
- the substance taken may be otherwise naturally produced by the body (when this was not the case)
- you only attempted any of the above violations

Even without a positive test, it is possible to be sanctioned as a result of:

- personal admission
- third party testimony
- any other evidence

Note: The above are general principles only. Exceptions to these general principles apply in certain specific cases. For full information on the details of these principles and their exceptions, the reader should consult the full text of the Code.

#### **POSSIBLE SANCTIONS**

From warning to ineligibility for life

Possible disqualification of results:  
at the competition during which violation occurred  
at all subsequent competitions since the violation occurred

#### **DEPENDING ON**

type of violation (4 years minimum for trafficking or administration)

circumstances of the individual case

substance found

previous offence

For an athlete:

whether the test was conducted out-of-competition or in-competition

applicable rules of the sport's international federation

circumstances of the individual case

For a team:

number of athletes on the team having violated anti-doping rules

applicable rules of the sport's international federation

Note: The above are general principles only. Exceptions to these general principles apply in certain specific cases. For full information on the details of these principles and their exceptions, the reader should consult the full text of the Code.

# HEALTH CONSEQUENCES OF DOPING

## IMPORTANT NOTE

The text below is for general information purposes only. It is intended for elite coaches who will attend or have attended elite coach anti-doping training and who are seeking a general understanding of some of the effects of certain substances and methods. Science, substances and methods, and the manner in which substances and methods are used are, however, in constant evolution. For up to date and more detailed information, the reader should consult with an expert with the appropriate scientific background and experience.

## General Comments on Health Consequences of Doping

It is very difficult to determine the exact side effects that a substance or a method or combination thereof may have on an athlete who is doping. This is partly because:

- the relevant studies cannot be conducted on individuals without a therapeutic reason to do so;
- the substances or methods used by doping athletes are usually developed for patients with well-defined disease conditions and are not intended for use by healthy people;
- volunteers in a therapeutic study are unlikely to be subjected to the same conditions of administration and dosage of a substance and/or method as those of an athlete who is doping;
- athletes who use prohibited substances often take them in significantly larger doses, and more frequently, than these substances would be prescribed for therapeutic purposes, and often use them in combination with other substances; and
- substances that are sold to athletes as performance enhancers are often manufactured illegally and may therefore contain impurities or additives, which can cause serious health problems or may even be fatal.

Because the many combinations and/or doses of performance enhancing substances used by doping athletes have never undergone official trials, for an athlete to acquiesce to doping is to accept being a guinea pig and to risk adverse effects of unknown nature and unknown gravity. The adverse effects outlined in this document are likely to be the very least of those that may be expected. The actual adverse effects and side effects of using large doses and drugs in combination with others are likely to be much more severe and serious. Using combinations of several drugs means not simply adding but compounding the risks.

Since hormones play multiple roles in the human organism's regulatory functions, the non-therapeutic use of any type of hormone risks creating an imbalance that affects several functions, and not only the function that is usually directly concerned by the given hormone.

Additional health risks are present when the use of substances or methods involves injections. Non-sterile injection techniques, including sharing possibly contaminated needles can increase the risk of transmission of infectious diseases such as hepatitis and HIV/AIDS.

Finally, use of any substance may also lead to addiction, whether psychological or physiological.

### Agents with Anti-Oestrogenic Activity

Side effects of the use of compounds with anti-oestrogenic activity include:

- |   |                  |
|---|------------------|
| ▪ hot flushes   | ▪ osteoporosis   |
| ▪ weight gain   | ▪ eye disorders  |
| ▪ fluid retention   | ▪ liver toxicity |
| ▪ cardiovascular disorders such as thrombosis (blood clots), hyperlipidemia (excess fat in the blood) |                  |

### Alcohol

Alcohol can increase self confidence, which may result in the person taking risks that he/she would not normally take. This could place both the subject and other persons around him/her at risk. Furthermore, continued alcohol consumption can lead to:

- vomiting
- slurred speech
- double vision
- memory and comprehension loss
- liver damage
- impaired judgement, co-ordination and reactions
- incontinence
- sleepiness
- shallow breathing
- sexual disorders
- addiction

### Anabolic Androgenic Steroids

The use of anabolic androgenic steroids can have serious effects on a person's health. The list of potential side effects is long and varied. Many of the reported side effects are reversible if the person stops using anabolic steroids; however, those indicated by an asterisk (\*) in the table below may be permanent depending on dosage or duration of use.

Anabolic steroids mimic naturally occurring hormones; they can therefore interfere with normal hormone function and may result in harmful side effects such as:

- increased risk of liver disease
- increased risk of cardiovascular disease
- increased risk of contracting infectious diseases such as hepatitis and HIV/AIDS
- high blood pressure
- psychological dependence

Also In Males:	Also In Females:	Also In Adolescents:
<ul style="list-style-type: none"> <li>▪ acne</li> <li>▪ shrinking of the testicles*</li> <li>▪ reduced sperm production*</li> <li>▪ impotence*</li> <li>▪ infertility</li> <li>▪ enlarged prostate gland</li> <li>▪ breast enlargement</li> <li>▪ premature baldness</li> <li>▪ potential kidney and liver dysfunction*</li> <li>▪ increased aggression and mood swings</li> <li>▪ libido disorders</li> </ul>	<ul style="list-style-type: none"> <li>▪ acne</li> <li>▪ development of male features</li> <li>▪ deepening of the voice*</li> <li>▪ excessive hair growth on the face and body*</li> <li>▪ abnormal menstrual cycles</li> <li>▪ enlarged clitoris*</li> <li>▪ increased aggression and mood swings</li> <li>▪ foetal damage</li> <li>▪ alteration of libido</li> </ul>	<ul style="list-style-type: none"> <li>▪ severe acne on the face and body</li> <li>▪ premature puberty</li> <li>▪ stunted growth as a result of premature closure of the growth plates of the bones</li> </ul>

### Artificial Oxygen Carriers

The harmful side effects of artificial oxygen carriers can be extremely serious, particularly as it is difficult to measure correct doses of these chemicals.

Side effects of perfluorocarbons include:

- a transient fever
- reduction in platelet count
- blood infection (if preparations are impure)
- potential overloading of the white blood cells
- irritability
- diarrhoea
- stroke
- embolism (blocked blood vessel).

Possible side effects of haemoglobin based oxygen carriers include:

- high blood pressure
- vasoconstriction (constriction of the blood vessels)
- kidney damage
- iron overload

### Beta Blockers

Side effects of using beta blockers include:

- lowered blood pressure and slow heart rate
- sleep disorders
- sexual dysfunction
- feelings of tiredness and decreased performance capacity in endurance activities
- spasm of the airways
- heart failure
- depression
- constriction of blood vessels in the arms and legs

### Beta2 Agonists

Possible side effects of beta2 agonists include:

- palpitations
- headaches
- nausea
- sweating
- muscle cramps
- dizziness
- mood disorders

### Blood Doping

Blood doping carries dangerous health risks including:

- jaundice
- circulatory overload
- increased risk of contracting infectious diseases such as hepatitis and HIV/AIDS
- septicaemia (blood poisoning)
- blood clots, stroke or heart failure
- metabolic shock
- allergic reactions (ranging from rash or fever to kidney damage) if wrong blood type is used

### Cannabinoids

Effects of cannabinoids may include:

- state similar to drunkenness
- loss of perception of time and space
- drowsiness and hallucinations
- reduced vigilance, balance and co-ordination
- reduced ability to perform complex tasks
- loss of concentration
- increased heart rate
- increased appetite
- mood instability – rapid changes from euphoria to depression

Long-term marijuana use may result in:

- loss of attention and motivation
- impaired memory and learning abilities
- weakening of the immune system
- respiratory diseases such as lung and throat cancer and chronic bronchitis
- psychological dependence

### Corticotrophins

The short-term side effects of ACTH use include:

- stomach irritation
- ulcers
- irritability
- infections

Other side effects may include:

- softening of the connective tissue
- high blood sugar (hyperglycaemia)
- reduced resistance to infections
- weakening of an injured area in muscles, bones, tendons or ligaments
- osteoporosis
- cataracts
- water retention

### Diuretics

Some of the side effects of the use of diuretics include:

- dizziness or even fainting
- dehydration
- muscle cramps
- drop in blood pressure
- loss of co-ordination and balance
- confusion, mental changes or moodiness
- cardiac disorders

### Erythropoietin (EPO)

There are some serious health risks associated with use of EPO such as:

- thickened blood
- increased risk of blood clots, stroke and heart attacks
- increased risk of contracting infectious diseases such as hepatitis and HIV/AIDS
- risk of developing, as an autoimmune reaction, EPO antibodies that can definitively destroy the EPO that is produced naturally by the body

### Gene Doping

Since most gene transfer technologies are still in experimental phases, the long-term effects of altering the body's genetic material are unknown, although several deaths have already occurred during experimentation. Some of the potential side effects of gene doping are:

- cancer development
- allergy
- metabolic deregulations

### Glucocorticosteroids

When administered into the blood stream, glucocorticosteroids have numerous side effects, involving different body systems. Possible side effects of large doses of glucocorticosteroids include:

- fluid retention
- increased susceptibility to infection
- osteoporosis (abnormal loss of bone tissue resulting in fragile porous bones)
- weakening of injured areas in muscle, bone, tendon or ligament
- disorders of the nervous system, such as convulsions and muscle cramps
- decrease in or cessation of growth in young people
- loss of muscle mass
- heartburn, regurgitation and gastric ulcers
- softening of connective tissue (such as tendons and ligaments)
- alteration to the walls of blood vessels, which could result in formation of blood clots
- psychiatric disorders, such as changes in mood and insomnia

### Gonadotrophins

As hCG stimulates the production of testosterone, the side effects can be similar to those experienced from anabolic steroid use. Other side effects of gonadotrophins use include:

- bone and joint pain
- hot flushes
- decrease in libido
- impotence
- allergic reactions and rash
- nausea, dizziness
- headaches
- irritability
- gastrointestinal problems
- irregular heart beats
- shortness of breath
- loss of appetite
- depression
- tiredness
- rapid increase in height

### Growth Hormone and Insulin-Like Growth Factor

There are dangerous side-effects related to the use of these substances including:

- tremors, sweat, anxiety
- worsening of cardiovascular diseases
- increasing development of tumours
- cardiomegaly (abnormal enlargement of the heart)
- accelerated osteoarthritis (chronic breakdown of cartilage in the joints)
- acromegaly in adults (distorted growth of internal organs, bones and facial features and the enlargement and thickening of fingers, toes, ears and skin)
- muscle, joint and bone pain
- hypertension
- fluid retention
- diabetes in individuals who may already be prone to the disease
- gigantism in young people (excessive growth of the skeleton)

### Insulin

The side effects of insulin use for non-medical purposes are severe and include low blood sugar (hypoglycaemia), which in turn may cause:

- shaking
- nausea
- weakness
- shortness of breath
- drowsiness
- pancreas disease
- coma
- brain damage and death

### Narcotics

The use of narcotics to reduce or eliminate pain can be dangerous as the substance is merely hiding the pain. With the false sense of security caused by narcotics, the user may ignore a potentially serious injury, and continue activity, risking further damage or causing permanent damage. Apart from the risk of further or permanent damage, narcotics can have other dangerous side effects such as:

- slowed breathing rate
- decreased heart rate
- sleepiness
- loss of balance, co-ordination and concentration
- suppression of the respiratory system and death
- euphoria
- nausea and vomiting
- constipation
- physical and psychological dependence, leading to addiction

### Stimulants

The use of certain stimulants can cause serious cardiovascular and psychological problems, as well as various other side effects, such as:

- overheating of the body
- dry mouth
- increased and irregular heart rate
- increased blood pressure
- dehydration
- increased risk of stroke, cardiac arrhythmia and heart attack
- visual disorders
- problems with co-ordination and balance
- anxiety and aggression
- insomnia
- weight loss
- tremors (involuntary trembling or shaking)

Stimulant use can also result in dependence and addiction.

# SIGNS, SYMPTOMS AND VULNERABILITY FACTORS IN DOPING

## Physical signs and symptoms of anabolic agent use

Athletes using anabolic steroids may show one or many of the following:

- Quick weight gain
- Acne
- Hair loss
- Becoming more masculine (for females) such as body hair growth and deepening of voice
- Development of abnormally sized breasts (males)
- Evidence of injections (needle marks)

## Other signs and symptoms of substance use

Athletes using or abusing certain drugs may show one or many of the following:

- Mood swings
- Aggressive behaviour
- Sudden increase in training regime
- Signs of depression
- Difficulty concentrating
- Difficulty sleeping
- Quick weight gain or loss

## Vulnerability factors

Some athletes display certain personality traits, characteristics or behaviours that put them at risk for engaging in doping activities. These predispositions include:

### **Personal characteristics, personality traits or attitudes**

- low self-esteem
- results-driven
- body image dissatisfaction / concern about weight maintenance
- unruly, disrespectful of authority
- high ego orientation
- low task orientation
- impatience with obtaining results
- propensity for cheating / bending the rules
- willingness to use prohibited methods or substances if they were legal
- willingness to use prohibited methods or substances if they could ensure success in sports
- belief that everyone else is doping
- disbelief in harmful effects of doping
- history of substance abuse in family
- admiration for achievements of known doped athletes
- thrill-seeking

### **At-risk behaviours**

- use of other substances, alcohol or tobacco
- non-discretionary use of dietary supplements
- relying on untrustworthy or misinformed sources
- frequenting fitness centres where steroids can be obtained
- setting unrealistic goals
- self-medication
- engaging in other risk-taking behaviour
- frequent reading of muscle/fitness magazines

Other athletes, who are otherwise well intentioned and not necessarily prone to doping, may find themselves in situations that make them more vulnerable to succumbing to the temptation. They include:

**Career-related circumstances:**

- external pressures to perform/ high stakes placed on performance (by sponsors, agents, family members, sports organisations, etc)
- overtraining or insufficient recovery time
- recovering from injury
- absence or weakness of deterrents (such as doping controls, severe sanctions, etc)
- type of sport (weight categories; endurance; pure speed or strength)
- lack of resources (access to competent training professionals and sports training information and technology)

**Temporary situations:**

- degradation of personal relationships (with parents, peers, etc)
- emotional instability caused by life transitions (puberty, graduation to higher education levels, dropping out of school, geographical moves, severed relationships, death of significant others, etc)
- upcoming career-determining events (team selection, major competition, scouting or recruitment activities, etc)
- performance set back or plateau

Whether at-risk from personal characteristics or from situational factors, athletes showing some vulnerability factors warrant special attention. Reinforcing anti-doping messages and offering them psychological support and a personalised, scientifically sound training regime will likely prevent them from resorting to prohibited practices.

## References

Pesce, C; Donati, A; Magri, L; Cereatti, L.; Giampietro, M; Monacelli, C; Zelli, A (2004). Behavioral and Psychological Factors Related to the Use of Nutritional Ergogenic Aids among Preadolescents, *Pediatric Exercise Science* (Champaign, Ill.), Aug 2004: 16 (3). p. 231-249.

Donovan, R.J.; Egger, G.; Kapernick, V.; Mendoza, J. (2002). A Conceptual Framework for Achieving Performance Enhancing Drug Compliance in Sport. *Sports Medicine* (Auckland, N.Z.), 2002: 32 (4). p. 269-284.

Bahrke, M.S.; Yesalis, C.E.; Kopstein, A.N.; Stephens, J.A. (2000). Risk Factors Associated with Anabolic-Androgenic Steroid Use among Adolescents. *Sports Medicine* (Auckland, N.Z.), June 2000: 29 (6). p. 397-405.

Corbin, C.B.; Feyrer, Melk, S.A.; Phelps, C.; Lewis, L. (1994). Anabolic Steroids: A Study of High School Athletes. *Pediatric Exercise Science* (Champaign, Ill.), May 1994: 6 (2). p. 149-158.

CCES (1992). *The Body Image Study: A Qualitative Study of the Use of Performance-Enhancing Drugs by Non-Athletes*, CCES (Ottawa, Canada).

Heyman, S.R. (1990). Psychological Factors in the Use of Recreational Drugs and Alcohol. In Tricker, R. (ed.), *Athletes at Risk: Drugs and Sport*, Dubuque, Iowa, W.C. Brown, c1990, p.73-92.

Marcello, R.J.; Danish, S.J.; Stolberg, A.L. (1989). An Evaluation of Strategies Developed to Prevent Substance Abuse among Student-Athletes. *Sport Psychologist* (Champaign, Ill.), Sept 1989: 3 (3). p. 196-211.

Prétagut, S.; Venisse, J.-L.; Potiron, M. (undated, retrieved from Internet on 5 June 2006). Chapitre dopage et conduites dopantes. In Thibaut, F.; Lejoyeux, M et al. [Addictions et conduites dopantes](#). Examen Classant National : Question(s) 45 Module(s) 3. Collège national universitaire de psychiatrie.

## Accreditation of Team Medical Doctor or Team Physical Therapist

Possession of FIVB accreditation as an official Team Medical Doctor allows the team doctor to take a place on the team bench as an official during FIVB sanctioned Volleyball matches. For Beach Volleyball such an accreditation allows the individual access to the field of play to provide medical assistance during a medical time-out.

Accreditation as a Team Medical Doctor will be granted by the FIVB Medical Commission (or its President, acting on behalf of the Commission) on presentation of the following documents:

- diploma of university grade
- letter of support from the relevant National Olympic Committee or National Volleyball Federation
- confirmation of license (or certificate) to practice medicine in country of origin as per the national health/medical authority of that country
- FIVB Form F-1 (please refer to the FIVB website at <http://www.fivb.org/EN/Volleyball/Forms/Documents/F-1%20Confidential%20Data.pdf>).

## Health Certificates

The Health Certificate of all athletes should be forwarded to the event organiser and representatives from the countries participating in the competition at least six months prior to the competition.

The M-3 form (please refer to [http://www.fivb.org/EN/Volleyball/Forms/Medical/FIVB\\_VB\\_M-3.pdf](http://www.fivb.org/EN/Volleyball/Forms/Medical/FIVB_VB_M-3.pdf)) must include a declaration of abstinence from the restricted substances listed in the FIVB Anti-doping Regulations and a statement regarding the player's health. The M-3 form should be signed by a medical doctor trained in sports medicine and by the President of the athlete's National Federation.

All players participating in official FIVB sanctioned Volleyball competitions must present to the respective Control Committee Health Certificates issued not earlier than two months prior to the competitions. For Beach Volleyball the M-3 form is valid for one year. The Health Certificates must be presented during the Preliminary Inquiry preceding the competition.

# NUTRITION OF PLAYERS DURING FIVB COMPETITIONS

## Introduction

The Nutritional Goal is to provide athletes with adequate amounts of food and fluids to maintain energy levels and health. The recommended amount and type of food will vary depending on what stage of competition the athlete is and when they have time to eat. These stages include pre-competition, during competition and post-competition (recovery). In some events, athletes from different teams may be in different stages at the same time, so it may be necessary to have food choices appropriate to each of the stages available on the same buffet table.

In most circumstances, a buffet table with several food choices is the best option for supplying all of the competitors with optimal nutrition. There should be at least 2 options from each category of the necessary food choices available for athletes at each meal. It is also important to make every effort to supply food choices that athletes enjoy eating. They will only be able to replenish their nutritional stores if they actually consume the food and fluids. It may be necessary to consider food options that appeal to athletes from different geographic regions, ethnicities and religious preferences, in preparing buffet menu options.

Male athletes may be expected to consume between 4,500 and 5,200 calories daily during competition; while women may be expected to consume 3700 to 4200 calories daily. Foods should be consumed in the following distribution to satisfy metabolic demands:

Carbohydrates:	60-65%
Fats:	18-20%
Proteins:	15-18%

Calories should be consumed throughout the day, divided into four or more meals daily in accordance with the schedule of the matches. Ample time in the dining room should be allowed to meet the needs of the competing athletes. Avoid serving the same dishes repeatedly. Alternate types of meat (beef, pork, poultry and fish) as well as menu items from other food groups should be used.

The buffet menu should be available to the FIVB medical delegate at the time of his or her initial inspection, prior to the start of the competition.

The FIVB medical delegate has the right and the obligation to assess the adequacy and quality of nutrition provided to athletes at FIVB sanctioned events.

## Essential Components of Nutrition for Competition

### Fluids

Adequate fluid intake is important to compensate for water lost from the body during exercise. Greater amounts may be needed during prolonged competition, or competition in hot climates. Water, fruit juices and other non-caffeinated beverages are the best choices for the buffet line to quench thirst and prevent dehydration. An unlimited supply of water and a fluid replacement drink containing electrolytes and 6-8% carbohydrate and electrolytes should be available to all athletes at all times during training and competition. Allow for athletes to drink small quantities

frequently. For Beach Volleyball competition, provide enough fluid for each athlete to be able to consume 4 litres of water or fluid replacement drinks each day, so that athletes may be free to choose one or the other. This will be enough fluid to compensate for losses on hot humid days when athletes may have multiple matches. For indoor volleyball, provide 2-3 litres per competing athlete per day.

## MACRONUTRIENTS

### Carbohydrate, Fat & Protein

The human body can metabolize energy from three dietary sources: carbohydrate, fat and protein. Carbohydrate is the primary source of energy for all athletes. Fat is an important energy source for events that last several days. Protein is usually not used for energy, unless energy intake is less than energy expenditure. Yet, adequate amounts of dietary protein are needed for muscle building and repair after physically demanding activity.

**CARBOHYDRATE:** Most athletes benefit from consuming a high carbohydrate diet. Carbohydrate-rich foods are characterized by the *Glycemic Index* (GI), which is an indicator of how rapidly blood sugar levels rise in response to the type of carbohydrate ingested. When consumed, high GI foods increase blood sugar levels rapidly, whereas medium and low GI foods take longer to digest and thus cause more gradual increases in blood sugar. Each type of carbohydrate has a place in the athlete's diet.

**High GI Foods** such as sugary cereals, hard candies, juices, fruit drinks, non-diet soda, sport drinks, white bread and some nutrition bars largely contain primarily simple carbohydrates or sugars. Some of these foods are sources of quick energy but provide few or none of the essential vitamins and minerals. High GI foods, particularly sport drinks, are beneficial during intense training and competition, as well as during recovery.

**Medium & Low GI Foods** such as brown rice and *whole grain* breads, cereals and pasta are sources of complex carbohydrates that provide energy as well as essential nutrients. Legumes (peas and lentils) and beans are rich in both carbohydrate and protein. Vegetables and fruits contain mixtures of simple and complex carbohydrates and are loaded with essential nutrients. It is important to include a variety of these foods in most, if not all, meals.

**PROTEIN:** Athletes need about 250 grams of protein a day which can be obtained by eating 5-6 servings of protein-rich foods such as 85 grams of meat, 250 millilitres of cottage cheese or a glass of milk. The majority of daily protein calories should come from foods that provide high quality protein containing all of the essential amino acids.

**Sources of high quality protein:** lean meats and poultry, fish (fresh and canned), egg whites, dairy products (milk, cheese, cottage cheese, yogurt) and tofu.

**Plant sources (lower quality):** mushrooms, legumes, beans, pasta, whole grains and nuts.

**FAT:** Although fat is a major source of energy, excessive intakes can cause unwanted weight gain and adversely affect performance. Fats should be eaten in moderation. Fats differ in their nutritional and health values.

**Limit** saturated fat found in butter, rich creamy desserts, some salad dressings, pastry, animal products (bacon, fatty meats) and deep-fried foods.

**Supply in moderation** mono and poly-unsaturated fats that are found in fatty fish, such as salmon and plant-based foods, such as peanut butter, nuts, seeds, and plant oils.

## Examples of suggested menu items:

(These guidelines represent minimum standards that must be offered to athletes at all events. There will be some leeway depending on the stage of competition for athletes of different teams).

### BREAKFAST

#### Pre competition:

Carbohydrates:	4 servings per athlete, 30 grams per serving. Medium/Low GI: whole grain bread, toast, muffins, hot and cold cereals, pancakes, French toast, dumplings, fresh fruit and orange juice.
Fats (small amounts):	1-2 servings per athlete, 30grams per serving. Peanut butter, margarine, cheese, bacon and sausage.
Protein:	2-3 servings per athlete, 30-50 grams per serving or 120 millilitres of fluids per serving. Eggs, low fat milk, yogurt or cottage cheese, lean deli/lunchmeat meat (turkey, ham).
Fluids:	700-1000 millilitres per athlete within three hours prior to competition. Fruit juices, milk, coffee, tea, hot chocolate.

#### During competition:

Carbohydrates/fluids:	4 litres per athlete per day (Beach Volleyball) 2-3 litres per athlete per day (Indoor Volleyball). 1-2 energy bars/gels per athlete per match. High/Medium GI: water and carbohydrate containing beverages such as Gatorade and Powerade, energy bars, energy gels, breads and bagels.
-----------------------	--

#### Recovery:

##### Within first 2 hours of competition:

High GI carbohydrates:	4 servings per athlete, 30 grams per serving. Sugary cereals and beverages, breads, pasties, white rice, potato.
Protein:	1 serving per athlete, 30 grams per serving. Low fat dairy, lean lunch/deli meat, protein bars.
Fluids:	700-1000 millilitres per athlete within three hour prior to competition. Fruit juices, fluid replacement drinks, water.

#### Rest of the day:

Carbohydrates:	4-6 servings per athlete 30 grams per serving. Low GI: rice, pasta, dumplings, pancakes, beans and lentils, vegetables (fresh, steamed, grilled or stir-fried), berries, fruit, soup, sandwiches.
Fats:	1-2 servings per athlete, 30 grams per serving. Nuts, vegetable oil (fat in meats and dairy), butter/margarine, salad dressing.
Protein:	2 servings per athlete: 30 grams per serving or 120 millilitres of fluid.

Any lean meat, poultry or fish prepared using a low-fat method of cooking (grilled, broiled, boiled or roasted), low-fat or fat-free dairy, tofu.

Fluids: 700-1000 millilitres per athlete.  
Fruit juices, milk, water, coffee, tea.

## LUNCH and DINNER

### Pre competition:

Carbohydrates: 4 servings per athlete per meal, 30 grams per serving  
Medium/Low GI: breads, dumplings, pasta, rice.

Fats: Fat in meats, margarine/butter.

Protein: 1 serving per athlete per meal, 30 grams per serving.  
Any lean meat, poultry or fish prepared using a low-fat method of cooking (grilled, broiled, boiled or roasted), low fat dairy.

Fluids: 700-1000 millilitres per athlete within three hour prior to competition.  
Fruit juices, water, milk, coffee, tea.

### During competition:

Carbohydrates/fluids: 4 litres per athlete per day (Beach Volleyball) 2-3 litres per athlete per day (Indoor Volleyball). 1-2 energy bars/gels per athlete per match.  
High/Medium GI: water and carbohydrate containing beverages such as Gatorade and Powerade, energy bars, energy gels, breads, bagels.

### Recovery:

#### Within first 2 hours of competition:

High GI carbohydrates: 3 servings per athlete per meal, 30 grams per serving.  
Potatoes, sugary pastries and beverages, breads, desserts.

Protein: 1 serving per athlete per meal, 30 grams per serving.  
Low fat milk, lean lunch/deli meat, protein bars

Fluids: 700-1000 millilitres per athlete.  
Fruit juices, fluid replacement drinks, water.

### Rest of the day:

Carbohydrates: 3-4 servings per athlete per meal, 30 grams per serving.  
Low GI: brown and white rice, whole wheat pasta, dumplings, beans and lentils, vegetables (fresh, steamed, grilled or stir-fried), berries, fruits, sandwiches, salad, tomato juice.  
High GI: desserts.

Fats: 1-2 serving per athlete per meal, grams per serving.  
Nuts, vegetable oil (fat in meats and dairy), butter/margarine, salad dressing, desserts.

Protein: 2 servings per athlete per meal, 30 grams per serving.  
Any lean meat, poultry or fish prepared using a low-fat method of cooking (grilled, broiled, boiled, or roasted), low-fat or fat-free dairy, tofu.

Fluids: 700-1000 millilitres per athlete.  
Fruit juices, milk, water, coffee, tea.

## CHECKLIST FOR COACHES

### FOR ALL COACHES:

- Clearly state your expectation that no one on your team will use prohibited substances or methods; have everyone sign a pledge.
- Ensure that you and everyone on your staff set a good example.
- Enforce your team rules objectively and consistently.
- Let your athletes know that they can talk to you about their fears and concerns regarding doping.
- Encourage athletes to set personal goals that are realistic and assist them in making gradual progress toward those goals.
- Help your athletes to develop appropriate decision-making skills.
- Be sensitive to changes in mood, attitude or behaviour among your athletes.
- Never ignore the signs that one or more of your athletes may be doping or considering it.
- Never avoid making tough decisions.
- Give a presentation, invite a guest speaker or lead group discussions on doping issues.
- Take advantage of increased media attention on a doping issue to express and reinforce your commitment to doping-free sport.

### FOR COACHES OF ATHLETES IN TESTING POOL:

- See checklist *For All Coaches* above.
- Remind your athletes on a regular basis that they are responsible for ensuring that nothing that they do constitutes a prohibited method and that nothing they use or ingest contains a prohibited substance.
- Find out the schedule for submitting whereabouts and remind your athletes a few days before, every time.
- Provide your athletes with all available information on upcoming team activities (dates, locations, etc) long enough ahead of time for them to fulfil their responsibility with respect to submitting whereabouts information.
- Inform your athletes, who are not currently in a testing pool, of upcoming competitions where there may be testing so that they have sufficient time to apply for therapeutic use exemptions if necessary.
- In October every year, obtain the new Prohibited List issued by the World Anti-Doping Agency, which will take effect on 1 January of the next year and remind your athletes to consult it.
- If you take a medication containing a prohibited substance for a personal health condition, carry your medication in its original packaging accompanied by a copy of your prescription.

## ANTI-DOPING MONITORING FORM

As a coach, you have a responsibility to guide your athletes throughout the course of a clean and successful sporting career. One way of meeting this responsibility can be to complete this form with each of your athletes individually to assess their level of knowledge in relation to doping prevention and to identify any areas where your athletes may need further information.

Ask your athletes the following questions, record their answers and note any information that may be useful for you in planning your doping prevention strategy.

<b>Applicable Anti-Doping Regulations</b>	<b>Yes/No</b>	<b>Comments</b>
Do you know what anti-doping regulations are applicable to you?		
Do you know that there is a Prohibited List?		
Do you know where to find the Prohibited List?		
Do you know when the Prohibited List is updated?		
<b>Strict Liability and Consequences to Athletes</b>	<b>Yes/No</b>	<b>Comments</b>
Do you understand what 'strict liability' means?		
Are you aware of the possible consequences of using Prohibited Substances and Methods in your sport?		
<b>Medications and Therapeutic Use Exemptions</b>	<b>Yes/No</b>	<b>Comments</b>
Do you take any medication which may contain a Prohibited Substance?		
Do you know what a Therapeutic Use Exemption is?		
Do you know how to apply for a Therapeutic Use Exemption?		
<b>Doping Control Programme</b>	<b>Yes/No</b>	<b>Comments</b>
Do you know the doping control procedures?		
Are you aware of your rights and responsibilities throughout the doping control process?		
Do you know to which Registered Testing Pool you belong?		
If you belong to a Registered Testing Pool, have you been asked to provide whereabouts information?		
Do you know the process for dealing with a reported Adverse Analytical Finding?		
<b>Supplements</b>	<b>Yes/No</b>	<b>Comments</b>
Do you know that some dietary supplements may contain Prohibited Substances due to poor labelling or poor manufacturing?		
<b>Resources</b>	<b>Yes/No</b>	<b>Comments</b>
Do you know where to find up-to-date anti-doping resources?		
Do you know who you can contact to get answers to any anti-doping questions?		

**NAME OF ATHLETE:** \_\_\_\_\_

**DATE OF COMPLETION:** \_\_\_\_\_

## CHECKLIST FOR ATHLETES

### FOR ALL ATHLETES:

- Focus on getting a proper diet and plenty of rest and on staying well hydrated.
- Clearly express your commitment to doping-free sport and support your friends' decisions to do so as well.
- In October of every year, consult the new Prohibited List issued by the World Anti-Doping Agency, which will take effect on 1 January the next year. If you are taking medications for a chronic health condition, consult a health care specialist to ensure that this medication has not been added to the new Prohibited List.
- Know where to find the Prohibited List at all times (if you can, carry it with you every day).
- Constantly remind your physician and pharmacist that you are an athlete and are subject to anti-doping rules. They can ensure that the medication prescribed or recommended does not contain a prohibited substance (see the document *Anti-Doping Guidance - Checking your Medication* for more detail).
- Talk to your coach about any frustration that you may have with your sports results.
- Talk to a person you trust if you suspect that doping activities are taking place in your sports environment.
- Subscribe to newsletters from your national anti-doping organization or sports federation or regularly log on to their websites to stay informed of decisions that may affect you.

### CHECKLIST FOR ATHLETES IN A TESTING POOL:

- See checklist *For All Athletes* above.
- Find out about the process for submitting your whereabouts information (schedules and deadlines, where to submit, what information is required).
- Obtain the form, fax number, or website address necessary to submit your whereabouts information.
- Include in your agenda a reminder to yourself to submit your whereabouts information on time.
- Remember to submit any last minute changes to your whereabouts information whenever they occur!
- Do not (unless your condition is life threatening) begin a treatment that involves a prohibited substance or method unless you have been granted a therapeutic use exemption.

## Anti-Doping Guidance

# Checking Your Medication

The guidance below will help an athlete or support personnel when checking the status of a substance or medication against the World Anti-Doping Agency's Prohibited List\*.

**INGREDIENTS:** Ask your doctor or a pharmacist to check that all the ingredients of your medication are permitted for use in sport. Checking only the brand name of the product can lead to error: in different countries, or even at different times in your own country, a product known under one same brand-name can contain different substances, one or several of which may be prohibited.

**CORRECT SPELLING:** Do not guess the spelling of the name of a product or its ingredients, as one substance might not be prohibited, while another, with a name that is similar, but not exactly the same, might.

**ROUTE OF ADMINISTRATION:** The status of a substance may vary depending on how it is used (e.g., orally, by injection etc).

**SUBSTANCES PROHIBITED IN PARTICULAR SPORTS:** Certain substances are prohibited only in particular sports. Ensure that you consult the Prohibited List to see if your sport prohibits substances that are specific to your sport.

**UP TO DATE INFORMATION:** Check the status of each ingredient of any medication that you buy, even if you have bought that medication before, as previously acceptable ingredients may have changed in status or new, prohibited ingredients may have been added.

**CHANGES TO THE PROHIBITED LIST:** Check any existing medication against the current Prohibited List and plan ahead to take any changes into account (an updated List comes into effect on January 1<sup>st</sup> each year but is first published three months earlier).

**PERMITTED ALTERNATIVES:** When checking your medication and you find it includes a prohibited substance, you are encouraged to try and find a suitable permitted alternative. Most common ailments can be treated with products that do not contain a prohibited substance!

**THERAPEUTIC USE EXEMPTIONS:** If a permitted alternative is not available, you may need to apply for a Therapeutic Use Exemption (TUE) by submitting a TUE application to your NADO or the FIVB.

**IF ALL ELSE FAILS:** Remember, if you can't find information about a substance or medication, DO NOT assume it is safe to use.

\* **The Prohibited List** outlines which substances and methods are prohibited in sport. A new version of the Prohibited List comes into effect every year on January 1<sup>st</sup>, however, it may be changed from time to time so it is important that you check for changes on a regular basis. The new List is always published three months before it becomes effective.

## Anti-Doping Guidance

# Preparing for a Competition

If you are preparing to compete at an event, you have some important anti-doping responsibilities that you can plan for, to ensure that nothing anti-doping-related interrupts your preparations. These include:

- KNOWLEDGE:** Familiarise yourself with the doping control procedures. Be aware of your rights and responsibilities throughout the doping control procedures.
- CHOOSE A REPRESENTATIVE:** Before a competition, ask an appropriate representative (coach or team manager) to be the person who will accompany you to the Doping Control Station in the event that you are selected for testing. Should that person not be available when you are actually notified, you can still take another representative with you.
- GETTING HOME AFTER AN EVENT:** Make alternate travel arrangements with your coach, team manager, parent or fellow athletes in the event that you are selected for testing after the competition. Remember that the doping control process may take longer than you expect.
- THERAPEUTIC USE EXEMPTION:** Make certain that you have applied for a Therapeutic Use Exemption (TUE), where needed, at least 21 days prior to a competition AND keep your TUE certificate in your sports bag at all times.
- PROHIBITED SUBSTANCES IN-COMPETITION\*:** Check the Prohibited List for substances prohibited 'In-Competition'. For some substances, the 'In-Competition' status is different from the 'Out-of-Competition' status.
- EVENT- OR SPORT-SPECIFIC RULES\*:** Check the anti-doping rules of your sport or for the event in which you are participating. For some events, the 'In-Competition' rule actually starts before competition and the therapeutic use exemption rules may also vary.
- SEALED FOOD AND DRINKS:** Make sure you take enough fluids and food in sealed containers to an event so you don't need to share. Always keep your food and drink supervised to ensure that no-one tampers with them.

\* **'In-competition'** rules may vary from sport to sport and from event to event. This may affect the status of a substance. For example, the 'in-competition' rule for the Olympic Games comes into effect 2-weeks prior to the start date of competition. This means that some substances, prohibited In-Competition only, such as marijuana and stimulants, may be prohibited even if an athlete has not started competing.

## Anti-Doping Guidance

# Travelling Abroad – Be Safe!

If you are travelling abroad to train, compete or even take a break, don't take a holiday from checking your medication! The anti-doping guidance below will help you prepare before you board the plane.

### Medication Advice

- TAKE PERMITTED MEDICATION:** Check the status of all substances and products that you intend to take abroad before you leave. Plan to take enough medication with you to allow for the ongoing treatment of an illness or injury.
- CUSTOMS:** Make sure that any medication you intend to take with you can be taken through customs into the country to which you are travelling. Carry all medications in their original packaging.
- THERAPEUTIC USE EXEMPTION (TUE):** If you need a TUE, you should make sure you obtain your TUE certificate before you travel.
- TAKE YOUR TUE CERTIFICATE:** Carry a doctor's prescription/letter and your TUE certificate with you at all times.
- BUYING MEDICATION ABROAD\*:** Always check the label carefully, as a product may look and sound familiar, but the ingredients may be different. Be sure to read the guidance on 'Checking Medication' as the same guidance applies when travelling abroad.

### Testing and Athlete Whereabouts Guidance

- ATHLETE WHEREABOUTS:** If you are part of a testing pool, don't forget to notify the relevant organisation of any changes to your whereabouts location while you are abroad.
- TESTING ABROAD:** Familiarise yourself with the testing procedures and know your rights and responsibilities throughout the doping control process
- KNOW WHO IS TESTING YOU:** You should take note of the organisation that is testing you. Having this information will enable you to know from whom to expect your results.
- COMPETING ABROAD:** If you are travelling abroad for a competition, be sure to read the guidance on 'Preparing for a Competition'.

\* **Medications sold in different countries** under the same brand name may contain different ingredients. If you know that a particular product sold in your country is permitted under anti-doping regulations, this does not mean that it is free of prohibited substances when purchased abroad.

## FAIR PLAY REFERENCES

### In English:

[www.fifa.com/en/fairplay/fairplay](http://www.fifa.com/en/fairplay/fairplay)

FIFA (Fédération internationale de football association)

[www.usadakids.org](http://www.usadakids.org)

United States Anti-Doping Agency (USA)

[www.100percentme.co.uk](http://www.100percentme.co.uk)

UK Sport

[www.truesportpur.ca/index.php/language/en/resourcecentre/2](http://www.truesportpur.ca/index.php/language/en/resourcecentre/2)

True Sport (Canada)

[www.aforbw.org](http://www.aforbw.org)

Athletes for a Better World

[www.charactercounts.org/sports/sports.htm](http://www.charactercounts.org/sports/sports.htm)

CHARACTER COUNTS!

[www.healthycompetition.org](http://www.healthycompetition.org)

Blue Cross and Blue Shield Foundation

[www.drugabuse.gov/NIDAHome.html](http://www.drugabuse.gov/NIDAHome.html)

National Institute of Drug Abuse (USA)

### En français:

[www.esprit-sportif.org](http://www.esprit-sportif.org)

[www.leolagrange-sport.org](http://www.leolagrange-sport.org)

Union Nationale Sportive Léo Lagrange (France)

[www.vivre-sport.com](http://www.vivre-sport.com)

Association Vivre Sport (France)

<http://terredefoot.free.fr/dopage.htm>

Association Terre de Foot

[www.truesportpur.ca/index.php/resourcecentre/2](http://www.truesportpur.ca/index.php/resourcecentre/2)

Sport Pur (Canada)

[www.fifa.com/fr/fairplay/fairplay](http://www.fifa.com/fr/fairplay/fairplay)

FIFA (Fédération internationale de football association)

### En español:

<http://deportelimpio.fundacionmiguelindurain.com/>

Fundación Miguel Indurain

[www.tecnociencia.es/especiales/dopaje/que.htm](http://www.tecnociencia.es/especiales/dopaje/que.htm)

Tecnociencia (Spain)

[www.fifa.com/es/fairplay/fairplay](http://www.fifa.com/es/fairplay/fairplay)

FIFA (Fédération internationale de football association)

[www.jccm.es/educacion/educar/num\\_31/10.html](http://www.jccm.es/educacion/educar/num_31/10.html)

Consejería de Educación y Ciencia (Spain)

[www.unicef.es/contenidos/266/5571\\_SPORT\\_SP.pdf](http://www.unicef.es/contenidos/266/5571_SPORT_SP.pdf)

UNICEF

[www.jccm.es/educacion/deportes/juego\\_limpio/index.html](http://www.jccm.es/educacion/deportes/juego_limpio/index.html)

Fundación de Cultura y Deporte de Castilla-La Mancha (Spain)

[www.cfnavarra.es/indj/deporte/pdf-word/04tranqui1.pdf](http://www.cfnavarra.es/indj/deporte/pdf-word/04tranqui1.pdf)

Instituto Navarro de Deporte y Juventud (Spain)

[www.drugabuse.gov/NIDAEspañol.html](http://www.drugabuse.gov/NIDAEspañol.html)

National Institute on Drug Abuse (United States)

[www.cerodopaje.com](http://www.cerodopaje.com)

Consejo Superior de Deportes (Spain)

## In Deutsch:

[www.fairplay-fairlife.de](http://www.fairplay-fairlife.de)

Fair Play - Fair Life (Germany)

[www.fifa.com/de/fairplay/fairplay](http://www.fifa.com/de/fairplay/fairplay)

FIFA (Fédération internationale de football association)

## COACH PLEDGE to Doping-Free Sport

The following text suggests a way for you, as a coach, to make a statement about your commitment to doping-free sport. You are invited to take a few moments to reflect on your role as a coach towards protecting the integrity of your sport. Afterwards, you may decide to sign this pledge as is, add elements in your own words, or even write your own pledge. You can also decide to keep your pledge as a commitment to yourself, or use it to make a public statement by sharing it with your athletes and fellow coaches.

Because **I believe in doping-free sport** and fair competition, I hereby declare that:

- I will coach within the spirit and letter of the rules of my sport.
- I will provide my athletes with the support needed to train and compete doping-free.
- I will not cover up or lie for others if they break anti-doping rules.
- I will display honourable behaviour to set a positive example for my athletes and for younger coaches who may follow in my footsteps.
- If I fail to respect this pledge, I will take responsibility for my actions.

Describe other ways in which you could show your commitment to doping-free sport:

Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

## ATHLETE PLEDGE to Doping-Free Sport

The following text suggests a way for you, as an athlete, to make a statement about your commitment to doping-free sport. You are invited to take a few moments to reflect on your role as an athlete towards protecting the integrity of your sport. Afterwards, you may decide to sign this pledge as is, add elements in your own words, or even write your own pledge. You can also decide to keep your pledge as a commitment to yourself, or use it to make a public statement by sharing it with your coaches and fellow athletes.

Because **I believe in doping-free sport** and fair competition, I hereby declare that:

- I will train and compete within the spirit and letter of the rules of my sport.
- I will compete doping-free.
- I will not cover up or lie for others if they break anti-doping rules.
- I will display honourable behaviour to set a positive example for younger athletes who may follow in my footsteps.
- If I fail to respect this pledge, I will take responsibility for my actions.

Describe other ways in which you could show your commitment to doping-free sport:

Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

***Get involved.  
Keep the ball flying.***