

## **The Lute against Doping In Sport**

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**Abstract:** *The challenges of our new air pushes the human to always exceed the different barriers by various means, whether legal or illegal, and therefore; the challenges faced in sports and even some team's regular methodology adopted in the use of doping products, which pushed the global and national sports organizations, to adopt a preventive policy against athletes who use performance-enhancing drugs, both during and outside competitions, and this; informing athletes, first on the dangers of doping, , by enacting laws relating to doping and finally, applying strict disciplinary measures to try to curb the extent of this phenomenon, which took on such a scale that integrity and ethics in sport was hit hard.*

**Keywords:** *High Performance Sport, Doping, Control, Physical Education and Sports, Prevention.*

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### **I. Introduction**

Sport is a recognized factor in the health protection: in developed countries, we live longer and better, if we practice an adapted physical activity and well conducted. In some diseases, physical activity is even considered therapeutic in itself, but there are cases where the sport, can be a health risk factor, the lack of initial screening against indications, quality of deficient care, research of performance at any price or diversion of medical function in favor of an aid to performance, are significant examples (Laure P 1995, 224). Doping is contrary to the ethics of sport, health hazard. The law considers the user of this method as a fraud and a cheat if a product is found at the Anti- Doping control.

#### **1. Definition of doping:**

Doping is the practice, to absorb substances, or use of medical procedures in order to artificially increase their physical or mental abilities (hematocrit in the blood, heart beat, confidence, etc.).

It is the use, often illicit substances, or particular processes in order to improve performance, or stamina (Jean Peter M, 2004, 1192). The notion of human doping is often mentioned about the sport. Because the use of drugs undermines the sporting ethic and endangers the health or life of the athlete who uses it, many national and international bodies (sports federations) have taken preventive measures, including writing lists of prohibited products which vary from one country to another and from one federation to another.

The IOC International Olympic Committee, has proposed an addition to harmonizing regulations and categories of doping, doping code that came into force January 1, 2000 and defines doping as contrary to the principles of the Olympics and banned accordingly practice (2007 Code).

### **II. Historical**

From time immemorial, man has sought to improve its performance by artificial means .In fact, the first doping concepts date back to antiquity.

From the sixth century BC, Greek athletes already ingest various meats as the sport they performed:

- Jumpers ate goat meat
- Boxers and launchers, bull meat
- The wrestlers for their preference of fat pork

Mead had the favor of the Greeks and Romans were using the tonic properties of sage leaves.

Black African primitive peoples share with the Amerindian populations that irrepressible and ongoing need for dopants, ie drugs able to increase their physical and mental energy, even sexual potential of individuals who consume them. Thus, the South American natives chew coca leaves, those of African kola nut.

**The Chinese** have known for more than 3,000 years the stimulating properties of ginseng  
Doping is a very old practice. The first modern confirmed case goes back to 1865. Considering that doping has become more professional and widespread in some sports in the late 1950s and early 1960s with the arrival of sympathomimetics, products with hormonal activity such as growth hormone, or steroids. Following the death of Knud Enemark Jensen at the Olympics in Rome in 1960, the international cycling federation effected informal controls on riders selected the Tokyo Games in 1964. It was not until 1989 that the IOC should

establish random checks. However, this test could not detect the case of doping the GH (growth hormone) or the masking products, such as diuretics.

In 1998, a scandal (Festina affair) splashes the Tour de France. The healer Festina cycling team Willy Voet, which belongs Richard Virenque was arrested at the border in possession of 500 doses of doping substances and drugs including 235 vials of EPO (erythropoietin). Bruno Roussel, sports director of the team, admits the existence of a "concerted management of supply-enhancing drugs runners". The public discovers the extent of these doping practices. Several doping cases including follow in Italy with the Blitz 2001 Giro, the trial of Juventus, the trial of Dr. Michele Ferrari (medical advisor and friend of Lance Armstrong) or the case of Calcio widows and the United States with the Balco case (see Tim Montgomery).

It is now almost proved (2005) Lance Armstrong was under EPO in 1999 (retrospective study of urine) (Brissonneau C, 2008, 304). Today, the longitudinal monitoring of athletes associated with unannounced inspections, seems to be the most effective weapon in the fight against doping and masking practices, since not only can detect doping products, but also abnormal change physiology of the athlete.

### **III. The Doping**

We speak of "doping conduct" when a person consumes a product to face a real or perceived difficulty (sports competition, exam, job interview, public speaking, professional or social situations difficult) or to improve its performance (sports, bodybuilding) (C Rizet, 1997, 149).

It is possible to be issued by a medical board a TUE authorization to use therapeutic purposes, to be treated with a prohibited substance, if there is no other possible treatment eg insulin in diabetics. For some drugs commonly used in treatment, there is sometimes an applicable abbreviated therapeutic purposes AUTA easier to obtain, eg asthma (Health and activities, 1998, 14).

#### **3.1. During and between events:**

**3.1.1.** Anabolic All anabolic hormones like testosterone and DHEA stands for dehydroepiandrosterone, steroid hormone produced by the adrenal glands.

#### **3.1.2. Hormones and related substances:**

- ❖ Erythropoietin EPO
- ❖ GH growth hormone
- ❖ Insulins
- ❖ Corticotrophins
- ❖ Gonadotropins and related in male sports

#### **3.1.3. Beta-2 agonist drugs used in asthma:**

- ❖ Formoterol requires AUTA
- ❖ Salbutamol requires AUTA
- ❖ Terbutaline requires AUTA
- ❖ Fenoterol requires AUTA
- ❖ Salmeterol requires AUTA

#### **3.1.4. Agents with anti-estrogenic activity:**

- ❖ Aromatase inhibitor
- ❖ Inducer of ovulation clomiphene, tamoxifen

#### **3.1.5. masking agents:**

- ❖ Diuretics
- ❖ Epitestosterone
- ❖ Plasma Substitutes

#### **3.1.6. prohibited methods**

- ❖ Dopage blood perfusion, blood enriched with ozone
- ❖ Intravenous infusions other than strictly medical treatment

#### **3. 2. Only during competitions:**

##### **3.2.1. Stimulants:**

- ❖ Amphetamines

- ❖ Adrenal epinephrine (note that an emergency injection to prevent anaphylaxis for example, by the fact of emergency still permitted, but asks a posteriori AUTA) .in this group there are also the local anesthetics for injection containing epinephrine.
- ❖ Ephedrine
- ❖ Cocaine
- ❖ A drug used to treat obesity has banned stimulant effects (the REDUCTIL).

### **3.2.2. Narcotics:**

- ❖ Morphine and heroin
- ❖ Methadone

### **3.2.3. Cannabis:**

- ❖ Haschisch and marijuana

**3.2.4. Glucocorticoids:** drugs sometimes prescribed in joint pain or inflammatory bowel disease are prohibited when administered see oral, rectal, intravenous or intramuscular and require .a intra articular injection AUT or infiltration as well as an inhalation (for asthma) requires AUTA

**3.2.5. Beta-blockers:** most drugs against hypertension are prohibited (Doroz p. 2003).

## **IV. Danger Of Prohibited Substances And Methods**

The use of drugs is not safe for certain products such as sports (cocaine, heroin, ecstasy ...) cause great physical addiction and / or mental to the consumer, other drugs such as (EPO, GH, insulin) the improper administration or change of use is causing adverse side effects on the body, which may even go directly to death, or complications (Health and activities, 1998 14- 32).

**4.1. Stimulants:** they have the risks of all active substances on the mind (nervousness, aggression, cardiovascular disorders ...)

**4.2. Androgenic steroids and other anabolic:** they have a masculinizing effect in women (virilization) and can lead to disorders of libido, aggression, ruptured tendons.

**4.3. Peptide hormones and similar:** their use leads to internal physiological deregulation with short- and long-term consequences. The EPO side effects are the occurrence of stroke, high blood pressure and risk of pulmonary embolism.

**4.4. Diuretics:** can cause severe state of dehydration which can cause thrombosis and risk of pulmonary embolism.

**4.5. Corticosteroids:** cause fragility of the tendons and muscles, cardiovascular disorders, gastric ulcers, demineralization of bone fracture risk with fatigue (Doroz.p, 2003).

## **V. Doping Control**

### **5.1. Objectives:**

The fight against doping involves a real mobilization both nationally and internationally to ensure the loyalty and credibility of major sporting events (Guide 2003).

The main national actors and stakeholders are the Ministry of Youth and Sports, internationally mainly World Anti-Doping Agency (WADA), the International Olympic Committee (IOC) and UNESCO.

**5. 1. 1. Role of sports federations:** they exercise disciplinary authority over athletes.

Athletes who dope liable for their part, sporting sanctions pronounced by their own federations, they have ten weeks to decide in the first instance, the complete procedure (first instance and appeal) not to exceed four months.

They have a medical surveillance mission vis-à-vis sports: The sports federations have a medical surveillance mission strengthened vis-à-vis their licensees. This requirement is more or less depending on the intensity of the practice of dismissed: it goes a medical certificate of no cons-indication to athletic competition for practitioners, even in the context of an activity performed during the recreation, a comprehensive monitoring of elite athletes (Patrick Laure, 1995).

## **5.2. Means:**

- \* Promulgation of laws relating to doping.
- \* Disciplinary measures against athletes who have taken doping substances.
- \* Support federations under the medical supervision of top athletes, medical supervision competitions and preventive actions.
- \* Develop a strategy for the prevention of doping by coordinating all stakeholders (Doping and Practices 1998, 127).

## **5.3. Actors and stakeholders:**

The fight against doping involves a real mobilization both nationally and at European and international level to ensure loyalty and credibility of major sporting events.

**5.3.1. The World Anti-Doping Agency (WADA):** Was founded on 10 November 1999 in Lausanne to promote and coordinate the international fight against doping in sport.

WADA is primarily responsible for coordinating the development and implementation of the World Anti-Doping Code, the document harmonizing anti-doping rules in all sports and all countries. Its current strategic plan was developed to better focus its activities and resources until 2009. The AMA intends to educate and inform signatories to the Code, governments and sports, but also the athlete support staff the dangers and consequences of doping. She wants to coordinate and support anti-doping research programs of global concern. And finally, it has set a goal to increase the ability of anti-doping organizations to implement anti-doping regulations and programs to ensure compliance with the Code. WADA aims to fulfill its mission of promoting, coordinating and monitoring at the international level in the fight against doping in sport in all its forms. In addition to these areas of expertise, WADA may also conduct out of competition testing without notice.

**5.3.2. The International Olympic Committee (IOC):** non-governmental non-profit organization was founded on 23 June 1894. Its main responsibility is the supervision and organization of the Olympic Winter and Summer Games. IOC's mission is to ensure the promotion of Olympics and of sporting ethics. One of its basic principles is to contribute to building a peaceful and better world by educating youth through sport practiced without discrimination of any kind and in a spirit of friendship and solidarity. It is in this context that the fight against doping is inscribed. It is conducted by a medical board created in 1967. The finance committee and is investigating new methods to help athletes, whether in sports medicine, biomechanics, physiology applied to sport, nutrition or any other science related sport. Since the creation of the World Anti-Doping Agency (WADA) in 1999, the scope of the IOC Medical Commission has evolved from managing the fight against doping in sport to active commitment to the protecting the health of athletes. The commission also plays a preventive role information, with athletes, coaches and administrators led through publications and seminars (Press Review, 2000).

**5.3.3. UNESCO:** Plays a major role in the global harmonization of the fight against doping. It was under his leadership that was adopted on 19 October 2005, unanimously by its member states, the International Convention against Doping in Sport. The purpose of this agreement is to harmonize efforts against doping and to provide a legal framework within which all governments can seek to eradicate doping. It urges member states to bring their sports practices the principles set out by the World Anti-Doping Code developed by the World Anti-Doping Agency. This harmonization legislation and sporting rules allow each athlete to be subject to the same rules and protocols regardless of the sport, nationality and where it is in the world.

Unesco convention entered into force on 1 April 2007. The legislation in our country has particularly been amended by the Act of 5 April 2006 to reflect the principles of the World Anti-Doping Code and the existence of the World Agency doping. The sanctioned by law (because of the nature and scope of sanctions for infringement of the provisions relating to the taking of illegal substances) is required to complete the national system and recognize the role and impact of decisions or sanctions other international actors, international federations, WADA, national agencies in the fight against doping ... the ratification process is underway in our country. The agreement should enter into force on 1 February 2007 because 30 states have ratified (P Yonnet, 1998, 254).

**5.3.4. Algeria:** ALGERIA adhere to WADA, the IOC AND UNESCO through its various sports federations and committees through the enactment of laws relating to doping including the following items.

## Definition

**Article 187:** Is considered doping:

- ❖ The use of an expedient (substance or method) potentially hazardous to the health of the players or capable of enhancing their performance;
- ❖ The presence in the player-controlled body of a prohibited substance, the finding of the application or attempted application of a prohibited method;
- ❖ Refusal to submit to a test;
- ❖ The own behavior to prevent or make impossible the check required;
- ❖ The fact conceal, alter or destroy the biological environments in which screening occurred;
- ❖ These facts constitute cases of doping whether detected during or out of competition, and are punished as such; therapeutic justification.

## Article 188:

- ❖ Any player who, for therapeutic reasons, went to a doctor and is prescribed treatment or medication must inquire whether the prescription contains prohibited substances or methods (see list in the Control Regulation FIFA doping in Appendix A).
- ❖ If that is the case, it must require another drug or treatment.
- ❖ If there is no alternative, he shall obtain a medical certificate explaining his situation. This document must be handed over to the Algerian Football Federation within 48 hours after medical examination. If a match occurs within this period, the certificate must be received by the Federation before the game, and be presented at any check.
- ❖ After this time, no medical certificate will be accepted.
- ❖ The justification shall be valid only if it is accepted by the medical commission of the Algerian Football Federation.

**Article 189:** The fixed Federation doping control procedures and therapeutic justification means following the rules made in this regard by FIFA.

**Article 190:** For sanctions to doping are stipulated in the disciplinary code of these bylaws, in articles 275-279.

## VI. Conclusion

The use of drugs has taken a fairly large scale in recent years, preventive measures, namely, the unexpected control of athletes during and outside competitions, and sanctions taken against fraudsters helped deter some athletes to use illegal drugs, however, the progress of pharmaceutical technology has unfortunately allowed to use new methods of doping and thus, cheaters are always steps ahead compared to controllers, for this a regular days set different doping methods allow a more rigorous approach used for these illegal methods.

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