

## Doping: An Overview Of Bane And Boon For Athletes

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DOI: <https://doi.org/10.55968/ijems.v13i01.314>


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Doping is a critical issue at international level in sports. It is a global problem. It is the misuse of some substances or the use of banned method for athletic performance - enhancing drugs by an athlete. If there are some benefits by the intake of doping substances like enhancing strength and stamina, another side we have a lot of side effects. They directly affect our health. Some techniques and substances are directly abused by professionals. It is not about health but also it affect our moral and ethical values that affect team spirit. With the help of blood doping, red blood cells mass are expanded, by which body can transfer more oxygen to muscles. Use of performance enhancing drugs are very harmful for our body. It is a form of cheating, which is entirely widespread at national and international level which is common in sports. Performance Enhancing drugs such as: Anabolic steroids, diuretics, stimulants, erythropoietin, etc are harmful for us. There is a prohibited list, which is published yearly by WADA (World Anti-Doping Agency). Some drugs are legal and some are illegal. There are many Anti- Doping laws. They are designed at both national and international level. The main purpose or motive for banning is to maintain equality and make coupled opportunities for athletes. It is the responsibility of authorities to spread awareness and to ensure prevention of them for fair competition.

**Keywords:** Doping, Drugs, Substances, long term, enhanced.

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Sukhpreet Singh, Student, Physical Education, Punjabi University, Patiala, Punjab, India. Email: <a href="mailto:sukhpreet742001@gmail.com">sukhpreet742001@gmail.com</a>	Singh S, Singh D, Singh P. Doping: An Overview Of Bane And Boon For Athletes. IJEMS. 2024;13(01):31-34. Available From <a href="https://ijems.net/index.php/ijem/article/view/314">https://ijems.net/index.php/ijem/article/view/314</a>	

<b>Manuscript Received</b> 2023-07-08	<b>Review Round 1</b> 2023-07-23	<b>Review Round 2</b> 2023-08-18	<b>Review Round 3</b> 2023-09-13	<b>Accepted</b> 2023-10-09
<b>Conflict of Interest</b> Nil	<b>Funding</b> Nil	<b>Ethical Approval</b> Yes	<b>Plagiarism X-checker</b> 14	<b>Note</b> Nil
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## INTRODUCTION

The word "DOPING" has many suggestions on its origin. It comes from the ancient Olympic games, when athletes took figs, they all were reported. Figs improved their performance because it is a combination of calcium and potassium for improving bone density. The word Doping is introduced from a Dutch word 'DOP', it means an alcoholic liquid made of grape skin. In 18th century, it was used in ceremonial dances in south Africa. It was used by Zulu warriors for their performance.

Another way to explain is that the word comes from the Dutch word 'DOOP' (a thick dipping sauce) that entered American slang to describe how robbers stupefied victims by mixing tobacco with the seed of *Datura stramonium*, known as jimsonweed, which contains a number of tropane alkaloid, causing sedation, hallucination and confusion.

In sports, Doping is used for performance enrichment, particularly to regulate competitions. From the biological point of view, doping targets all body function including heart, pulmonary, chemical reactions, hormones regulation, cerebral, genetic etc. The physiological basis the short-term acute responses include elevation in the heart rate and cardiac output, redistribution of blood flow, increased pulmonary ventilation and endocrinological responses.

Doping have both productive effects and side effects. Performance improvement methods are introduced in the two criteria. The first criteria have hazards to the health of the sports person and break the spirit of the sports. Another method or criteria is improving performance such as through blood transfusion.

If we talk about the merits of doping, it recovers from an injury, enhance body capacity after training, increase muscle fibre, along with muscle mass also increases strength & endurance and help in decreasing fat tissue.

If doping permits all the benefits to a sports person, then let's talk about that why it is a consequential issue at national and international level. There are innumerable substances used by the athletes to increase their performance directly or indirectly, some of them are: -

Anabolic steroids, which come about originally from male hormones (testosterone),

Have a vast range of physiological functions and these steroids have impact which most probably are long-term lasting in both males and females such as liver malfunction, kidneys & liver cysts, reproductive & endocrine abnormalities, the atrophy of testicles, major heart diseases symptoms. The negative effects are multiplied if the intake dosage is increased above the recommended amount. The fact that testosterone occurs naturally in males, the consequences after taking additional artificial form of these hormones have unavoidable harm for males too and simultaneously serious. In females, these steroids in a way tears down their future. As we know, the female's hormones are mainly Oestrogen and Progesterone and we can only imagine what can happen to a female body if maximum number of hormones are replaced by the male hormones. Their voice gets dense, along with the facial hairs, scalp hair fall, irregular menstrual cycle and facing infertility etc.

Another method we would like to discuss about the use in doping method is 'EPO' which is a naturally occurring hormone Erythropoietin produced by the RBC's in the blood, which as a result help the athlete to supply oxygen to the working muscle for a long time. It is used in the replacement of an old method known as the Blood Doping. These methods effect an athlete in a very dangerous way which can cause a stroke, various cardiovascular hazards and sudden death as well.

Besides giving the good or bad results on the performance, the use of doping substances is unstoppable and it's increasing day by day. If it is giving enhanced results at present, then it is undetectably damaging the body internally for long term.

There are various categories of drugs which are considered as a doping substance only if the amount is detected above a recommended dose as given by the international authorities, which can control all doping laboratories and programmes and doping substances, WADA, such as Caffeine, Beta-2 substances, adrenaline, nicotine etc. Some substances are not prohibited but can enhance the performance of the athlete like L-Carnitine, Arginine, BCAA, Alpha GPC, etc. These are natural extracts which assist during training and competition. Various sports organisation have restricted the use of performance increasing drugs and have uncompromising

Regulations and consequences for sportspersons who are caught using them. Doping increases the performance but unnaturally and directly denoting the abolishment of fair play for which sports is recognised for. WADA being an international federation established the criteria for various drugs and their prohibition to make sure that the sports competitions are organised in a way which brings out the most deserving winners and to prevent life threatening health risks of the sportspersons.

### **CONCLUSION**

To summarize, in the context of health threats, using various doping agents, including the most widespread, such as AAS, stimulants and EPO, increases the risk of cardiovascular disease, thrombosis, stroke and cancers in men and women. In addition, the use of AAS adversely affects the hormonal axes resulting in the cracking down of endogenous hormone production in males, while male sex characteristics affect in females. Additionally, the regularly using some of the anabolic agents and stimulants can have serious mental health/behavioural aftereffects. Consequently the physical and mental health risks related with the use of such agents are likely to surpass the health benefits associated with participation in physical activity. The popularity of doping agents holds out beyond the realms of elite sport, into lower levels of competition and into non-competitive exercise training as well and as dreadful as it seems, for the development of an enhanced physique! The indications are that doping and related drug abuse constitute a notable health issue, and what it is worth for, the discussion of the bane and boon of doping in sports should be consistent to reach the maximum athletes and spreading awareness for the same.

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