



# *Cheating to win* **DOPING IN SPORT**

By **Kotie Geldenhuys**; Photos courtesy of **Pixabay**

In August 2023, reports emerged that Elton Jantjies, a member of the Springbok team who had won the 2019 Rugby World Cup, had been notified by the South African Institute for Drug-Free Sport (SAIDS) about a positive drug test result. The result emanated from a urine sample that was taken from him in June 2023, showing the presence of the banned substance Clenbuterol. Clenbuterol is used by bodybuilders to reduce weight and enhance muscle mass, as well as for alleviating breathing issues in asthma patients in certain regions. In his 2023 statement, Jantjies denied any deliberate consumption of the substance and expressed determination to establish his innocence. "At this stage, I can say little more about the matter, save that I assure all my supporters that I have not and never will deliberately take a banned substance, and that I will do everything in my power to prove my innocence," he said. However, SAIDS insisted that Jantjies had not opted for a hearing before an impartial doping panel. Jantjies was informed about the potential penalties he was facing in December 2023 but failed to appeal within the stipulated timeframe. In January 2024, he was handed a four-year suspension, the maximum punishment for testing positive for Clenbuterol (Sebembe, 2024).

**D**oping has emerged as a key and complex concern within the global sports landscape as media exposés of scandalous incidents highlight the seriousness of a troubling trend in numerous sports disciplines. Doping cases undermine the integrity of athletic performance, casting doubt on the legitimacy of celebrated victories by some sports heroes. These days it appears that certain sports have pushed beyond both human and legal boundaries.

It is evident that in disciplines such as athletics and cycling, there is a limit to human performance. In today's context, sports are no longer only about healthy competition. Sports have evolved into multi-billion dollar industries, conduits for business and sources of political or national pride. These dynamics often breed a mentality where some athletes are willing to bend or break rules in pursuit of success. Whether through conscious deception, covert actions or with the aid of a network of specialists, some athletes operate under the assumption of evading detection, driven by the allure of sponsorships, advertising deals and financial gain. In their pursuit, concerns for personal health often take a backseat (Vlad, Hancu, Popescu and Lungu, 2018).

The phenomenon of doping in sport is increasing and evolving, as is the array of performance-enhancing drugs (PEDs) being used. A perpetual race exists between those devising new doping techniques and the ethical bodies within sports striving to develop more effective detection methods. Regrettably, those in the former category often maintain a lead over the latter (Vlad et al, 2018).

## Doping in sport - an old problem

The term "doping" is nothing new and the use of drugs in sport dates back through an extensively documented past. References to the use of substances to enhance performance or strength can be found in Scandinavian mythology, such as bufotenin, a substance reputed to augment physical capabilities, sourced from frog skin or specific species of Amanita Muscaria mushrooms (Spiteri, 2016 and Ljungqvist, 2017). In ancient Greece, the use of banned substances was not discouraged as specialists provided athletes with diverse concoctions to enhance physical prowess, a practice deemed entirely ordinary. Similarly, doping techniques were also used in the Roman Empire such as for racehorses where various mixtures of substances to enhance their speed and endurance were administered. Apparently, gladiators also used strength-enhancing agents (Ljungqvist, 2017).

In 1807, Abraham Wood confessed to using opium to stay awake for 24 hours during Britain's endurance walking race. This led organisers to extend the walking distances to over 500 miles to attract more spectators. Similar endurance events were introduced for cyclists, with organisers believing it was more thrilling to witness cyclists push themselves to total exhaustion, often resulting in falls. This attracted more paying spectators, increased prize money and incentivised participants to use substances to endure the long distances. However, the darker consequences soon emerged as cyclists experienced extreme exhaustion and hallucinations. Recovery often took weeks, while some cyclists never fully recovered. Public outrage ensued, condemning the events as brutal (Spiteri, 2016).

The practice of doping emerged in modern sports during the latter part of the 19<sup>th</sup> century. Shockingly, strychnine was discovered to be used in the 1904 Olympics, believed to be essential for endurance events like the marathon. During the marathon event of the 1904 Olympics, Thomas Hicks was close to collapsing when his coach, Charles Lucas, intervened by administering a dose of strychnine, along with shot of brandy and urging him to continue running. Hicks struggled to continue and received more dosages of brandy and strychnine along the way until he reached the finish line and secured the gold medal (Spiteri, 2016).

Following several incidents in competitions, **the International Athletics Federation (IAF) took the pioneering step in 1928 to become the first international federation to prohibit doping in athletics events**. In the aftermath of World War II, it became evident that numerous athletes across various sports were resorting to drug use to boost their performance. This trend was rampant, with inadequate measures in place to combat it. The fatalities of cyclists in 1960 and 1967, attributed to doping, sparked significant outcry and calls for sports authorities to act (Vlad et al, 2018 and World Athletics, 2024). One tragic event in this context related to the Danish cyclist Knut Jensen, who passed away while competing in a 100 km cycling race at the 1960 Rome Olympics. Substances such as amphetamines and nicotinyl tartrate were discovered in his system (Spiteri, 2016).

## Modern stance on doping

In 1963, the Council of Europe provided **the first definition of doping, characterising it as the use of specific substances or methodologies aimed at artificially enhancing the physical and/or mental capabilities of athletes before or during competitions, thereby improving their performance**. While the initial concern stemmed from the health risks associated with drug usage, doping is now equally condemned as deceitful and morally wrong. The International Olympic Committee (IOC) responded by establishing a Medical Commission in 1967 and implementing a ban on doping in 1968. This committee identified a list of prohibited substances, with the first tests for stimulants being conducted during the Winter Olympics in 1968, while the detection of steroids only became feasible in 1974. Various International Sports Federations (IFs) also introduced doping controls at their events, with the International Association of Athletics Federations (IAAF) pioneering systematic out-of-competition testing, recognised as the most effective form of screening. National anti-doping agencies in different countries have since taken charge of doping controls within their respective borders, and in certain nations, doping has been outlawed, rendering it subject to legal penalties (World Athletics, 2024).

## Increase in doping

In 1998, several incidents of doping surfaced globally, prompting numerous governments to express discontent with the prevailing doping control measures. As a result, the IOC convened a conference in Lausanne, Switzerland early in 1999, gathering National Olympic Committees (NOCs), governmental bodies, IFs and athletes. This assembly endorsed more stringent measures and resulted in **The Lausanne Declaration**, which led to the establishment of

The World Anti-Doping Agency (WADA), jointly supported by the IOC, IFs and governments. WADA's primary objective is to standardise and strengthen anti-doping efforts and regulations across all sports and nations. WADA is also responsible for publishing the list of prohibited substances, subject to regular review and formal updates on 1 January of each year. To merit inclusion on the list, a substance or method must meet at least two of the following three criteria as determined by WADA: enhancing performance; posing health risks to athletes; or conflicting with the principles of fair play in sports. Substances or methods can also be added to the list if WADA identifies their potential to obfuscate (conceal) the detection of other banned substances or methods (World Athletics, 2024).

South Africa also had to adopt a strong stance against doping in sports, leading to the establishment of the South African Institute for Drug-free Sport (SAIDS) in 1998. This public entity was formed under the Drug-Free Sport Act 14 of 1997 with the aim of advocating for clean participation in sports, ensuring that prohibited substances or methods intended to artificially enhance performance are not utilised. This initiative aims to eradicate doping practices that contradict the principles of fair play and medical ethics, prioritising the health and well-being of athletes (SAIDS, 2023).

## Doping in modern professional sports

In an era of modern professional sports, numerous athletes have tested positive for banned substances. Notable cases include that of Canadian sprinter Ben Johnson, renowned for his participation in the 100 m race, who tested positive for using anabolic steroids. The incident in 1988, resulted in Johnson's initial two-year suspension followed by a lifetime ban when he tested positive again in 1993 (Montague, 2012).

Another widely publicised case involved cyclist Lance Armstrong, whose reliance on the brief detectability window of PEDs enabled him to elude anti-doping agencies for an extended period. Following years of speculation, denial and accusations, Armstrong admitted to doping during a 2013 interview with Oprah Winfrey, resulting in the revocation of his seven Tour de France titles and a lifetime ban from cycling. He later settled a \$100 million federal lawsuit, agreeing to pay \$5 million to the USA government based on testimonies from whistleblowers, including his former teammate Floyd Landis (Ostlere, 2023).

Closer to home, we have witnessed numerous cases of South African athletes being implicated in doping scandals and the use of prohibited substances. In SAIDS's most recent list of athletes who were found guilty, almost 400 South Africans' names appear along with that of Elton Jantjies. The list dates to 2011 and include some of the following cases:

- Ruann Visser, a South African heavyweight boxing champion, received a four-year ban from the Court of Arbitration for Sport in Switzerland after testing positive for stanozolol following his victory over Osborne Machimana in 2018. Despite vigorous efforts by Visser's legal team to contest the ban, it was upheld, resulting in him being stripped of his title. Several of his previous fights were also declared as no-contests (Sunday World, 2023).

- In 2018, elite South African mountain biker Max Knox was found guilty of doping and received a four-year ban from SAIDS. Knox's suspension stemmed from irregularities detected in his Athlete Biological Passport, indicating doping and his inability to provide a satisfactory explanation to the appointed panel of international experts. As a consequence, all titles won by Knox since 16 June 2015, were revoked. He was also required to return any prizes, money and medals earned during that period (Team SA, 2018).
- South African rugby winger Aphiwe Dyantyi, who made his debut for the Springboks against England in 2018, was handed a four-year ban for doping in 2020. Dyantyi failed to substantiate his claim that he inadvertently ingested multiple PEDs while drinking from a friend's water bottle at the gym. He tested positive for methandienone, methyltestosterone and LGD-4033 while in camp with the Springboks during July 2019. Although he admitted to the doping charge, he maintained his innocence regarding knowingly taking the substances (Sky Sports, 2020).
- Lynette Burger, a distinguished cyclist at national level, was found to have deliberately breached an anti-doping regulation by SAIDS following a hearing held on 16 March 2021. On 26 September 2018, Burger was involved in a severe crash involving a minibus taxi, resulting in significant injuries including a brain injury, facial abrasions and chest injuries. She required resuscitation, intubation and mechanical ventilation post-accident. Despite her injuries, Burger made a remarkable recovery and returned to competitive cycling, achieving victory in her first race in May 2019. However, on 1 November 2019, Burger provided an out-of-competition urine sample at a Free State retreat after SAIDS received a tip-off regarding potential doping activities. Analysis of her urine sample conducted at a WADA accredited laboratory revealed the presence of 19-norandrosterone and 19-noreticholanolone. Burger's legal team and medical advisors argued that she was grappling with various mental health issues, including PTSD, depression, anxiety and physical pain stemming from the crash. They contended that Burger had used the substances to alleviate her mental distress rather than seeking an unfair advantage in competition. In 2020, SAIDS appointed experts to conduct thorough medical research to ascertain the purported mental health benefits of the substances. However, no conclusive evidence supporting the use of Nandrolone for such purposes could be found in medical literature or reports. Despite Burger's explanations and plea for leniency, her request for a reduced sanction was rejected. Consequently, she was handed a four-year ban effective from 26 November 2019 (Cycling South Africa, 2021).

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**Athletes bear full responsibility for the substances they consume. Therefore, even if an athlete unintentionally consumes a prohibited substance, they remain accountable (Vlad et al, 2018).**

## Dangers of doping

Doping substances can be obtained from pharmacies, supplement stores or more commonly, through the black market (Vlad et al, 2018). The market for doping substances exhibits a "high profit, low risk" dynamic, rendering it increasingly appealing to globally operating organised crime groups (INTERPOL, nd). The illegal production and distribution of performance-enhancing drugs yield significant profits for criminal groups. These proceeds frequently funnel into various illicit enterprises, such as manufacturing and trafficking of counterfeit medications and synthetic narcotics (Europol, 2021).

Although many of the medications listed on WADA's prohibited list can be found in pharmacies, they may not be suitable for use by healthy athletes seeking to enhance their performance through higher dosages or in combination with other supplements, as these medications are intended for individuals with specific health conditions. It is essential to recognise that the regulation of supplement companies is often lacking, leaving athletes uncertain about the contents of the products they consume. There is a risk that banned substances may be present in supposedly "all-natural" supplements (SAIDS, nd).

Various methods of administering substances or manipulating physiology are prohibited due to their potential negative effects on the body. One such an example is **blood doping**, which involves blood transfusions to alter the oxygen-carrying capacity of blood. This **can lead to increased risks of heart failure, strokes, kidney damage and hypertension**. It further carries the risk of infections, poisoning and excessive white blood cell levels. Also, the use of injectable **drugs**, such as doping agents administered with syringes, **puts athletes at higher risk of contracting infectious diseases** such as HIV/AIDS and hepatitis (Vlad et al, 2018; and SAIDS, nd).

WADA and SAIDS provide a comprehensive list of various doping methods or substances and their effects on athletes:

- **Steroids** have the potential to enhance an athlete's muscle size and strength. However, dependence on steroids can lead to adverse effects such as acne, mood swings, aggressiveness, heightened risks of liver and cardiovascular diseases and even suicidal tendencies. In males, it may cause testicular shrinkage, breast enlargement, decreased libido and diminished sperm production. For females, consequences may include a deepened voice, excessive facial and body hair growth, irregular menstrual cycles and enlargement of the clitoris.
- **Erythropoietin (EPO)** can enhance oxygen usage in the body, but it may also lead to increased viscosity of the blood, making it harder for it to flow through the veins. This can result in sensations of weakness for athletes, accompanied by elevated blood pressure and increased strain on the heart.
- **Human growth hormone (HGH)** can enhance muscle and bone strength and speed up recovery, but it is not just muscle growth that occurs. It can also cause acromegaly, characterised by protrusion of the forehead, brow, skull and jaw, as well as enlargement of the heart leading to potential heart failure, damage to the liver, thyroid and vision, and the development of severe arthritis.



- **Stimulants** are used to enhance competitive performance, yet they can lead to insomnia, anxiety, aggression, elevated and irregular heart rates, as well as the risk of a heart attack and stroke.
- Athletes resort to **masking agents** to deceive anti-doping measures by concealing the presence of banned substances. However, the repercussions of using these agents can result in various adverse effects such as dizziness, fainting, dehydration, muscle cramps, lowered blood pressure, impaired coordination, confusion, mood swings and cardiac issues.
- **Marijuana, also referred to as cannabis or dagga**, is prohibited and can negatively affect an athlete's performance and health. It may diminish attention and memory, weaken the immune system, impact lung function and potentially result in both psychological and physical dependence.
- **Narcotics** such as heroin and morphine may provide relief from pain for athletes, but can result in adverse effects including a compromised immune system, reduced heart rate, suppressed respiratory function, impaired balance and concentration, as well as symptoms such as vomiting and constipation. As these substances are highly addictive, athletes may develop dependency on these substances rapidly (SAIDS, nd).

## Consequences of doping

Doping carries numerous risks and consequences. According to the European Olympic Committees, these include adverse effects on both physical and mental well-being, potential loss of financial support and endorsements and lasting harm to an athlete's reputation and relationships. Understanding the full spectrum of consequences is crucial.

An overview of some common outcomes associated with doping include the following:

- **Health implications** as the usage of PEDs can result in both immediate and long-term health issues for athletes. Depending on factors such as the type of substance, dosage and duration of use, PEDs may lead to severe and irreversible damage to the body. Research also indicates a significant correlation between PED usage and mental health concerns, including anxiety, obsessive disorders and psychosis.

## Doping is commonly perceived as an individual's wrongdoing. However, the truth is that when athletes resort to using illegal PEDs, it is a single component within a broader network of criminal activity.

- **Social consciousness** as athletes linked to doping or found guilty of doping offences often face significant damage to their reputation and social connections. Public perception often brands them as cheaters, leading to various forms of social stigma. Doping can profoundly affect personal lives and social interactions, with many people distancing themselves from those who have tarnished the integrity of sports and exhibited poor judgment.
- **Financial consequences** as violations can have substantial financial ramifications for the person involved. Athletes and support personnel may be required to forfeit prize money or face monetary penalties. Doping can also result in the termination of contracts and sponsorship agreements, loss of government funding, grants and other forms of financial aid.
- **Sanctions** can severely impact an athlete's ability to train and compete. Coaches and other support personnel may also face professional repercussions, potentially losing their ability to practice and work with athletes. Sanctions can vary from warnings to lifetime bans from all sports. It is important to note that athletes banned from one sport are typically prohibited from participating in any capacity in other sports as well.
- **Legal consequences** as many governments and public authorities treat doping as a criminal offence. Depending on national legislation and the severity of the violation, individuals may face fines, community service requirements or even incarceration (European Olympic Committees, nd).

### Legislation in South Africa

The anti-doping legislation enforced in South Africa includes the **Drug-Free Sport Act 14 of 1997** and the **Drug-Free Sport Amended Act 25 of 2006**, granting SAIDS the authority to conduct drug testing across all sports disciplines. South Africa is also a signatory to the **UNESCO Convention against Doping in Sport**, obliging national adherence to its stipulations, with SAIDS acting as the implementing body to ensure compliance. The **World Anti-Doping Code**, overseen by WADA, establishes global standards for anti-doping efforts. SAIDS serves as the custodian of the Code within South Africa, implementing its guidelines. Failure to comply with this Code may lead to South African athletes being barred from international competitions such as the Olympic Games, World Cups and World Championships. WADA conducts independent Code Compliance Audits on all international anti-doping agencies, including SAIDS (SAIDS, 2023).

In October 2023, concerns were raised by WADA during South Africa's participation in the Rugby World Cup in France. The Springboks faced the potential of competing in the tournament under a neutral flag due to South Africa's failure to comply with WADA's 2021 anti-doping regulations. On 10 October 2023, SAIDS formally disputed the allegation of non-compliance and its proposed consequences. In accordance

with Article 24.1.7 of the Code, WADA publicly announced that it had filed a request for arbitration with the Court of Arbitration for Sport (CAS) on 16 November 2023 (WADA, 2023).

On 22 February 2024, Noncawe Mafu, South Africa's Deputy Minister of Sports, Arts and Culture, introduced the South African Institute for Drug-Free Sport Amendment Bill (B41-2023) to revise the Drug-Free Sport Act 14 of 1997. The National Assembly conducted public hearings on the Amendment Bill with the deadline for submissions set for 14 March 2024, and hopes that it will be resolved and accepted before the May 2024 national elections. With the Olympics scheduled for this year, meeting the requirements of the Bill is crucial to ensure that South African teams are not adversely affected (Parliamentary Monitoring Group, 2024).

### Law enforcement and doping in sport

Doping is commonly perceived as an individual's wrongdoing. However, the truth is that when athletes resort to using illegal PEDs, it is a single component within a broader network of criminal activity (INTERPOL, nd). Unlike sports bodies, law enforcement and governmental agencies possess authority to address the root causes and distribution of illicit substances, along with the ability to apprehend suspects. Entities such as WADA and other anti-doping agencies gather valuable information and expertise that can aid criminal inquiries. Collaborations between anti-doping agencies and law enforcement facilitate:

- Combating the illicit production and dissemination of doping substances
- Sharing intelligence and practical assistance
- Coordinating the collection of evidence
- Collaborating on investigations of shared interest (WADA, nd).

Ensuring effective collaboration between law enforcement agencies and doping regulatory bodies is crucial in tackling this aspect of organised crime. This partnership will contribute to bolstering the integrity of sporting events, promoting fair competition and ensuring the protection of athletes' health and well-being (Europol, 2021).



The ongoing battle against doping persists, yet anti-doping agencies find themselves consistently trailing behind the manufacturers of novel, almost undetectable substances possessing pharmacological traits akin to existing ones on the market. Despite concerted efforts to tackle doping, it remains an enduring issue across numerous sports. Athletes may be motivated to dope by aspirations for success, performance demands, financial rewards, sponsorships, publicity or a lack of awareness regarding associated risks. Regardless of the rationale, **doping in sport ultimately amounts to cheating.**

**Doping can be reported on SAIDS's website:**  
<http://drugfreesport.org.za/contact-us>

### Editor's note

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