



***“MICRODOSING” AND “INADVERTENT CONTAMINATION”.
ARE TOO STRINGENT REGULATIONS ABOUT DOPING REALLY A
PROTECTION OF THE INTEGRITY OF SPORT?¹***

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Abstract: Il doping costituisce da sempre una delle condotte illecite che maggiormente compromettono l'integrità e la correttezza dello sport e i cui effetti possono anche causare danni alla salute degli atleti. La legislazione in materia di prevenzione e contrasto al doping è particolarmente severa e restrittiva: il Codice Mondiale Antidoping della WADA sanziona non solo l'uso effettivo di sostanze dopanti, ma anche qualsiasi serie di atti che possano essere altrimenti ricondotti al doping. Anche la giurisprudenza è caratterizzata da un approccio molto rigido, con interpretazioni che lasciano pochissimo spazio alla considerazione della consapevolezza dell'atleta di un uso deliberato o involontario: sia l'atto di assumere la sostanza dopante che la semplice intenzione di utilizzarla sono considerati illeciti. In particolare, anche se il doping è avvenuto inconsapevolmente, ad esempio attraverso una contaminazione involontaria, le circostanze non sono rilevanti, non sono previste circostanze attenuanti.

Negli ultimi anni, l'evoluzione delle tecniche di analisi biologica ha ulteriormente consentito l'identificazione della presenza di quantità minime di sostanze contenute nella lista del doping. Si tratta di sostanze che potrebbero essere state assunte inconsapevolmente e altresì non avere alcuna influenza sulla prestazione sportiva: tuttavia la loro presenza nei campioni biologici costituisce comunque una condotta illecita significativa e può comportare una sanzione con squalifica per diversi mesi o addirittura anni. L'espressione utilizzata per indicare queste quantità minime è “microdosaggio” e l'argomento rappresenta uno dei temi più dibattuti degli ultimi mesi, alla luce dell'episodio che ha coinvolto il tennista italiano Jannik Sinner.

Richiamando alcune delle più recenti vicende che hanno interessato alcuni tennisti di alto livello per episodi di assunzione inconsapevole e per presenza di microdosaggio, l'autrice pone alcune domande sul reale valore di una normativa eccessivamente rigorosa, che non tenga nella giusta considerazione gli stati soggettivi degli atleti, evidenziando come la modifica e l'aggiornamento delle norme antidoping appaiano quindi necessari, soprattutto quando si giunge al paradosso di un atleta che preferisca mettere a rischio la propria salute, piuttosto che assumere un farmaco temendo la contaminazione.

Doping has always been one of the illicit behaviours that most compromises the integrity and fairness of

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sport and whose effects can also cause impairment and damage to the health of athletes. Legislation on the prevention and repression of doping is particularly stringent and restrictive: the World Anti-Doping Agency (WADA) Code sanctions not only the actual use of doping substances, but also any series of acts that can be linked in other ways to doping. Case law is also characterized by a very rigid approach, with interpretations that leave very little space for consideration of the athlete’s awareness of a deliberate or an involuntary use: both the act of doping and the simple intention of doping are considered as illicit. In particular, even if doping occurred unknowingly, for example through involuntary contamination, the circumstances are not relevant, there are no mitigating circumstances.

In recent years, the evolution of biological analysis techniques has further allowed the identification of the presence of minimal quantities of substances contained in the doping list. These substances might be taken unknowingly and may have no influence on sports performance, but nevertheless they constitute significant unlawful conduct and may result in a sanction with disqualification for several months or even years. The expression used to indicate these minimal quantities is “microdosing” and the topic represents the most debated topic in recent months, in light of the episode involving the Italian tennis player, Jannik Sinner.

Recalling some of the most recent events that have involved some high-level tennis players for episodes of unaware intake and for the presence of microdosing, the author raises some questions on the real value of excessively rigorous regulations, which do not take into due consideration the subjective states of athletes, highlighting how the modification and updating of anti-doping rules therefore appear necessary, especially when we reach the paradox of an athlete who prefers to put his health at risk, rather than take a drug fearing contamination.

Keywords: doping – microdosaggio – contaminazione involontaria – codice mondiale antidoping

doping – microdosing – inadvertent contamination – world anti-doping code

Summary: 1 Introduction – 2. Briefly: characteristics and rigor of anti-doping regulations – 3. The Iga Swiatek case – 4. The Jannik Sinner Case - 5. Hypothesis of reform of the WADA Code: protection of health and sports ethics

1. Introduction

Doping is one of the most studied and, at the same time, debated topics in contemporary sport, both for its nature as multi-offensive behaviour and for the diffusion, characteristics and multiplicity of events that fill the sports news almost daily, especially when they take place during major international events or involve top players.

In recent months, with the Olympic and Paralympic Games in Paris 2024 having passed without particular uproar, and where only five cases of positive results without significant situations were recorded, attention has been polarized by tennis. The situation involved both the number one players in international male and female rankings, who were called to answer for the presence of substances contained in the World Anti-Doping Agency (WADA) prohibited list in their analyses, but which



entered their organisms in microscopic quantities and in absolutely involuntary and unaware ways. Both situations, which developed in different ways, especially due to the different attitude of WADA towards the decisions taken by the International Tennis Integrity Agency (ITIA), have given rise to a heated debate and brought a series of critical issues regarding anti-doping regulations to the attention of the community and of sports institutions. This regards both the lack of consideration of the subjective states of athletes, until now generally ignored, and the evolution of analysis techniques that today allow even minimal traces of prohibited substances to be detected, in dosages that are irrelevant to athletic performance, but still considered a violation of the rules of the World Anti-Doping Code.

The common thread that links the two mentioned cases, which we will shortly examine in detail, is precisely that: the stringent interpretation of the rules of the World Anti-Doping Code that can lead to athletes being sanctioned even in cases where not only is there no evidence of intent or fault, since the contamination occurred in a completely involuntary manner, but also the level of detected dosage is so low that it cannot have any influence on their performance, thus raising doubts on the very substantial value of unlawfulness of the conduct.

“Involuntary contamination” and *“microdosing”* are the terms used to indicate the situations that most recently involved Iga Swiatek and Jannik Sinner but which, scrolling through the WADA news of recent years, are terms that have already appeared in some case that have had less media coverage, considering the lesser importance of the athletes involved: *“involuntary contamination”* and *“microdosing”* are the two hypotheses of violation of the rules of the World Anti-Doping Code. Which raises a question - should the permanent validity of the absolutely rigid and literal interpretative line adopted up to now by WADA be continued or maybe this is the opportunity for a more suitable interpretation of the rules? The interpretation must always be consistent with the punitive and deterrent purposes of doping, but at the same time it could be more responsive to the complexity of the situations and the evolution of diagnostic analysis techniques.

2. Briefly: characteristics and rigor of anti-doping regulations

Before proceeding with the analysis of the most recent cases and in particular the case of Jannik Sinner and the out-of-court agreement he signed out with WADA last January, to avoid the sports trial with the Court of Arbitration (CAS) which had already been scheduled for April, I'd like to give a quick reminder of the main characteristics of anti-doping regulations and the methods of analysis, with the necessary warning that since this is a very complex subject, I must limit myself to a few notes, just useful for the following considerations.

The most common definition of doping, in practice, refers to the intake of prohibited substances or the use of prohibited methods. However, reading Art. 1 of the WADA Code, a much broader definition emerges, namely: *“the occurrence of one or more of the antidoping rule violations set forth in Article 2.1 through Article 2.11 of the Code”* with reference to a plurality of hypotheses that range from strictly commissive conduct, related to prohibited substances and methods, to omissions, up to association with people already disqualified for doping or conduct aimed at dissuading other athletes from the obligation to report facts related to doping. All the hypotheses reported from Art. 2.1 to Art. 2.11 are those that you can read in the slide and include a series of punishment hypotheses for which even the attempt to use or the simple fact of possession of the substance is relevant, also without use or premonitory sign(s) of use of same. Italian criminal law doctrine defines this situation as *“soglia di punibilità anticipata”*



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meaning that relevance of behaviour lies in some acts or facts, also without any actual commission of the crime or unequivocal intention to commit the crime. The irrelevance of the subjective state of the athlete, from fraud to negligence to simple unawareness, already emerges from the words of Art. 2.1 which does not refer to the assumption but rather to the presence of a *“prohibited substance or its metabolites or markers in an athlete’s sample”*, placing, *in incipit*, the duty of the athletes *“to ensure that no prohibited substance enters their bodies”* and underlining how *“athletes are responsible for any prohibited substance or its metabolites or markers found to be present in their samples”* and also how *“it is not necessary that intent, fault, negligence or knowing use on the athlete’s part be demonstrated in order to establish an anti-doping rule violation under Article 2.1”*.

From this formulation that ignores any consideration of the subjective state of the athlete, an interpretative line of the entire anti-doping legislation emerges, aimed at sanctioning any relevant conduct, also in terms of objective responsibility, to achieve, on the one hand, a repressive purpose and on the other, a deterrent purpose.

Doping is also presented as multi-offensive behaviour and is seen as being against sporting loyalty understood as respect for the rules and as protection of fair competition between athletes; against health, since the intake of pharmacologically active substances or the use of prohibited methodologies and health treatments can compromise well-being and favour the onset, in more or less long periods of time, of irreversible pathologies; and against competitive equality and the randomness and reliability of results, especially in individual sports, with possible repercussions on sports betting.

Considering the strong ethical and legal disvalue and the possibility of damage to many personal rights and legal assets, it is not surprising that the anti-doping regulations have a very rigorous imprint. This is also reflected in the activity of the bodies responsible for controls and the administration of justice in the case of violations of the anti-doping regulations: national anti-doping organizations (NADOs) and CAS, along with the international agencies responsible for protecting the integrity of sports disciplines. Scrolling through some summaries relating to the activity of NADOs, WADA and CAS, a very severe interpretative line emerges, which has led to the sanctioning of athletes who had not deliberately committed any illicit conduct but had rather been victims of contamination by food substances or drugs, particularly in the case of controls carried out in an out-of-competition way. A rigorous interpretative line may appear appropriate in the case of negligence by the athlete, as in the *Cilic case (Croatian tennis player sanctioned for taking the banned substance niketamide due to semantic confusion with the vitamin nicotamide, given his lack of knowledge of the French language and the failure to check the components of the tablets taken, also through a translator)*. In other cases, it appears excessive in not considering the subjective state of the athlete and the possibility of uncontrollable external interventions (*as in the second Schwazer case, in which CAS did not accept the findings on the possible manipulation of the biological samples and the low dosage of the substance, such as to suggest involuntary contamination; the same evidence, however, was accepted by the Court of Bolzano which declared the walker not guilty of the crime of doping*) or the hypothesis of food contamination (*as in the case of the motorcyclist Iannone, for whom, despite the thesis of food contamination due to food eaten in a non-EU country which showed the presence of an anabolic steroid in biological samples, in minimal and occasional quantities, , CAS imposed a four-year disqualification; or again in the case of the volleyball player Sylla who, in 2017, was the victim of food contamination and managed to demonstrate her innocence as a result of the corresponding contamination also to the detriment of another athlete from another country, who was a guest at the hotel: although she was not disqualified, however, during the precautionary*



suspension phase she lost the possibility of playing in the 2017 European Championships).

Very particular and often remembered as the “kissing theory - case” is the case of the tennis player Richard Gasquet who, having tested positive for the metabolite of cocaine, defended himself by asserting that the substance had entered his body following kisses with a girl, met during a tennis tournament in the US and with whom he had exchanged long effusions but who had not revealed that she habitually used and had used, also on the evening they spent together, narcotic substances; based on the reliability of the tennis player’s statements and some analyses of the girl, which showed that she was actually a regular cocaine user, the tennis player’s good faith theory was accepted since imagining a contamination from a kiss appeared to be an “unrealistic and impractical expectation”.

As already mentioned, the case law on doping appears to be very rich and complex. However, in recent years, cases of involuntary contamination have emerged with increasing frequency, both through food and drugs, with the detection of increasingly lower levels and dosages due also to increasingly accurate and in-depth analysis techniques.

Research on medical diagnostic techniques, in fact, allows for an ever-increasing refinement of both the investigation methods and the isolation and evidence of useful results, in terms of the presence of minimal quantities of substances. To indicate the phenomenon, the term “microdosing” is used, even if normally it is used in the context of the criminal relevance of narcotic and psychedelic substances. In relation to substances prohibited by anti-doping regulations, microdosing can be understood as a value that suggests involuntary contamination and which, furthermore, has no impact on athletic performance. However, it should be considered that, in terms of a literal and rigorous interpretation of the anti-doping regulations and in particular of Art. 2.1 of the WADA Code, the presence, even in microdosing, of a prohibited substance constitutes doping and, therefore, determines the athlete’s liability. Furthermore, by virtue of the provisions of paragraph 1 and the general duty of the athlete to prevent the substance from entering their body, even a microdose due to involuntary contamination is illegal and could lead to disqualification.

Up to this point, we have spoken about the literal interpretation of the regulation.

But from this point on, we should consider how many sources of involuntary contamination there may be that could lead to the presence of microdosing of a prohibited substance, which is not relevant for sports performance but relevant for the purposes of anti-doping control: a handshake, a refreshing drink during a competition, touching the surface of a tool previously touched by a subject who had a compound containing prohibited substances on their hands, some food or drink in the out of competition phase but, as in the Iannone case, consumed in non-EU countries with less stringent regulations on the use of anabolic substances in livestock farming. The picture that emerges is particularly complex and could transform the athletes’ duty of diligence, who are already subject to the whereabouts system if they are top level athletes, into a sort of *probatio diabolica* for involuntary contamination and irrelevance of microdosing, as the two cases involving Swiatek and Sinner last year seem to demonstrate.

3. The Iga Swiatek case

In September 2024, Iga Swiatek, a Polish tennis player (at that time) ranked number 1 in the women’s world ranking, received notification of a positive result in an anti-doping test. The test had been performed a few days after being eliminated from the US Open tournament and when she was about to play another tournament in Asia. It was carried out in the first half of August, in the US, for the substance trimetazidine,



with a concentration of 0.05 ng/ml (this is a very low concentration and completely irrelevant to athletic performance). Retracing the events of the days in question, the tennis player recalls having taken a drug against insomnia, a common over-the-counter drug that does not contain the prohibited substance in question. However, it was found to be contaminated with the substance from an analysis, just as another bottle, still unopened and purchased at the same time, was found to be contaminated. The analyses conducted show that the contamination had occurred during the production phase of the drug, therefore before or during packaging, so it was completely impossible for anyone who had taken it, in complete good faith, to hypothesize the contamination and the possibility of ingesting a prohibited substance. At the conclusion of the investigation, in November 2024, ITIA imposed a one-month ineligibility period, which the tennis player accepted, having already had to give up participation in some tournaments during the precautionary ineligibility period. Subsequently, on 20 January 2025, WADA released a statement in which it declared that it was waiving any possible appeal to CAS against ITIA's decision, since the explanation regarding contamination during the production phase appeared well-proven.

(Slide: Statement – “The World Anti-Doping Agency (WADA) confirms that, following a thorough review, it will not appeal to the Court of Arbitration for Sport (CAS) in the case of Polish tennis player Iga Świątek, who tested positive for trimetazidine (TMZ), a banned substance, in August 2024. On 28 November, ITIA, the independent body that delivers anti-doping programmes on behalf of the International Tennis Federation, announced that Ms. Świątek had accepted a one-month ineligibility period after ITIA determined that the positive test for TMZ was caused by a contaminated melatonin product, regulated as a drug in Poland and sourced from a reputable pharmacy in that country. WADA conducted a full review of the ITIA decision file, which was received on 29 November. WADA scientific experts confirmed that the specific scenario of the contaminated melatonin, submitted by the athlete and accepted by the ITIA, is plausible and that there would be no scientific basis to challenge it at CAS. Furthermore, WADA sought advice from external legal counsel, who found that the athlete's contamination explanation was well-substantiated, that the ITIA decision was in accordance with the World Anti-Doping Code, and that there was no reasonable basis to appeal to CAS”).

4. The Jannik Sinner Case

The Sinner case appears to be much more complex, carrying greater media resonance. It has been discussed on all sports news outlets and has animated the debate among sports law scholars.

The case is well known: during two checks carried out in March 2024 (during the Indian Wells tournament), blood analyses of the Italian tennis player revealed the presence, albeit in micro-dosage (a few millionths of a gram), of clostebol, a banned anabolic steroid included in the WADA prohibited list. The quantity detected was minimal and did not present the possibility of influencing any athletic performance.

The cause of the contamination was immediately identified: a masseur of Sinner's technical staff was using a healing cream for a wound to a finger. The cream contained clostebol and, as the masseur performed several massages on the tennis player with his bare hands, he passed on the substance through epidermal contact.

The ITIA accepted the defence arguments presented by the Italian tennis player's lawyers, supported by statements of staff members, including that of the athletic trainer who claims to have given the drug to the masseur who then contaminated Sinner by performing a bare-handed massage. The dispute



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ARE TOO STRINGENT REGULATIONS ABOUT DOPING REALLY A
PROTECTION OF THE INTEGRITY OF SPORT?***

resolution procedure, conducted by the independent body Sport Resolution, also led to the acquittal of the Italian tennis player, recognizing the total and absolute involuntary nature of the intake, considering the quantities of the substance and the methods of contact. The only sanction that was imposed was disqualification of the result obtained in recent the Indian Wells tournament and the subtraction of the related points in the general ranking.

The declaration of not guilty by ITIA, however, was subsequently contested by WADA which appealed to CAS asking for a suspension from 12 to 24 months for objective liability connected to the activity of the staff. In accordance with the World Anti-Doping Code, in fact, the quantity of the substance is irrelevant as liability is linked to the simple presence of a substance in an athlete's body. Moreover, Sinner had an objective responsibility for the actions of his staff. In the appeal to CAS, WADA also requested the application of the ineligibility period without any consideration of Art. 10.5 of the World Anti-Doping Code and, in addition, confirmation of the disqualification of the results of Indian Wells but not disqualification of the results achieved in other tournaments, including the US Open in September 2024.

News of the appeal by WADA had a wide media echo and animated a lively debate especially in relation to the excessive rigidity of the rules of the Anti-Doping Code and the structure of objective responsibility. The succession of statements released by experts in both medical and legal fields have gradually heated up the debate between the “innocentists”/supporters of the ‘innocent’ theory, convinced supporters of a modification to the rules of the World Anti-Doping Code, and the “guiltists”/ supporters of the ‘guilty’ theory, convinced instead of the need to continue along the lines of previous decisions according to a very strong line of intervention.

Looking at the case history of appeals presented by WADA to CAS against decisions of independent evaluation bodies or federal bodies for the reform *in peius* of the sanctions imposed for doping, a generally unitary interpretative line emerges in accepting the requests for greater severity: for example, we can recall the Dupik case, in which CAS didn't accept the decision taken by the International Canoe Federation and imposed 4 years of ineligibility; the Moreira Silva case, in which CAS didn't accept the decision of the Anti-Doping Authority of Portugal and imposed 8 years of ineligibility; the Sun Yan case, characterized by strong political pressure on the International Swimming Federation in which CAS imposed 4 years and 3 month of ineligibility.

On the other hand, there are very few cases in which CAS agreed a reduction of the period of ineligibility. In recent years, we note the case of the Australian swimmer Shaina Jack, in which CAS reduced the 4 year ineligibility period imposed by the Australian Anti-Doping Authority, supporting the theory of involuntary contamination on the basis of the “more probable than not” criterion and with a decision taken by a majority (and not unanimously) of the members of the panel.

About the actual Sinner Case, the discussion by CAS, with a closed-door procedure, had been scheduled for April 16 and 17 (2025), however at the end of January (2025) news of an agreement between WADA and Sinner was released: it was a sort of plea bargain which concluded the entire case with a three-month suspension for the Italian tennis player who will therefore be able to serve the ineligibility period in the months of February, March, April and return to activity from May 4 (2025), therefore, in time to participate in the main tournaments of the season, first of all “International BNL Italy”/“Internazionali BNL d'Italia” in Rome and then “Rolland Garros” in Paris.

Case closed and solution found?

Only on paper, since the agreement that avoided litigation before CAS has been the subject of analysis



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PROTECTION OF THE INTEGRITY OF SPORT?***

and criticism with the consolidation of two parts: one that complains about the absurdity of the anti-doping regulations and considers the three-month's ineligibility an unjust sanction, given the lack of wilfulness and knowledge of the entire situation on the part of the Italian tennis player; the other that, instead, considers the situation too advantageous and complains about a possible disparity in treatment between the world number 1, who is a very well-known athlete with huge financial resources, and the hundreds of athletes accused of doping due to objective responsibility who, instead, must accept sanctions and ineligibility, even if unjust, not having the financial means and methods to appeal to CAS. Again, during the debate, a critical point has been focused on: the comparison of the Sinner case to the already mentioned Sviatetsk case, considering how in both cases agreeing for few weeks or few months of ineligibility avoided the risks of a much longer period of ineligibility.

Furthermore, compared to the previous cases, Sinner's was the most “mediatic” and caught the attention of supporters and specialized operators and scholars, maybe determining a turning point on the part of the WADA governance itself. Some representatives have released interviews regarding major changes that will be made to the World Anti-Doping Code from 2026/2027, with the provision of exemptions for microdosing and in particular for involuntary conduct that, when proven, is supported by good faith and correctness. Precisely on microdosing, moreover, the issue intersects with the results of technical and technological progress: the ever-increasing precision of the results obtained from the checks, also using AI tools, leads to the isolation of markers of even infinitesimal quantities that previously could not be detected. It follows that legislation must be adapted so as not to transform legislation into hypotheses of extreme iniquity in the name of extreme rigor leading to sanctioning athletes who have no responsibility and who are found to be “contaminated” by not only by absolutely irrelevant quantities regarding physical performance but also of any negative moral evaluation that, where present, must correctly lead, in any case, to sanctions in the case of narcotic substances and psychotropic effects. The new rules have been announced, albeit still informally, as being operational from 2026 or 2027: this time frame allows, on the one hand, to better develop general clauses that will then have to deal with the technical evolution dominated by AI and, on the other, also allows to dispel any doubts about alleged favoritism or *ad personam rules* for the current world ranking number 1 tennis player.

With regard to this latter point, it seems appropriate to highlight how the agreement falls within the rule of Art. 10.8.2 (case resolution agreements rule) of the WADA Code, for which, in particular situations not fully falling within the framework of Code sanctions, there may be an equity decision with the provision of a sanction, but at the same time reduction of the period of ineligibility, according to criteria of proportionality with the committed Code violation and the circumstances of the same. The case resolution agreement foreseen in Art. 10.8.2 must be reached with the consent of all interested parties, which in the case considered are Sinner, WADA and ITIA. It also provides for recognition of the violation by the athlete and acceptance of the consequent ineligibility period: once the agreement is signed, it cannot be subject to review or appeal (Slide: *The decision by WADA and the Anti-Doping Organization to enter or not enter into a case resolution agreement, and the amount of the reduction to, and the starting date of, the period of ineligibility, are not matters for determination or review by a hearing body and are not subject to appeal under Article 13*).

In light of this consideration, it can therefore be stated that, contrary to what is claimed by most critics, in the Sinner case no favorable evaluation was made solely due to the world ranking and the fame of the athlete: actually, Art. 10.8.2, had already been used several times since its introduction into the Code in 2021.



Moreover, there is another point of relevance: Art. 10.8.2, as mentioned, constitutes an innovation of recent years and therefore can be read as a confirmation of the need for constant work of adaptation of the rules of the World Anti-Doping Code in response to changes in social communities and to evolution and progress of studies and research in technological and scientific fields.

5. Hypothesis of reform of the WADA Code: protection of health and sports ethics

The same innovations foreseen for the Code over the next few years, including the regulation of micro-dosing hypotheses, are in line with the direction of a less strict regulation with more attention to the evaluation of particular circumstances of individual cases that do not fall within the established hypotheses of voluntary and conscious illicit conduct. Due indeed to the improvements and progress made in bio-analysis techniques and in recognizing the presence of even minimal components of prohibited substances, a considerable increase in cases classified as doping under the WADA Code and sanctionable with long periods of ineligibility could be envisaged.

This progress in bio-analysis techniques, allowing for more certain and reliable results, is one of the most evident critical issues. Moreover, it also allows for the highlighting of dosages that previously would not have been detectable and, due to their minimal consistency, do not have any influence on the athlete's performance. Considering also the growing social complexity in which the world of sport and competitive athletes have fallen, the fear of involuntary contamination could be reflected in the behaviour of athletes and also lead to risks for their health. This last sentence may seem illogical, yet we can consider two situations, one that actually happened and the other only imaginary; or maybe, even this latter actually happening but not in the light of media or public opinion.

The first: during a competition in Australia, a few days before the start of the Australian Open 2025, the British tennis player Emma Raducanu was bitten by an insect and presented a redness with a visible wheal. However, she refused to use sprays and/or other therapeutic drugs whose composition she was not sure of, fearing the possibility of involuntary contamination with substances classified as doping. As stated during the press conference preceding the tournament, the tennis player preferred to take a risk for her health, postponing any treatment, rather than use drugs that could contaminate her, even involuntarily and for a therapeutic purpose. So, she chose a health risk so as not to run a doping risk.

The second: let's imagine the possible repercussions of contamination anxiety in younger athletes, who could develop obsessive forms of control over their diet and, more generally, over their daily life, living with the fear of leaving bags and gear or food and drinks unattended. This latter hypothesis seems extreme yet not entirely improbable, precisely because of the many and varied possibilities of involuntary contamination that can occur in daily life, both on and off the sports field. As time passes and these anxiety situations consolidate, the athlete may develop an emotional and psychological problem that could have repercussions on sports performance and also on lifestyles.

Even in this imaginary case: Athletes could choose a health risk, not to run a doping risk.

A regulation that is more attentive to the behaviour of athletes and subjective emotional states, that could characterize the hypotheses classified as doping and the real incidence of microdosing and involuntary intake - a regulation that allows forms of evolutionary interpretation and adaptation to social and technological changes would undoubtedly be much more consistent with the purposes of protecting the athletes health and values of “clean” sport.

In this sense, the announced reforms of the WADA Code should move in the direction of a more careful



*“MICRODOSING” AND “INADVERTENT CONTAMINATION”.
ARE TOO STRINGENT REGULATIONS ABOUT DOPING REALLY A
PROTECTION OF THE INTEGRITY OF SPORT?*

consideration of the factual dynamics and awareness of athletes, measuring the sanctions, not according to abstract criteria but to the concrete circumstances in which the violation of the anti-doping rules matured. Greater flexibility of the rules does not automatically mean retreating in the fight against doping, which must maintain high levels of alertness and intervene to fight and sanction the phenomenon. It simply responds to needs that emerge from the evolution of scientific research and the changes maturing in the sports system and in civil society.

Even from a comparison with some cases from the recent past, it emerges that situations in which a subjective state of wilful or negligent conduct could be identified would not have been effected or ignored, as in the case of Maria Sharapova. An ineligibility period of 2 years was imposed due to her having taken a drug containing doping substances and due to failure of the staff to evaluate the composition of that drug.

Violations, conscious or carried out with negligence, that reveal the intake of a dosage relevant to performance are, and must continue to be, punishable conduct, but the same assessment cannot be applied, especially in terms of sanctions, for the hypotheses of contamination with microdosing or of an evidently involuntary nature, given that it can be traced back to situations that are not knowable or controllable by the athletes. These include contamination of drugs during packaging in the factory, or food contamination due to lack of controls in the supply chain where there are less rigorous State regulations, or even contamination due to events that cannot be traced back, in any case, to the activities or lifestyles of athletes.

The choice of the rules of the WADA Code and the various interpretations of CAS must be as responsive as possible to concrete and current interests and not only to abstract legal logic inspired by a greater or lesser degree of effectiveness of the sanction and its relevance. The primary value and centre of gravity of the entire system can only be the consideration of the athlete as a human person, and a correct anti-doping system can only be based on the dimensions of protection of the person/athlete. The well-being of the physical-biological sphere, through the protection of health and at the same time of the emotional-relational sphere through the safeguarding of sports ethics must be paramount.