# High on sport: the ethically unjustified inclusion of cannabis on the anti-doping list

Michel Riemersma 17-6-2011

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Universiteit Utrecht

Name: Michel Riemersma

Studentnumber: 3237427

Supervisors: dr. Jan Vorstenbosch

Olivier de Hon

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# **Summary**

The objective of my thesis is to morally analyze the inclusion of cannabis on the anti-doping list. Cannabis is relatively often identified in athlete's test samples and this causes a lot of controversy about the question whether cannabis should be included on the anti-doping list.

In my thesis I argue that the three criteria WADA uses to include a substance or method on the anti-doping list, do not provide a morally right justification for the inclusion of cannabis.

### I argue:

- (1) Cannabis is not performance enhancing.
- (2) Although cannabis can be harmful to the health of an athlete, I argue that this should only be a matter of concern for sport organisations if the substance is performance enhancing.
- (3) I provide a definition of 'the spirit of sport' which is grounded on the normative framework that makes a sport into what it is. Using this definition I argue that cannabis is not contrary to 'the spirit of sport'.

I add two other arguments against the inclusion of cannabis on the antidoping list:

- (1) Prohibiting the use of cannabis is interfering with the privacy rights of athletes.
- (2) Given the limited resources of the anti-doping organisations, it is morally wrong to spend any resources on the prohibition of cannabis.

I conclude from these arguments that it is morally wrong to include cannabis on the anti-doping list.

### 1. Introduction

The inclusion of cannabis on the anti-doping list is a controversial issue in the sports world. Every year when the new anti-doping list is published, the Dutch Anti-doping Authority reacts to this by saying that cannabis should not be included on the list. They ground their claim on practical, financial and legal arguments. In this thesis I will add some moral reasons to remove cannabis from the anti-doping list. My objective is to argue convincingly that the inclusion of cannabis on the anti-doping list is morally wrong. In the first chapter I will provide some relevant background information regarding WADA and cannabis. In the second, third and fourth chapters I will argue that the three criteria that are given to include a substance or method on the anti-doping list cannot provide a justification for including cannabis. Besides a critique on the three criteria, I offer two other relevant reasons why cannabis should not be included on the list. First, it is against the privacy rights of an athlete to prevent him from using cannabis. This will be discussed in the fifth chapter. Second, the sixth chapter will present the argument that there is a moral duty to spend the limited resources that are available to fight doping in the best possible way. This entails that fighting cannabis is wasting valuable resources that could better be spent on fighting other substances or methods. Finally I will conclude that it is morally wrong to include cannabis on the antidoping list. The morally right thing to do is to remove cannabis from the list.

### 1.1 About WADA and the Code

The World Anti-Doping Agency (WADA) '[w]as established in 1999 as an international independent agency composed and funded equally by the sport movement and governments of the world'. To achieve its purposes, the sport organisations and national governments have provided WADA with a budget of 26 million US dollar in 2011. The rules of WADA are established in the World Anti-Doping Code (hereby referred to as the Code). The Code is the core document that provides the framework for harmonized anti-doping policies, rules and regulations within sport organisations and among public authorities'. As such it is mandatory

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<sup>&</sup>lt;sup>1</sup> About WADA: http://www.wada-ama.org/en/About-WADA/ (Accessed 28-5-2011)

<sup>&</sup>lt;sup>2</sup> WADA contributions: <a href="http://www.wada-ama.org/Documents/About WADA/Funding/WADA Contributions 2011 update EN.pdf">http://www.wada-ama.org/Documents/About WADA/Funding/WADA Contributions 2011 update EN.pdf</a> (Accessed 28-5-2011)

<sup>&</sup>lt;sup>3</sup> WADA anti-doping code 2009: <a href="http://www.wada-ama.org/Documents/World">http://www.wada-ama.org/Documents/World</a> Anti-Doping Program/WADP-The-Code/WADA Anti-Doping CODE 2009 EN.pdf (Accessed 28-5-2011)

<sup>&</sup>lt;sup>4</sup> WADA anti-doping code introduction: <a href="http://www.wada-ama.org/en/World-Anti-Doping-Program/Sports-and-Anti-Doping-Organizations/The-Code/">http://www.wada-ama.org/en/World-Anti-Doping-Program/Sports-and-Anti-Doping-Organizations/The-Code/</a> (Accessed 28-5-2011)

for the International Olympic Committee, International Paralympic Committee, International Federations, Major Event Organisations, and National Anti-Doping Organisations to follow the Code. The Code applies to all athletes that are sporting under supervision of any of these sport organisations. In the Code the twofold purpose of WADA is set out:

- To protect the athletes' fundamental right to participate in doping-free sport and thus promote health, fairness and equality for athletes worldwide, and
- To ensure harmonized, coordinated and effective anti-doping programs at the international and national level with regard to detection, deterrence and prevention of doping.<sup>5</sup>

To ensure a doping-free sport, it is necessary to define what doping is. WADA defines doping as '[t]he occurrence of one or more of the anti-doping rule violations'. The anti-doping rule violations range from possession of a prohibited substance to presence of metabolites in an athlete's sample and from attempts to tamper with doping controls to failing to be available for a doping test.

Which substances and methods are included on the anti-doping list (accompanying the Code) is defined by three criteria.<sup>7</sup> To be included on the anti-doping list, a substance or method has to meet '[a]ny two of the following three criteria:

- Medical or other scientific evidence, pharmacological effect or experience that the substance or method, alone or in combination with other substances or methods, has the potential to enhance or enhance sport performance;
- Medical or other scientific evidence, pharmacological effect or experience that the use of the substance or method represents an actual or potential health risk to the Athlete;
- WADA's determination that the use of the substance or method violates the spirit of sport described in the introduction of the Code'.

<sup>&</sup>lt;sup>5</sup> WADA anti-doping code 2009, p. 11 (Accessed 28-5-2011)

<sup>&</sup>lt;sup>6</sup> WADA anti-doping code 2009, p. 18 (Accessed 28-5-2011)

<sup>&</sup>lt;sup>7</sup> A fourth criterion, that is not relevant for this thesis, is on itself sufficient basis to include a substance or method in the anti-doping list: the substance or method has the potential to mask the use of other prohibited substances or prohibited methods.

<sup>&</sup>lt;sup>8</sup> WADA anti-doping code 2009, pp. 32-3 (Accessed 28-5-2011)

The third criterion is further explicated in the Code. 'Anti-doping programs seek to preserve what is intrinsically valuable about sport. This intrinsic value is often referred to as "the spirit of sport", it is the essence of Olympism; it is how we play true'. In a comment to the criteria, WADA explains the idea that two out of three criteria should be fulfilled:

None of the three criteria alone is a sufficient basis for adding a substance to the Prohibited List. Using the potential to enhance performance as the sole criterion would include, for example, physical and mental training, red meat, carbohydrate loading and training at altitude. Risk of harm would include smoking. Requiring all three criteria would also be unsatisfactory. For example, the use of genetic transfer technology to dramatically enhance sport performance should be prohibited as contrary to the spirit of sport even if it is not harmful. Similarly, the potentially unhealthy abuse of certain substances without therapeutic justification based on the mistaken belief they enhance performance is certainly contrary to the spirit of sport regardless of whether the expectation of performance enhancement is realistic.<sup>10</sup>

# 1.2 Cannabis on the anti-doping list

The substance group of cannabinoids includes the following substances: 'Natural (e.g. cannabis, hashish, marijuana) or synthetic delta 9-tetrahydrocannabinol (THC) and cannabimimetics [e.g. "Spice" (containing JWH018, JWH073), HU-210] are prohibited'. Cannabis is one of the substance groups that is only prohibited in-competition. Out-of-competition an athlete is free to use cannabis. This is an important distinction that I will return to later in discussing the health argument and privacy rights.

<sup>&</sup>lt;sup>9</sup> WADA anti-doping code 2009, p. 14 (Accessed 28-5-2011) According to WADA the spirit of sport, is characterized by the following eleven values: ethics, fair play and honesty; health; excellence in performance; character and education; fun and joy; teamwork; dedication and commitment; respect for rules and laws; respect for self and other participants; courage; community and solidarity.

<sup>&</sup>lt;sup>10</sup> WADA anti-doping code 2009, p. 33 (Accessed 30-5-2011) I quote this at length because it is important for my further arguments to see what the idea behind the inclusion criterion is.

<sup>&</sup>lt;sup>11</sup> WADA anti-doping list 2011: <a href="http://www.wada-ama.org/Documents/World-Anti-Doping Program/WADP-Prohibited-list/To\_be\_effective/WADA\_Prohibited\_List\_2011\_EN.pdf">http://www.wada-ama.org/Documents/World\_Anti-Doping Program/WADP-Prohibited-list/To\_be\_effective/WADA\_Prohibited\_List\_2011\_EN.pdf</a> p, 8 (Accessed 30-5-2011)

<sup>&</sup>lt;sup>12</sup> Cannabis is the more common term for the whole substance group. Whenever I use the word 'cannabis' I refer to the group of cannabinoids.

<sup>&</sup>lt;sup>13</sup> WADA anti-doping list 2011, p. 8 (Accessed 30-5-2011). The other substances that are only prohibited incompetition are stimulants, narcotics and glucocorticosteroids.

Cannabis is often detected in an athlete's urine sample. The athlete's urine is checked for multiple substances and if traces of cannabis <sup>14</sup> are found that are above the WADA determined threshold that divides passive and active users of cannabis <sup>15</sup>, the athlete will be suspended. The detection method used is not capable to determine the exact time the substance was used. That this is problematic becomes clear if the timetables of the activity of the substance are compared to the timetables of traces of the substance in the urine. If the cannabis is smoked it starts to be active after half a minute, reaches its maximum effect after 20-30 minutes and remains active for 2 or 3 hours. If the cannabis is processed in food, the consumer experiences the effects after 1-2 hours and the chemicals can remain active for 5-12 hours. However, the detection of recent cannabis use is an imperfect science. Metabolites of cannabis can be found in urine samples until at least 3-4 days after use (infrequent users, for frequent users it can even be 77 days [30 days average for frequent users]). <sup>16</sup> Combining these two timetables shows that cannabis traces can be found long after it has been active. This means that it is impossible to conclude from urine samples whether the athlete has used cannabis during his athletic performance.

The analyses of athletes' samples in the anti-doping fight resulted in 5084 cases of prohibited substances identified worldwide in all sports during 2009.<sup>17</sup> The top-5 of most identified substances is as follows:

|   | Substance group                        | Number | % of all reported findings |
|---|--|--------|----------------------------|
| • | S1. Anabolic Agents                    | 3,297  | 64.9%                      |
| • | S8. Cannabinoids                       | 399    | 7.8%                       |
| • | S6. Stimulants                         | 325    | 6.4%                       |
| • | S3. Beta-2 Agonists                    | 303    | 6.0%                       |
| • | S5. Diuretics and Other Masking Agents | 273    | 5.4%                       |

<sup>&</sup>lt;sup>14</sup> The metabolite that laboratories search for is: 11-nor-delta 9-tetrahydrocannabinol-9-carboxylic acid. The abbreviation THC will be used for the active substance in cannabis: tetrahydrocannabinol.

<sup>&</sup>lt;sup>15</sup> There is a lot of debate about the viability of this distinction, but I do not want to discuss it. Passive smokers are second-hand smokers: they inhale the substance because someone else in their surrounding is smoking cannabis.

<sup>&</sup>lt;sup>16</sup> Saugy, M. et al. Cannabis and sport. In Br J Sports Med, No. 40, 2006, p. i14

WADA laboratory statistics report 2009: <a href="http://www.wada-ama.org/Documents/Science\_Medicine/Anti-Doping\_Laboratories/Lab\_Statistics/WADA\_2009\_LaboratoryStatisticsReport\_Final.pdf">http://www.wada-ama.org/Documents/Science\_Medicine/Anti-Doping\_Laboratories/Lab\_Statistics/WADA\_2009\_LaboratoryStatisticsReport\_Final.pdf</a> (Accessed 28-5-2011)

In the above table it is shown that the substance group of cannabinoids ranks second among the most identified substances. Only the anabolic agents like testosterone (2319 occurrences) are more frequently identified. Cannabinoids are more often detected than stimulants like cocaine (60) and ephedrine (44); alcohol (5); and hormones and related substances like EPO (56). Some National Doping Authorities (NADOs) are critical about the inclusion of cannabis on the anti-doping list. Because it is so often detected '[t]he NADOs mention they need extra resources because cannabis is on the prohibited list which requires extra result management and elaborate educational efforts to athletes and media'. <sup>18</sup>

In the remainder of this thesis, I will use the top substances of the anabolic agents (testosterone) and the stimulants group (cocaine) in comparison to cannabis.<sup>19</sup>

# 1.3 Definition of sport

In arguing that cannabis should not be included on the anti-doping list, I require a normative statement on the definition of sport. A definition of sport is needed to articulate the focus of the anti-doping policies. Is it in the performance enhancement criterion? In the health argument? Is 'the spirit of sport' a good representation of what sport is?

For the definition of sport I will use a theory that defines sport by looking at its intrinsic value. This will provide a better view on the definition of sport than a definition that also looks at the external factors that surround sports. Values like teamwork, joy and education are often found in sports, but I will argue that they are not intrinsic values of sport.

Vorstenbosch<sup>20</sup> argues that sport intrinsically is a social and rule-guided practice. As a practice it has an internal normative character that depends on two components. The first component is the human condition that establishes the parameters of the competition. The second component is a relative equality of circumstances for all athletes within a competition. I will elaborate on these components in chapter 4. I have chosen this definition of sport to claim that within the three criteria of inclusion, the emphasis should be on the performance enhancement criterion. Some substances and methods have the potential to make sport no

<sup>&</sup>lt;sup>18</sup> WADA working group costs report: <a href="http://www.wada-ama.org/Documents/About\_WADA/Funding/WADA\_ReportWorkingGroupCosts\_EN.pdf">http://www.wada-ama.org/Documents/About\_WADA/Funding/WADA\_ReportWorkingGroupCosts\_EN.pdf</a>, p. 21 (Accessed: 2-6-2011)

<sup>&</sup>lt;sup>19</sup> Top substances: most identified in athletes' samples.

<sup>&</sup>lt;sup>20</sup> Vorstenbosch, Jan. Drogredenen over doping. Een pleidooi tegen legalisatie van dopinggebruik in de sport. In *Filosofie en praktijk*, No. 19:1, 1998, p. 170

longer a human activity (as opposed to an activity of bodies) combined with the potential to create an unequal playing field in competition based on pharmacological advantages that are not intrinsically part of the normative character of sport. Placing the emphasis of the antidoping fight on the performance enhancement criterion is in accordance with the view of the Dutch National Anti-Doping Organisation: 'Article 4.3 of the World Anti-Doping Code clearly gives WADA the opportunity to weigh the three well-known criteria, and in our minds the performance enhancing characteristics of a particular substance should have the most impact in this weighing process'<sup>21</sup>.

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<sup>&</sup>lt;sup>21</sup> Netherlands reaction to draft 2011 Prohibited List International Standard: <a href="http://www.dopingautoriteit.nl/media/files/documenten/2010/NED%20comments%20to%20Prohibited%20List%202011.pdf">http://www.dopingautoriteit.nl/media/files/documenten/2010/NED%20comments%20to%20Prohibited%20List%202011.pdf</a>, p. 2 (Accessed 28-5-2011). Article 4.3 in the Code features the criteria for including substances or methods on the prohibited list.

# 2. Is cannabis performance enhancing?

The first criterion that WADA employs to include a substance or method on the anti-doping-list is whether it is performance enhancing. In this chapter I present some empirical statements on cannabis and its effects on athletes. I will argue that the empirical research regarding cannabis shows that it is a substance that can only enhance the performance in a very limited way. Furthermore, it is almost impossible to predict the exact effects of using the substance, making it a less attractive illicit option for athletes.

In arguing against the performance enhancing qualities of cannabis, I will start with an example that provides one of the best cases in favour of the statement that cannabis is a performance enhancing substance. I submit that if the argument fails for this case, then it will fail for all cases in which the performance enhancing effect is less probable. Cannabis can be perceived as a performance enhancing substance if only the positive effects (the effects that usually are aimed for by the users) are taken into consideration. 'It can have a euphoric effect, reducing anxiety and increasing the sociability of a player who may be particularly nervous before an important match. It can also have a relaxing effect after the game. In this way, cannabis can be considered as a doping product that calms the mind'. 22 However, these positive effects are usually accompanied by some negative effects. In two separate studies regarding sport and cannabis, Saugy et al. and Campos et al. have shown that infrequent cannabis use can lead to mild intoxication, sedative effect on behavior, slower reaction times, memory problems and/or tendency towards drowsiness.<sup>23</sup> Cannabis thus '[h]as a severe negative effect on most cognitive and motor functions, and thus it has a severe negative effect on almost all athletic performances'. <sup>24</sup> As is often the case with pharmaceutical substances, not every one of the mentioned effects would occur if someone uses it. For cannabis this could mean that the positive effect of reducing anxiety may occur, separate from the negative effects of deteriorating cognitive and motor functions. This could result in a performance enhancing effect in some sport situations. Anxiety is one of the main problems for professional athletes and minimising it would give them an edge on other competitors. Furthermore, even if the positive effects cannot occur without the negative effects, there can still be situations in which the negative effects are not of importance. For example, a penalty

<sup>&</sup>lt;sup>22</sup> Saugy, M et al. Cannabis and sport, p. i14

<sup>&</sup>lt;sup>23</sup> Campos, Daniel R. et al. Marijuana as doping in sports. In *Sports Med*, No. 33 (6), 2003 and Saugy, M. et al. Cannabis and sport

<sup>&</sup>lt;sup>24</sup> Netherlands reaction to draft 2011 Prohibited List International Standard, p. 7 (Accessed 28-5-2011)

shoot-out after a football match or a golf player who has to make a put at the 18<sup>th</sup> hole. These are match-ending acts that require relatively little cognitive and motor skills. Anxiety is a major factor that makes it hard for a professional to perform such acts. The 'match-ending-character' of the act makes it possible to exclude the negative effects. The slower reaction times and drowsiness might make it harder to lift the cup or give a press-conference, but as the match has ended it cannot influence the athletic performance in a negative way.

The examples mentioned above provide a best case scenario for the performance enhancing qualities of cannabis. However, some further insights in the way cannabis works makes it clear that it is useless for an athlete to use cannabis as a performance enhancer even in such best case scenarios. Campos et al. have argued that '[d]ue to its self administration via the pulmonary route, the quantity of delta-9-THC inhaled will vary from one cigarette to another, making it difficult to know if the main effect will be anxiolytic or anxiogenic'. 25 They add to that the idea that '[i]mmediate effects can occur depending on the dynamic of the smoking act: the duration and time interval of each inhalation, as well as the quantity of smoke inhaled'. 26 For the athlete using cannabis, it is thus not possible to reasonably predict what the substance will do to his body and thus to his athletic performance. Even with the synthetic THC pills it is not possible to determine the effects. Using the synthetic version of THC makes it possible to determine the amount of THC that should enter the body, but it would still not be possible to determine the effects of the substance. Theoretically this is the case for every pharmaceutical substance, but for cannabis the odds of achieving the wished for effect are significantly lower than with other substances like cocaine or testosterone. Instead of relaxing the athlete, the cannabis using athlete might become even more anxious.<sup>27</sup> Or the THC might have no sudden effect on the anxiety-level, while it does degenerate the motor and cognitive skills.

So, even if the use of cannabis has the theoretical quality of enhancing some athletic performances, it is extremely unlikely that its use will actually enhance performance.

Compared to the anabolic agent testosterone, the performance enhancing qualities of cannabis

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<sup>&</sup>lt;sup>25</sup> Campos, Daniel R. et al. Marijuana as doping in sports, p. 398

<sup>&</sup>lt;sup>26</sup> Campos, Daniel R. et al. Marijuana as doping in sports, p. 396

<sup>&</sup>lt;sup>27</sup> Trimbos institute, cannabis: <a href="http://www.trimbos.nl/onderwerpen/alcohol-en-drugs/cannabis/cannabis-algemeen/effecten">http://www.trimbos.nl/onderwerpen/alcohol-en-drugs/cannabis/cannabis-algemeen/effecten</a> (Accessed: 30-5-2011). The Dutch 'Trimbos Institute conducts research on mental health, mental resilience and addiction. We put our research findings into practice in support of professionals who provide mental health and addiction services.'

are negligible. Testosterone can enhance the muscle strength of an athlete 5-20%.<sup>28</sup> Strength is a capacity that is directly related to many sport performances (e.g. weightlifting, combat sports). For cannabis there are no available numbers, but the above should prove that five percent is far above the enhancement qualities of cannabis. Compared to the stimulant cocaine, it becomes clear that not all so called 'social', 'party' or 'recreational' drugs are non-performance enhancing. While cannabis only has a theoretical quality of performance enhancing, the performance enhancing qualities of cocaine are actual. It provides its users with more energy: a temporary raise of muscle strength and endurance.<sup>29</sup> This is useful in a lot of sports.

The definition of sport that I have used entails that the performance enhancement criterion is the most important one. In refuting the 'best-case-scenario' for the potential performance enhancing qualities of cannabis I have argued that cannabis is not a performance enhancing substance. It should therefore, based on this criterion, not be included on the anti-doping list.

<sup>&</sup>lt;sup>28</sup> Hartgens, F. and Kuipers, H. Verboden middelen in de sport. Houten/Diegem: Bohn Stafleu Van Loghem, 2000, p. 167.

<sup>&</sup>lt;sup>29</sup> Trimbos institute, cocaine: <a href="http://www.trimbos.nl/onderwerpen/alcohol-en-drugs/cocaine/cocaine-algemeen/effecten">http://www.trimbos.nl/onderwerpen/alcohol-en-drugs/cocaine/cocaine-algemeen/effecten</a> (Accessed 30-5-2011)

# 3. The health-argument: a Millian approach

Having argued that the performance enhancement requirement is not capable of including cannabis on the anti-doping-list, I now turn to the second requirement: it represents an actual or potential health risk to the athlete. I will first argue that cannabis indeed is potentially harmful to the health of users. Second, I will argue, using the harm-principle of John Stuart Mill, that the requirement should not focus on the potential harm to the user himself, but to the potential harm that the user can cause to his opponents. The potential health risk to others is twofold: first, others can be harmed in a so called 'drug race'. Second, others can be harmed by reckless behavior caused by cannabis using competitors. I will deny both claims their validity and argue that prohibiting the use of cannabis cannot be justified on the basis of potential harm to others.

### 3.1 Cannabis and health

Cannabis is a substance that can harm the health of its users. Frequent use can cause '[d]etrimental effects on the lungs, oral cavity and upper respiratory tract'. (Saugy et al. p. i14). The Trimbos institute mentions some further health problems for frequent users:

- Headaches and dizzyness.
- Anxiety and nauseaness.
- Negative influence on reaction time, concentration and cognitive skills.
- High heartbeat and low blood pressure which may cause passing out.
- Addiction.

• Improves susceptibility to psychic disorders. 30

For occasional users the risk is lower. Often the mentioned effects do not occur with occasional use. Although cannabis is also used as a medicine<sup>31</sup>, it is clear that all the above is enough to conclude that cannabis is a substance that is potentially harmful to the health of its users if it is used frequently in high amounts. In comparison cocaine may cause: depressive feelings after use, addiction, higher heartbeat and pulse, higher body temperature, damage to

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<sup>&</sup>lt;sup>30</sup> Trimbos institute, cannabis (Accessed: 30-5-2011)

<sup>&</sup>lt;sup>31</sup> Campos, Daniel R. et al. Marijuana as doping in sports, p. 396. As a painkiller for patients who receive chemo-therapy.

the nasal cavity and/or exhaustion and delusions.<sup>32</sup> Testosterone can cause damage to sex hormones and organs, the heart and vascular system, the liver, may cause psychiatric disorders, epidermal problems and/or changes in distribution of body hair.<sup>33</sup>

# 3.2 Cannabis and the harm-principle

Although cannabis is potentially harmful to its users, I argue that this in itself is not a sufficient reason to include it on the anti-doping-list. Prohibiting an athlete to use a substance based on the idea that it is potentially harmful to himself is a controversial paternalistic act that requires moral justification. One of the most influential theories that can provide a moral justification for prohibiting an act is John Stuart Mill's harm principle. Mill claims that prohibition of a certain act can only be morally justified if that act is potentially harmful to others. Freedom is very important in Mill's liberal theory. No rational adult may be stopped from performing actions that harm or may harm only himself. 'The sole end for which mankind are warranted, individually or collectively in interfering with the liberty or action of any of their number, is self-protection. That the only purpose for which power can be rightfully exercised over any member of a civilized community, against his will, is to prevent harm to others'. 34 No matter the nature of the act, prohibiting an individual from performing it is considered paternalistic if the reason is provided in terms of protection against his own will. The freedom of a person is violated if he is prohibited from doing what he wants. Every rational individual is the judge of his own well-being and interfering with that to help him, without consent, can never be morally justified.

Two requirements to make a prohibition a paternalistic one are mentioned in the last sentence: the subject has to be a rational being and he is not consenting to an interference. If a subject is not rational (a child, an addict, a mentally ill adult), then interference in his life can be justified. He is no longer (or not yet) the judge of his own interests. If a subject has consented with interference in his life, then there is no moral problem either. Consent is an often used concept in medical practice: harming (performing surgery involves cutting someone open, for example) is permitted, because the subject has consented to this treatment. Mill also adds an information requirement. If a person is not aware of the dangers he is about to encounter, others (and public authorities) should warn him about the risks. But if he is informed and still wants to go on with his risky act, no one is allowed to interfere. I shall not discuss this

<sup>33</sup> Hartgens, F. and Kuipers, H. Verboden middelen in de sport, pp. 168-73.

<sup>&</sup>lt;sup>32</sup> Trimbos institute, cocaine (Accessed 30-5-2011)

<sup>&</sup>lt;sup>34</sup> Mill, John Stuart. On Liberty: http://www.constitution.org/jsm/liberty.htm (Accessed: 2-6-2011)

additional requirement, but simply assume that athletes are informed about the potential risks of using cannabis. And even if they are not aware of the risks: it is a public task to inform persons about the potential dangers of drug use. It is not a risk that is particular to athletes.<sup>35</sup>

I will discuss the inclusion of cannabis on the anti-doping-list with this theory in mind. Harm may be described in different terms, but I will restrict my argument to the harm to health. After all WADA is only talking about harm to health in its inclusion requirements. W.M. Brown has argued, in line with Mill, that forbidding the use of drugs in sport is contrary to liberal ideals of self-reliance, personal achievement, and autonomy. According to Brown, '[i]n adopting such a paternalistic stance of insisting that we know better than the athletes themselves how to achieve some more general good which they myopically ignore, we must deny in them the very attributes we claim to value'. <sup>36</sup> A prohibition on the use of cannabis for athletes will have this effect. WADA has to assume that they are a better judge of the interests of an athlete than the athlete himself. To justify such a standpoint, the harm-principle provides two options: irrationality and consent.

For the first justification to succeed, there needs to be a claim that cannabis-users by definition are irrational. A first way to argue in favor of this is by claiming that cannabis is an addictive substance. Addictions make users irrational in their longing for the drug. Addicts cannot rationally choose to stay away from their favorite drug. This would be a viable option to declare all cannabis-users as irrational, if every cannabis-user indeed was an addict. However, cannabis can only be addictive if it is used frequently.<sup>37</sup> It is possible for athletes to occasionally use cannabis without losing their rationality by becoming addicts. Prohibiting the use for all based on the idea that some are irrational cannot be justified with the harmprinciple. It would lead to what Teitler and Ram call 'by-catch': instead of only punishing the athletes who are addicts, all drug using athletes would be punished.<sup>38</sup> 'As the intention of the Code is "to catch them all", all these athletes are considered to be cheats and should be punished'.<sup>39</sup>

<sup>&</sup>lt;sup>35</sup> In chapter 4 and 5 I will further discuss the scope of the authority of sport organisations.

<sup>&</sup>lt;sup>36</sup> Brown, W.M. Paternalism, drugs, and the nature of sports. In *Ethics in sport*. Ed. Morgan et al. Champaign, IL: Human Kinetics, 2001, p. 140

<sup>&</sup>lt;sup>37</sup> Compared to testosterone and cocaine: both substances can be addictive. Hartgens, F. and Kuipers, H. Verboden middelen in de sport, p. 172 and Trimbos institute, cocaine (Accessed 30-5-2011)

<sup>&</sup>lt;sup>38</sup> Teitler, Steven, H. Ram. Analyzing the new world anti-doping code: a different approach. In *International Sport Law Journal* 2008, 1-2, p. 42

<sup>&</sup>lt;sup>39</sup> Teitler and Ram mention seven (fictional) examples of athletes that are suspended for drug use, including one who '[m]ay take a few puffs of marihuana during a party, with no intention of gaining any performance

A second way to argue that cannabis-users are irrational is to claim that athletes who use cannabis are not fully informed about their good: being successful in their sport. As cannabis has very limited performance enhancing qualities, while it is capable of damaging performance in a quite severe way, any athlete who uses cannabis has shown to be unaware of his own good. Such an athlete is incapable of mean-goal-rationality. However, this is not to say that his health is being harmed by his irrational action, and preventing (potential) harm to the health would have to be the grounds for this measure. An athlete who is incapable of strict mean-goal-rationality, could still be capable of making choices regarding his own health.

Another argument against the possibility to define cannabis-users as irrational is provided by the current method of execution of the cannabis prohibition. The use of cannabis is detected after a doping test has taken place. Above I have argued that it is impossible to conclude from urine samples whether the athlete has used cannabis during his athletic performance. To declare the athlete whose urine is filled with THC irrational by claiming that he has used a substance that is contrary to his athletic performance is thus not valid.

The second kind of justification for the prohibition of cannabis use in sport is that the athlete has consented to this prohibition. The athlete, who engages in sports organized by sport organisations which have conformed themselves to the WADA rules, is said to have consented to the prohibition of doping. <sup>40</sup> A very simple counterargument can be made: WADA makes a distinction between in- and out-of-competition use of dope. Some substances and methods are prohibited at all times, while some substances are only prohibited during the time an athlete is in competition. Cannabis is only prohibited in-competition. If the claim is made that an athlete has consented to the WADA rules, it thus only entails that he has consented not to use cannabis during a competition. The enforcement of the current prohibition goes by urine sample testing, but in using this method it is impossible to tell if the substance was used in- or out-of-competition. The prohibition thus goes beyond the rules to which the athlete is said to have consented.

The two possible justifications for prohibiting the use of cannabis in sport are thus unsuccessful. The cannabis using athlete cannot by definition be seen as irrational and he has not freely consented to never use cannabis at all. As judged by the harm-principle it is

enhancing advantage and without ever being aware that his behaviour involves the use of a prohibited substance'. Teitler, Steven, H. Ram. Analyzing the new world anti-doping code: a different approach, p. 42. <sup>40</sup> Consenting by competing is not uncontroversial, but I accept the idea for the sake of the argument.

morally wrong to include cannabis on the anti-doping-list grounded on the idea of protecting the cannabis using athlete against harm to his own health.

The harm-principle provides another approach to prohibiting the use of cannabis in sport. The harm-principle includes the clause of 'no prohibition as long as no one else is harmed'. <sup>41</sup> So, instead of focusing on the health risks for the user, it is also possible to focus on the potential of a substance to harm the health of others. How can cannabis use harm the health of others? There are two options. One of them is by 'forcing' other athletes to use the substance too. The other is by endangering others with cannabis-influenced behaviour during competition. In the next sections I will elaborate on both options.

# 3.3 A drug race: harm to the health of competitors

It might be argued that if one athlete uses a substance that is harmful to his health, he is creating a drug race within his sport. Other athletes may feel pressured to use the substance as well if this particular substance substantially enhances the performance, or at least if athletes perceive this to be the case. In that way the health of others is harmed by the initial action of the athlete who has started the drug race. WADA would then have a positive argument to prohibit the use of that particular substance in order to protect the health of other athletes. Murray is using such an argument: 'When a young person has devoted years to reach the highest levels in an event, only to find that to compete successfully he or she must take potentially grave risks to health, we have as serious a threat to human flourishing as many restrictions on liberty'. 42 However, as Murray argues, the drug race is, he implicitly assumes, limited to performance enhancing drugs: 'Where improved performance can be measured in fractions of inches, pounds, or seconds, and that fraction is the difference between winning and losing, it is very difficult for athletes to forego using something that they believe improves their competitors' performance'. 43 Cannabis is, as I argued above, not a performance enhancing substance. So there is no reason for other athletes to feel pressured into cannabis use if one of their competitors starts using cannabis. Even when taking into consideration that '[t]he potentially unhealthy abuse of certain substances without therapeutic justification based on the mistaken belief they enhance performance is certainly contrary to the spirit of sport regardless of whether the expectation of performance enhancement is

 $<sup>^{\</sup>rm 41}$  Paraphrase of John Stuart Mill. On Liberty (Accessed 2-6-2011)

<sup>&</sup>lt;sup>42</sup> Murray, Thomas H. The coercive power of drugs in sports. In *The Hastings Center Report*, vol. 13, No. 4 aug., 1983, p. 29

<sup>&</sup>lt;sup>43</sup> Murray, Thomas H. The coercive power of drugs in sports, p. 29

realistic, the drug race argument would still not be valid for cannabis. Athletes see cannabis usually as a recreational drug that has nothing to do with enhancing the athletic performance. Expecting athletes to perceive cannabis as a performance enhancing substance because another athlete has used it, is thus rather odd. Athletes will reasonably expect that their cannabis using competitor has used it for other than performance enhancing reasons.

### 3.4 Cannabis and reckless behavior

'Drugs, such as cannabis products, can be very serious in dangerous sports that rely on clear minds, quick reactions and split-second timing'. <sup>45</sup> Cannabis use can endanger the health of others if the cannabis using athlete is suffering the negative consequences of cannabis during the competition. Obviously he is endangering himself in the first place, but his dangerous behavior is likely to confront others with health risks as well. A cyclist who uses his brakes too late can bring down half a peloton; a rugby-player who does not pay attention in the scrum is likely to injure his teammates. An injury is easily sustained in contact sports if one of the athletes is not acting in a way that can be reasonably anticipated.

This sort of harm to the health of others is, in this argument, limited to substances that alter the behavior of athletes. Cannabis is such a substance and thus it could be argued, using the harm-principle, that cannabis use in sport should be prohibited. However, forbidding an act is a serious interference into the lives of all athletes and should only be institutionalized if there is no alternative that protects the other competitors in the same way as a prohibition would do. Prohibition should only be the last measure.

The prohibition of cannabis will probably not be the best way to further the goal of protecting athletes against the dangerous behavior of their competitors. It is rather odd to expect professional athletes who compete in sports in which clear minds and quick reactions are necessary, to use cannabis. It can only enhance their performance in a very limited way, while the negative effects that may occur are disastrous to their performance. Endangering competitors in such sports is not only a potential harm to the health of others, but also a potential harm to their own good sport performance. I assume without available data that only a very low percentage of athletes may be expected to use cannabis during or just before a match. The prohibition is then aimed at only those few athletes, but it interferes unjustly with the lives of all athletes who can and will abstain from using cannabis during the match, but

<sup>&</sup>lt;sup>44</sup> WADA anti-doping code 2009, p. 33 (Accessed 30-5-2011)

<sup>&</sup>lt;sup>45</sup> Campos, Daniel R. et al. Marijuana as doping in sports, p. 398

who are willing to use cannabis out of competition. The in- out-of-competition distinction once again is futile.

Furthermore, a prohibition which is enforced by detection afterwards is not likely to protect the health of competitors. The cannabis using athlete can already have harmed his opponents with his reckless behavior in a competition. For comparison: the alcohol prohibition in motored sports is enforced by tests before the match starts. Although the difficulties in enforcing a rule cannot in itself provide a principled reason to declare the rule unjust, this difficulty in enforcement is added to the above problems, making it even more unlikely to ever result in prevention of harm to other competitors.

Prohibition thus is an over-effective method. The catch-all method can result in catching hundreds of innocent athletes in order to catch the one who is guilty. As well as this, the guilty one is still allowed to act in a dangerous way, because he is only confronted with his use of cannabis after the traces of it have been found in his urine when the competition is over. The side-effects of trying to prevent one athlete from posing a risk for all other athletes involves the prohibition for other athletes to freely use a substance. This side-effect is an unreasonable burden.

### 3.5 Safety responsibilities of sport organisations

Still it can be argued that sport organisations have a duty to protect the competitors in their competitions. Like all organisations and companies, sport organisations have some moral responsibility towards the people who are acting under their supervision. The sport organisations set the rules and define the conditions under which the athletes act. If the conditions provide a risk to the health of the athletes, the sport organisation will decide whether that risk is appropriate. Generally sport organisations take all kinds of safety measures. Perhaps the most common example is the helmet cyclists must wear during competition. To protect the health of cyclists, the cyclist federation has decided to make helmets obligatory during competition. This is a paternalistic measure because it protects only the health of the cyclist himself. Some cyclists however were opponents of the obligation, because the helmets were lowering their performance. Helmets weigh a few hundred grams and every gram carried along on a steep hill is a gram too much. The helmets

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<sup>&</sup>lt;sup>46</sup> Union Cycliste Internationale statement on mandatory cycling helmets:
<a href="http://oldsite.uci.ch/english/news/news\_2002/20030502i\_comm.htm">http://oldsite.uci.ch/english/news/news\_2002/20030502i\_comm.htm</a> (Accessed 9-6-2011)

also decrease the ability to sweat properly and insects can get stuck in the helmet. If some cyclists refuse to wear helmets for these reasons, then other athletes might be forced to stop wearing helmets as well. The refusing athletes become free-riders and gain an unfair advantage. Wearing a helmet, a safety measure, would be a disadvantage in competition. Allowing the individual athlete to make a free choice regarding such safety measures will create the free-rider problem. To protect the health of the athletes, the sport organisations only option is then to make the safety measure obligatory for all. With cannabis use there is no performance enhancement, so there is no free-rider problem regarding cannabis use. Protecting the athletes against the health effects of cannabis cannot be justified by analogy to safety-measures like helmets in cycling. Risk prevention should only be made into an obligation if it is harming others.

The argument thus only applies to paternalistic measures, and for non-paternalistic measures (protecting athletes against other competitors) another argument is required. What if an athlete can harm the health of other athletes? Should the sport organisation prevent him from doing this? In arguments regarding working place safety, it is often claimed that organisations have a moral duty to ensure a safe working place. Employees should not be exposed to a greater risk then what is necessary to perform their jobs. For the sake of the argument I accept the idea about duties to ensure a safe working place without questioning it. Does this entail that WADA should prohibit the use of cannabis? I do not think so. The responsibilities of the organisation must be measured against the freedom to act of the athletes. The cannabis prohibition presents an unfair burden to all athletes in competition, and is incomparable with the theoretical harm avoided. The option to prohibit cannabis use by athletes both in and out-of-competition is, as I have already mentioned, over-effective.

In this chapter I have argued that although cannabis is a substance that might endanger the health of its users, that is not a sufficient reason to put it on the anti-doping-list. A prohibition of cannabis in sport can only be justified (in terms of the potential health risk criterion) if it is grounded on the protection of others. However, the protection of others still has to be measured against the potential side-effects of imposing prohibitions on all athletes. This weighing process indicates overly negative consequences for the total prohibition of cannabis: the prohibition of cannabis cannot be justified in terms of protecting the health of other athletes.

# 4. Cannabis and the spirit of sport

The third criterion that WADA uses to include a substance or method on the anti-doping-list is that it is contrary to 'the spirit of sport'. In this chapter I will argue that cannabis use is not contrary to 'the spirit of sport' because it is not interfering with the excellence of sport; and second, it is not lowering the health, fairness and equality in sport. Further, the role-model argument that is often brought forward against cannabis use in athletes is false.

# 4.1 WADA's definition

'The spirit of sport' is a concept that is hard to define. WADA has defined it in the following sense: 'Anti-doping programs seek to preserve what is intrinsically valuable about sport. This intrinsic value is often referred to as "the spirit of sport", it is the essence of Olympism; it is how we play true'. 'AT WADA claims that 'the spirit of sport' is characterized by eleven values: ethics, fair play and honesty; health; excellence in performance; character and education; fun and joy; teamwork; dedication and commitment; respect for rules and laws; respect for self and other participants; courage; community and solidarity. 'AT Those values are all concepts in need of further interpretation. Simply claiming that a sport must be characterized by 'fun and joy' is ambiguous. What does 'fun and joy' mean? I am not sure about it and I propose a different approach. Instead of listing concepts that are ambiguous, it is more useful to adhere to one clear concept of sport, though other related characteristics may feature implicitly in this concept as well. In chapter 1.3 I have presented a definition of sport and I will use it now to argue that cannabis is not contrary to the spirit of sport.

### 4.2 Alternative definition

In chapter 1.3 I argued alongside Vorstenbosch that sport as a practice has an internal normative character that depends on two components. The spirit of sport can then be defined as the internal normative character of sport that has the following two factors. The first factor is the human condition that establishes the parameters of the competition. The human body limits sport performances, within these limits an athlete can strive to reach excellence. To excel in sports is to reach for the limits of the human body. Secondly: a relative equality of circumstances is necessary for all athletes within a competition. The two components correspond with two of the values that are listed by WADA: the first with the value of

<sup>&</sup>lt;sup>47</sup> WADA anti-doping code 2009, p. 14 (Accessed 28-5-2011)

<sup>&</sup>lt;sup>48</sup> WADA anti-doping code 2009, p. 14 (Accessed 28-5-2011)

excellence in performance, and the second with the value of ethics, fair play and honesty. I will discuss the use of cannabis in sport in light of these two values.

# 4.3 Excellence in performance

Excellence in sport performance can be seen in two ways: excellence in the process and excellence in the result. Vorstenbosch<sup>49</sup> argues that it is the process that should be valued by sports spectators and athletes. The process of excellence in sport refers to how the match or competition has been played. Playing the game as it should be done (in accordance with the spirit of sport) is seen as more important than winning the game. The athlete who is prepared to win the game at all costs is not willing to display excellence in performance. Using playing methods that are not in accordance with the spirit of sport may ensure the athlete a good result, but is contrary to excellence in performance. Excellence in performance essentially refers to the human condition of sports. Sport is an activity performed by human beings, and not by mere bodies. Pharmacological preparation of the body to reach some excellent result in a sport match or competition turns the sport into an activity for mere bodies. Seeing CERA beating EPO is not what sport is about. How good the results may be is not important, as the sport will no longer be a human activity. It is the competition between humans that should interest us.

Robert Simon expresses a similar idea about the excellence of performance: 'when use of drugs leads to improved play, it is natural to say that it is not athletic ability that determines outcome but rather the efficiency with which the athlete's body reacts to the performance enhancer. But the whole point of athletic competition is to test the athletic ability of persons, not the way bodies react to drugs'. <sup>50</sup> He adds to this: 'where athletic competition is concerned, if all we are interested in is better and better performance, we could design robots to "run" the hundred yards in 3 seconds or hit a golf ball 500 yards when necessary. But it isn't just enhanced performance that we are after. In addition, we want athletic competition to be a test of *persons*. It is not only raw ability we are testing for; it is what people do with their ability that counts at least as much'. <sup>51</sup>

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<sup>&</sup>lt;sup>49</sup> Vorstenbosch, Jan. Drogredenen over doping. Een pleidooi tegen legalisatie van dopinggebruik in de sport, p. 177

<sup>&</sup>lt;sup>50</sup> Simon, Robert L. Good competition and drug-enhanced performance. In *Ethics in sport*. Ed. Morgan et al. Champaign, IL: Human Kinetics, 2001, p. 126

<sup>&</sup>lt;sup>51</sup> Simon, Robert L. Good competition and drug-enhanced performance, p. 127

How does the use of cannabis fit in with this perception of excellence in performance? For two reasons, I do not think cannabis can be seen as a pharmacological substance that is limiting the excellence of performance in sport. First, it is clear that what turns the human activity of sport into an activity for mere bodies is the performance enhancement that results from the use of pharmacological substances. Contrary to substances like testosterone or cocaine, cannabis is not enhancing the performance of athletes. It is thus not turning athletes into mere bodies. Second, cannabis is not necessarily contradicting the excellence of sporting performance. Its use may result in decreasing the motor skills of athletes, which may lead to a decrease in the excellence of the performance. But this is not necessarily so, as cannabis use might have no influence on athletic performance at all. There is no immediacy between the use of cannabis and the results of the athlete. The effects cannot be predicted for every case separately. Again, in some way this is the case for every pharmaceutical substance, but with cannabis it is significantly more difficult to predict the effects.

Combining these two reasons results in the idea that cannabis is not against the spirit of sport, but it does not further the spirit of sport; it is a neutral substance at this regard. Hence, WADA should not consider cannabis as part of its domain, as far as this criterion is considered, because cannabis has nothing to do with the excellence of sport.

# 4.4 Ethics, fair play and honesty

The equal playing field that characterises this value is a contested concept. Some argue that competition never takes place on an equal playing field. Athletes differ in talent and teams have different budgets. This ensures that top sport is never an equal and fair practice. Using pharmacological substances is then only one among many unequal factors. However, using the concept of sport that I described above, I argue that differences in talent make sport what it is, while differences established by pharmacological preparation add nothing to the practice of sport.

Differences in money between teams is relative. Professional teams generally compete against other professional teams, whilst amateur teams compete against amateur teams. It might be predicted, before a league starts, that the richest teams will end somewhere at the top of the ranking. However, the best team in the league may still occasionally lose to a lower ranking team. Whilst there is a relation, there is no immediacy between money and results. However, there is immediacy between performance enhancing substances and the results.

<sup>&</sup>lt;sup>52</sup> Vorstenbosch, Jan. Drogredenen over doping. Een pleidooi tegen legalisatie van dopinggebruik in de sport, p. 179

Simon describes how some capacities are relevant to sport competitions, while others are irrelevant: 'The point of such competition is to select those who do run the fastest, swing the hardest, or jump the farthest. The idea is not for all to come out equally, but for differences on outcome to correlate with differences in ability and motivation. Likewise, while some athletes may be predisposed to benefit more from a given amount of weight training than others, this trait seems relevant to selection of the best athlete. Capacity to benefit from training techniques seems part of what makes one a superior athlete in a way that capacity to benefit from a drug does not'. <sup>53</sup>

Differences in talent and training are thus part of a sport. The use of performance enhancing pharmacological substances is not. It is a difference that would turn sport into a practice of testing the effects of pharmacological substances on human bodies.<sup>54</sup>

The second component might in itself be unable to make a clear distinction between pharmacological and monetary ways to improve the sports performance, but combined with the first component, we can make the distinction clearly. Differences in money may result in disturbing the relatively equal playing field, but this disparity does not violate the human condition. The performance enhancing pharmacological substances are both violating the human condition and the relatively equal playing field.

While performance enhancing pharmacological substances are thus contrary to the spirit of sport, it should be clear that cannabis is not contrary to this aspect of the spirit of sport, because it does not enhance athletic performance.

### 4.5 Athletes as role models

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Another argument that is often brought forward to argue that cannabis use is contrary to the spirit of sport, is that cannabis using athletes present a bad example to youth and recreational athletes. According to this argument, athletes are role models for society and as such, should abstain from using drugs, especially because drugs such as cannabis are prohibited in most countries. The use of cannabis (and other acts regarding cannabis) is often seen as a criminal offense.

54 Vorstenbosch, Jan. Drogredenen over doping. Een pleidooi tegen legalisatie van dopinggebruik in de sport, p.

 $<sup>^{\</sup>rm 53}$  Simon, Robert L. Good competition and drug-enhanced performance, p. 127

I consider the role model-argument to be false for three reasons. First, as Lavin argues, the use of cannabis is not a problem that should specifically be a concern for sport organisations. '[A]thletes abusing recreational drugs do not use these drugs to further their careers qua athletes any more than drug-abusing certified accountants do. Recreational drug abuse may be a national tragedy; it is not peculiar to sports'. <sup>55</sup> It is unreasonable to expect athletes to adhere to stricter rules than people with equivalent role model-professions. A counter-argument is contained in the sports definition provided by Vorstenbosch. He argues that in sport, it is the process that is important and not solely the result. For an athlete the process is important because it is the process as well as the result that is admired by fans and makes a sport into what it is. As said above, cannabis is not necessarily influencing the process of a sport match or competition. This counter-argument is only valid for performance enhancing substances. Therefore expecting athletes to adhere to stricter rules regarding the use of cannabis is not justified.

Further, I question the premise that cannabis using athletes are influencing the behavior of recreational sportsmen and children in such a way that prohibition is required. Youngsters and recreational sportsmen are usually influenced by the performances of top athletes. If top athletes have some 'secret' method to enhance their performance, then others might be impressed and follow their lead in also trying that method. But once again, this argument is only valid for performance enhancing substances. For kids and amateurs, using a substance that a top athlete is using for non-performance enhancing reasons makes no sense in terms of improving their athleticism. Using cannabis recreationally may be detrimental to athletes as role models, but it can once again be argued that compared to other role models like musicians, politicians or actors, athletes are unreasonably burdened by prohibiting them the use of cannabis.<sup>56</sup>

Finally, athletes may commit all sorts of anti-social or even criminal behavior outside their profession. It could be argued that they set a bad example by acting in such ways, but it is questionable whether WADA is the authority that should sanction athletes who commit such acts. 'Athletes who choose to use cannabis may be setting a poor example to others, but so do athletes who speed on the highway, launder money, or perform other acts that society in general denounces. Such acts should not invoke doping related sanctions either'. <sup>57</sup> Using

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<sup>&</sup>lt;sup>55</sup> Lavin, Micheal. Sports and drugs: are the current bans justified? In *Ethics in sport*. Ed. Morgan et al. Champaign, IL: Human Kinetics, 2001, p. 170.

<sup>&</sup>lt;sup>56</sup> Kayser, Bengt. et al. Current anti-doping policy: a critical appraisal. In *BMC Medical Ethics*, No. 8:2, 2007

<sup>&</sup>lt;sup>57</sup> Netherlands reaction to draft 2011 Prohibited List International Standard, p. 7 (Accessed 28-5-2011)

cannabis, whether it is a criminal offence or not, is an act that should be treated by the WADA in the same way as it treats other criminal or anti-social behaviour. WADA should not interfere with cannabis using athletes, because cannabis use is an action that falls outside the scope of WADA's authority.

Concluding this chapter, I see no reason to prohibit the use of cannabis for athletes based on the criterion of the spirit of sport. Furthermore, I question the viability of the spirit of sport criterion. Pharmacologically all performance enhancing drugs violate the spirit of sport as well as the performance enhancement criterion. Scoring two out of three criteria is then a matter of definition: if a substance is performance enhancing, it is also automatically contrary to the spirit of sport.

# 5. Privacy

Having discussed the three criteria that WADA uses to include substances or methods on the anti-doping list, there are two other relevant arguments regarding the use of cannabis in sport that I will deal with. This chapter will feature an argument regarding the privacy of the athletes and the next chapter is about resource allocation. Privacy is an important theme in the anti-doping debate and should therefore be discussed. Resource allocation is not yet a big issue in the literature regarding the moral aspects of anti-doping policy, but I will argue in the next chapter that it should be an essential part of any policy that is concerned with the allocation of limited resources.

In the chapter about the health risk criterion, some of the arguments I discussed touched on the idea of privacy. The in- and out-of-competition distinction and the safety responsibilities of sports organisations have to a certain extent safety responsibilities towards the athletes who compete under their supervision. The WADA purposes explicated in the Code are an example of this sort of safety responsibility. WADA sees it as its responsibility to promote 'health, fairness and equality for athletes worldwide'. The question is how far this responsibility can reach. Is it only valid in-competition, or can it also apply to situations out-of-competition? The privacy of an athlete may be infringed if the sport organisation unjustifiably interferes with the athlete's private life.

# 5.1 A right to privacy

To give a clearer view of what is at stake in this argument, I will present the right to privacy as it is discussed in the liberal human rights tradition. The right to privacy relates to all sorts of actions and thoughts that a person is permitted to do or think without the interference of others. In article 12 of the UN Declaration of Human Rights, privacy is given the title of a legal human right: 'No one shall be subjected to arbitrary interference with his privacy, family, home or correspondence, nor to attacks upon his honour and reputation. Everyone has

<sup>&</sup>lt;sup>58</sup> The argument is specifically about sport organisations, not about individual clubs who might have additional arrangements in their contracts with individual athletes.

<sup>&</sup>lt;sup>59</sup> WADA anti-doping code 2009, p. 11 (Accessed 28-5-2011)

<sup>&</sup>lt;sup>60</sup> The moral human rights, not the legal human rights.

the right to the protection of the law against such interference or attacks'. <sup>61</sup> This resembles the Millian ideal of freedom that I mentioned above. The right to privacy is based on a distinction between the private and public life of an individual. <sup>62</sup> In his private life, an individual should not be disturbed by others. In his public life, an individual may be disturbed by others who limit his privacy. Others could be the government, neighbours, companies or other organisations. In the human rights tradition, anyone who is proposing to limit the privacy of someone has to present a very good justification. 'While there may be a justification for such expanded surveillance in the matter of, say, terrorists' threats to public safety, the case for its application in antidoping seems less obvious'. <sup>63</sup> What is more, it is usually the government who imposes privacy regulations on its subjects. As the legitimate authority, the government has the right and duty to balance the different rights and interests of its citizens. <sup>64</sup> When rights conflict with each other, the government is supposed to find a solution and make policy that favors one right over the other. Privacy might then be regarded as less important than safety. Or safety might be regarded as less important than privacy. Regardless, the infringement of one right needs to be justified in terms of another right.

# 5.2 WADA and privacy

For the sake of the argument, I am willing to assume that WADA has unlimited power and rights to enforce their (safety) rules within competition. However, this premise is not going to help the prohibition of cannabis in sport. Cannabis is a substance that is currently only prohibited in-competition. However it is not possible to define the time of use via urine sample analysis. Remnants of cannabis may be found after more than 70 days. To ensure that cannabis is not found in the athlete's urine sample, it would be necessary to absolutely prohibit the use of cannabis for athletes. The justification for such a prohibition would have to be given in the terms that WADA is giving in its purposes: cannabis use out-of-competition should present a health risk to the athlete and it should compromise the equality and fairness of competition.

<sup>&</sup>lt;sup>61</sup> United Nations declaration of human rights: <a href="http://www.un.org/en/documents/udhr/index.shtml">http://www.un.org/en/documents/udhr/index.shtml</a> (Accessed 7-6-2011)

<sup>&</sup>lt;sup>62</sup> This is a controversial distinction, but I am using it here only for clarification.

<sup>&</sup>lt;sup>63</sup> McNamee, Mike J. and Tarasti, Lauri. Juridical and ethical peculiarities in doping policy. In *J Med Ethics*, No. 36, 2010, p. 169. The surveillance they are talking about regards the WADA whereabouts rule. See article 14.3 of the Code.

<sup>&</sup>lt;sup>64</sup> It is controversial whether a(ny) government is a legitimate authority, but this is not important for my argument.

However, out-of-competition WADA has limited authority over athletes. They do not have the authority to decide for athletes whether a right in their private life should be interfered with, based on the promotion or protection of some other right. It may however be argued that WADA has authority over athletes who are training for competitions: training is an inherent part of competition and athletes who train should therefore be considered to be incompetition. This means that the balancing of the right to privacy of an athlete against the rights that are presented in the WADA purposes can take place at all times, because the athlete is then in-competition during his whole active career.

# 5.3 Cannabis and privacy

If I accept the last premise, that athletes are in-competition 24-7, the balancing of the right to privacy against health, fairness and equality in sport can begin. If we look at cannabis, how should this balancing turn out? Privacy outweighs the other interests, because cannabis is not contradictory to health, fairness and equality in sport. There is thus no reason to infringe on the privacy of an athlete by prohibiting the use of cannabis. 'The normal privacy rights enjoyed by everyone protect athletes from this intrusion into their private lives'. <sup>65</sup>

To strengthen this claim, I will use an argument WADA is providing in the Code with regards to tobacco smoking. <sup>66</sup> They argue that a substance or method that is only fulfilling one of the criteria should not be on the list. Smoking is the example they provide of a substance that is harmful to the health, but should not be on the list because it is not enhancing the performance of an athlete and neither is it harming the spirit of sport. Although WADA is not clarifying their tobacco example, I assume that their refusal to ban tobacco on account of health reasons has to do with the limitations regarding the privacy of an athlete that WADA adheres to. In this self-imposed limitation I conceive a line drawn between the sphere in which WADA deems itself responsible for the safety of athletes, and the sphere in which it exercises no say over an athlete's actions.

Cannabis should be treated in a similar manner to tobacco. Cannabis may cause harm to an athlete, but it is not enhancing the performance, nor is it contradictory to the spirit of sport. WADA should thus abstain from prohibiting cannabis use for athletes because it should be

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<sup>&</sup>lt;sup>65</sup> Thompson, Paul B. Privacy and the urinalysis testing of athletes. In *Ethics in sport*. Ed. Morgan et al. Champaign, IL: Human Kinetics, 2001, p. 194

<sup>&</sup>lt;sup>66</sup> WADA anti-doping code 2009, p. 33 (Accessed 30-5-2011)

treated in the same way as tobacco: it is a private matter and should not be of concern to WADA.

### 6. Doping hunt and resource allocation

In the previous chapters I have argued that cannabis is a substance that is not adequately fulfilling the three criteria of the WADA anti-doping-list. It cannot enhance performance, its health risks should not be something that WADA should worry about and it is not contrary to the spirit of sport. I compared cannabis to testosterone and cocaine. Those substances do enhance the athletic performance. All three substances increase the risk of harm to the health of the athlete through their use, but contrary to cannabis, testosterone and cocaine can create a drug race. The last criterion is the spirit of sport. Testosterone and cocaine are contrary to the spirit of sport because they create an unequal playing field and turn athletes from persons into mere bodies. By definition substances that are better performance enhancers are also contrary to the spirit of sport. Furthermore, in the previous chapter I have argued that cannabis should be treated in the same way as tobacco: international sporting authorities should respect the privacy of athletes to use this substance in their private lives.

While I argue that the prohibition of cannabis is not morally justified, in actual situations cannabis use is treated in the same way as substances like testosterone and cocaine. The same amount of time, energy and money is used to counter cannabis as is used to counter the other drugs. This presents a challenge to moral theories that consider the question of the allocation of scarce resources. In this chapter I will first, by analogy to the medical practice of organ allocation, argue that allocation of scarce resources is of moral concern. Second, I will argue that the prohibition of cannabis is making use of scarce resources - both time and money - that could better be used to fight against substances that clearly fulfill at least two of the three WADA criteria.

### 6.1 Resources allocation: a moral issue

Organ donation is one of the best examples that the allocation of scarce resources is a moral issue. There is a shortage of organs that are available for medical transplants. All people who are in need for an organ transplant have a moral claim on the organs that become available. The allocation of the currently available organs is thus not only going to make someone happy, but it is also going to deny some other people their moral right to be treated. The decision to favor the interests of one person over the interests of another is a moral decision and thus in need of moral justification. For example, allocating an organ to a person in which the likelihood of success from the transplant is low is questionable on moral grounds. Why

spend such valuable resources on someone who might not profit from it while there are others who could profit? In order to maximize the use of currently available resources, doctors prioritise healthy patients, who generally experience shorter recovery time and less medical complications.

I do not want to discuss whether the doctors in the example are morally justified in acting as they do. The example is meant to show that there always has to be some balancing of interests when the resources are scarce. This balancing is always a moral issue. This is also clear if we look at the circumstances of justice that John Rawls has put forward. 'The circumstances of justice might be described as the normal conditions under which human cooperation is both possible and necessary'. <sup>67</sup> The circumstances of justice include the condition that material resources are scarce. This condition is combined with the idea that '[m]any individuals coexist together at the same time on a definite geographical territory'. <sup>68</sup> This situation creates a conflict of interests. The existing resources have to be divided between individuals with competing interests. Against this background, decisions have to be made about the allocation of scarce resources. I will now present two different arguments that favour the idea that it is morally wrong to allocate any resources to the fight against cannabis use in sport.

### 6.2 Mill's Utilitarianism

A theory that can offer a good answer to the question as to how to divide the limited resources available WADA is utilitarianism. John Stuart Mill's utilitarianism is the theory that most clearly establishes the idea that a morally right act is an act that ensures the greatest amount of happiness for all. 'The creed which accepts as the foundation of morals, Utility, or the Greatest Happiness Principle, holds that actions are right in proportion as they tend to promote happiness, wrong as they tend to produce the reverse of happiness. By happiness is intended pleasure, and the absence of pain; by unhappiness, pain, and the privation of pleasure. [P]leasure and freedom from pain, are the only things desirable as ends; and that all desirable things (which are numerous in the utilitarian as in any other scheme) are desirable either for the pleasure inherent in themselves, or as means to the promotion of pleasure and the prevention of pain'.<sup>69</sup> An objective standard of the morality of an act emerges from this and it enables us to make laws and social arrangements that places '[t]he happiness, or (as

<sup>&</sup>lt;sup>67</sup> Rawls. Theory of Justice, p. 126. Harvard University Press, 1971

<sup>&</sup>lt;sup>68</sup> Rawls. Theory of Justice, p. 126.

<sup>&</sup>lt;sup>69</sup> Mill, John Stuart. Utilitarianism. Mineola, NY: Dover publications, 2007. Unabridged republication of the 4<sup>th</sup> ed. Published by Longmans, Green, Reader, and Dyer, Longon, 1871, p. 6

speaking practically it may be called) the interest, of every individual, as nearly as possible in harmony with the interest of the whole'. <sup>70</sup> Social arrangements, like an anti-doping-policy, are thus, according to this theory, supposed to promote the interests of all as well as realistically possible.

In addressing Mill's utilitarianism I do not intend to discuss all the possible consequences of the WADA anti-doping-policy. I restrict the evaluation to the two purposes that WADA conceives as its ultimate goals. The impact of the anti-doping-policy on the interests of all athletes is only measured by looking at the interests that are referred to in the two purposes of WADA. Health, fairness and equality are thus supposed to be promoted in a way that is as effective as possible. The greatest amount of health, fairness and equality in sport should be ensured for all athletes worldwide. That is the moral goal of the anti-doping-policy. The three criteria for including a substance or method on the anti-doping-list provide a good starting point to decide if the inclusion of cannabis is actually promoting the greatest amount of health, fairness and equality in sport for all athletes worldwide.

# 6.3 The right to health, fairness and equality in sport

The other argument I will present derives from rights-based theories. Its rationale can be found in the Code. The first purpose of WADA is 'to protect the athletes' fundamental right to participate in doping-free sport and thus promote health, fairness and equality for athletes worldwide'. Rights are: 'entitlements (not) to perform certain actions, or (not) to be in certain states; or entitlements that others (not) perform certain actions or (not) be in certain states'. WADA is speaking about the entitlements that athletes make against other athletes. They see themselves as the organisation that is responsible for protecting the rights of athletes to healthy, fair and equal sport. As an organisation they have a moral duty to ensure that these rights are protected. From this point of view, it would be morally wrong for WADA to spend their resources in such a way that these rights of athletes are not protected in the best possible manner.

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<sup>&</sup>lt;sup>70</sup> Mill, John Stuart. Utilitarianism, p. 15

<sup>&</sup>lt;sup>71</sup> WADA anti-doping code 2009, p. 11 (Accessed 28-5-2011)

<sup>&</sup>lt;sup>72</sup> WADA anti-doping code 2009, p. 11 (Accessed 28-5-2011)

<sup>&</sup>lt;sup>73</sup> Wenar, Leif. Rights, in *Stanford Encyclopedia of Philosophy*: http://plato.stanford.edu/entries/rights/ (Accessed 9-6-2011)

# 6.4 Anti-doping costs

In 2006, the WADA Working Group on Anti-Doping Costs presented a report to the WADA Executive Committee. The aim of this working group was to find any elements of WADA's work that could lower the costs and raise the effectiveness of the procedures which embody its purposes. However, the working group was limited in the manner it could present answers to their search in front of the executive committee. In relation to the List, the Executive Committee acknowledged the comments of the Working Group, but firmly reaffirmed that the substances on the List shall not be subject to any cost assessment but rather be included as a result of proper scientific discussion. The criteria for inclusion of substances and methods do not include cost analysis'. Arguing from the moral perspectives I have sketched above, I claim that this is a mistake of the WADA: to promote the WADA purposes it is necessary to include cost analysis to the substances and methods on the list.

This argument is in accordance with one third of the respondents of the working group's survey. They argue that they feel that the resources spend on cannabis (among others) could be better used in other terrains of the anti-doping program. 'The NADOs mention they need extra resources because cannabis is on the prohibited list which requires extra result management and elaborate educational efforts to athletes and media'. They '[f]eel that the educational efforts and legal fees associated with these AAFs [Adverse Analytical Findings] could be spent much more effectively in other areas of their anti-doping programs. Especially some of the responding NADOs are very critical of the presence of these substances on the prohibited list'. 76 It is both the fiscal demands of the cannabis prevention/detection program, as well as the time burden placed on staff which determine the costly nature of the program. 'These kind of cases may under the 2009 Code still be treated the same way as cases involving steroid or EPO users. Despite their likely outcome, these cases will still have to go through the entire test result management process and hearing process (including public disclosure) at a significant expense: possibly disproportionate impact for the athlete, as well as claiming a significant amount of anti-doping organisation's resources. Resources that many feel should be directed at different areas of fight against doping'. 77 Although these NADOs make a practical claim, I want to add to this a moral claim.

<sup>&</sup>lt;sup>74</sup> WADA working group costs report (Accessed 2-6-2011)

<sup>&</sup>lt;sup>75</sup> WADA working group costs report, p. 2 (Accessed 2-6-2011)

<sup>&</sup>lt;sup>76</sup> WADA working group costs report, p. 21 (Accessed 2-6-2011)

<sup>&</sup>lt;sup>77</sup> Teitler, Steven, H. Ram. Analyzing the new world anti-doping code: a different approach, p. 44. The kind of cases they refer to are cases '[w]here (i) because of the circumstances, such as the substance involved or the timing of the adverse analytical finding, it (ii) is unlikely that any period of ineligibility will be imposed'.

The moral claim is: it is morally wrong to spent any resources on the fight against cannabis if those resources could better be used to fight against substances or methods that are significantly more performance enhancing, present a greater risk to the health of users and other competitors, and cause greater damage to the spirit of sport. Using Mill's utilitarianism I claim that the act that will bring forth the most health, fairness and equality within the framework of WADA is: spend all resources available on programs that counter the use of substances that are actually harming the health, fairness and equality for athletes. The same goes for the rights-based argument: spend all resources available on programs that promote the fundamental right of athletes to health, fairness and equality in sport. If resources are used to fight substances that should not be on the list, this withdraws important means from the promotion of rights that WADA considers of utmost importance.

The most harmful and performance enhancing substances and methods deserve the most resources to be spent on them. In this thesis I have compared cannabis to the anabolic agent testosterone and the stimulant cocaine. It was clear that these substances are a greater threat to the health, fairness and equality of sport. The decision to include cannabis on the list thus does not only mean that the sports are protected against cannabis, but due to the actual limitation of resources it also means that the sports are less protected against substances like testosterone and cocaine. This means that cannabis, based on the resources-argument, should be removed from the anti-doping-list.

# 7. Conclusion

It is morally wrong to include cannabis on the anti-doping list. I came to this conclusion by arguing that cannabis is not fulfilling the three criteria that WADA uses to include substances on the anti-doping list. Cannabis is not performance enhancing. It may be harmful to the health of athletes, but this is not a sufficient reason for sport organisations like WADA to prohibit cannabis. Cannabis is not contrary to the spirit of sport. The only substances that can be contrary to the spirit of sport are performance enhancing substances. Two other arguments were provided. Prohibiting the use of cannabis is an unjustifiable interference within an athlete's private life. Furthermore WADA has a moral duty to spend scarce resources in the best possible manner. In the anti-doping fight, this means that the current resource allocation

to the prohibition of cannabis is morally wrong. For WADA to promote health, fairness and equality in the best possible way, it is necessary to remove cannabis from the anti-doping list.

### References

### **Articles:**

- Brown, W.M. Paternalism, drugs, and the nature of sports. In *Ethics in sport*. Ed. Morgan et al. Champaign, IL: Human Kinetics, 2001. pp. 130- 142
- Campos, Daniel R. et al. Marijuana as doping in sports. In *Sports Med*, No. 33 (6), 2003. pp. 395-399
- Kayser, Bengt. et al. Current anti-doping policy: a critical appraisal. In *BMC Medical Ethics*, No. 8:2, 2007
- Lavin, Micheal. Sports and drugs: are the current bans justified? In *Ethics in sport*. Ed. Morgan et al. Champaign, IL: Human Kinetics, 2001. pp. 169-180
- McNamee, Mike J. and Tarasti, Lauri. Juridical and ethical peculiarities in doping policy. In *J Med Ethics*, No. 36, 2010. pp. 165-169
- Murray, Thomas H. The coercive power of drugs in sports. In *The Hastings Center Report*, vol. 13, No. 4 aug., 1983. pp. 24-30
- Saugy, M. et al. Cannabis and sport. In Br J Sports Med, No. 40, 2006. pp. i13-i15
- Simon, Robert L. Good competition and drug-enhanced performance. In *Ethics in sport*. Ed. Morgan et al. Champaign, IL: Human Kinetics, 2001. pp. 119-129
- Teitler, Steven, H. Ram. Analyzing the new world anti-doping code: a different approach. In *International Sport Law Journal* 2008, 1-2, p. 42-49
- Thompson, Paul B. Privacy and the urinalysis testing of athletes. In *Ethics in sport*. Ed. Morgan et al. Champaign, IL: Human Kinetics, 2001. pp. 188- 195
- Vorstenbosch, Jan. Drogredenen over doping. Een pleidooi tegen legalisatie van dopinggebruik in de sport. In *Filosofie en praktijk*, No. 19:1, 1998. pp. 169-183

### **Books:**

- Hartgens, F. and Kuipers, H. Verboden middelen in de sport. Houten/Diegem: Bohn Stafleu Van Loghem, 2000
- Mill, John Stuart. Utilitarianism. Mineola, NY: Dover publications, 2007. Unabridged republication of the 4<sup>th</sup> ed. Published by Longmans, Green, Reader, and Dyer, Longon, 1871

• Rawls, John. Theory of Justice. Cambridge, MA: Harvard University Press, 1971

### **Internet sources:**

• About WADA:

http://www.wada-ama.org/en/About-WADA/ (Accessed 28-5-2011)

• Mill, John Stuart. On Liberty:

http://www.constitution.org/jsm/liberty.htm (Accessed 2-6-2011)

Netherlands reaction to draft 2011 Prohibited List International Standard:
 <a href="http://www.dopingautoriteit.nl/media/files/documenten/2010/NED%20comments%20t">http://www.dopingautoriteit.nl/media/files/documenten/2010/NED%20comments%20t</a>
 o%20Prohibited%20List%202011.pdf (Accessed 28-5-2011)

• Trimbos institute, cannabis:

http://www.trimbos.nl/onderwerpen/alcohol-en-drugs/cannabis/cannabis-algemeen/effecten (Accessed 30-5-2011)

• Trimbos institute, cocaine:

http://www.trimbos.nl/onderwerpen/alcohol-en-drugs/cocaine/cocaine-algemeen/effecten (Accessed 30-5-2011)

• United Nations declaration of human rights:

http://www.un.org/en/documents/udhr/index.shtml (Accessed 7-6-2011)

Union Cycliste Internationale statement on mandatory cycling helmets:
 <a href="http://oldsite.uci.ch/english/news/news\_2002/20030502i\_comm.htm">http://oldsite.uci.ch/english/news/news\_2002/20030502i\_comm.htm</a> (Accessed 9-6-2011)

• WADA anti-doping code 2009:

http://www.wada-ama.org/Documents/World\_Anti-Doping\_Program/WADP-The-Code/WADA\_Anti-Doping\_CODE\_2009\_EN.pdf (Accessed 28-5-2011)

• WADA anti-doping code introduction:

http://www.wada-ama.org/en/World-Anti-Doping-Program/Sports-and-Anti-Doping-Organizations/The-Code/ (Accessed 28-5-2011)

• WADA anti-doping list 2011:

http://www.wada-ama.org/Documents/World\_Anti-Doping\_Program/WADP-Prohibited-list/To\_be\_effective/WADA\_Prohibited\_List\_2011\_EN.pdf (Accessed 30-5-2011)

• WADA Contributions:

http://www.wadaama.org/Documents/About\_WADA/Funding/WADA\_Contributions\_2011\_update\_E
N.pdf (Accessed 28-5-2011)

WADA laboratory statistics report 2009:
 <a href="http://www.wada-ama.org/Documents/Science\_Medicine/Anti-Doping\_Laboratories/Lab\_Statistics/WADA\_2009\_LaboratoryStatisticsReport\_Final.">http://www.wada-ama.org/Documents/Science\_Medicine/Anti-Doping\_Laboratories/Lab\_Statistics/WADA\_2009\_LaboratoryStatisticsReport\_Final.</a>

<u>pdf</u> (Accessed 28-5-2011)

• WADA working group costs report:

http://www.wada-

<u>ama.org/Documents/About\_WADA/Funding/WADA\_ReportWorkingGroupCosts\_E</u>
<u>N.pdf</u> (Accessed 2-6-2011)

Wenar, Leif. Rights, in Stanford Encyclopedia of Philosophy:
 <a href="http://plato.stanford.edu/entries/rights/">http://plato.stanford.edu/entries/rights/</a> (Accessed 9-6-2011)