

WARM UP

The drug wars

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We get terribly excited about the issue of drugs in sport. The fear of anabolic agents or stimulants producing superhuman performance has dominated Olympic and professional team sports for many years. It seems however that doping has been present virtually since competitive sports began, with apocryphal stories of various potions being used in ancient times just as pharmacological agents are used today.

The World Anti-Doping Agency (WADA) list of banned agents gets ever longer and more complex and yet we still seem to have high-level athletes testing positive on a regular basis. Does this mean the process actually works or does it reflect a fundamental failure of the doping control mechanisms in sport? Why, for example, are non-performance-enhancing agents (eg marijuana) banned, and why are chess and bridge players (yes, they are apparently athletes too according to WADA) banned for using β blockers in competition?

If the system is so good then why do athletes not buy into the process? There are regular pronouncements on doping from the International Olympic Committee, WADA and other groups. Athlete commissions exist to advise these bodies, yet we keep seeing athletes at the highest levels test positive for banned agents or using banned doping methods.

Could it be that the administrative agencies themselves contribute to the problem? The ruthless approach adopted by key anti-doping personnel certainly is not endearing to the athletes generally, and the failure to acknowledge the fundamental differences between Olympic and

professional team sports has created a rift in the sports world. Given that the biggest doping issue in professional team sports is illicit drugs rather than performance-enhancing drugs, some re-thinking needs to occur. The approach to the use of illicit drugs is one of "name, shame and ban" rather than counselling and support, especially for first time offenders.

Could it be that the mission is not clearly spelt out? The pursuit of the Victorian ideal of a "level playing field" of sport played by amateur athletes really hasn't kept pace with the current view of sport as a TV vehicle for entertainment. Current day athletes need to buy into the underlying principles before they will embrace the desires of the administrators. It does raise the issue as to who decided that there would be banned agents in the first place!

Often the message is blurred—is the ultimate desire to protect the health of athletes or to protect sport? The recent press release in early October 2006 announcing that WADA and Interpol are to draw up a memorandum of understanding in order to push the fight against doping to another level raises a whole new set of concerns. If there is broad agreement among athletes and administrators to prevent doping then why should this approach even be necessary? Is it really necessary to prosecute and jail athletes to protect their health?

It is clear that the line between legal and illegal is increasingly blurred. The difference between altitude training in the mountains versus using a hypoxic

chamber is simply one of convenience, although the sports ethicists may see it as against the *spirit* of sport (whatever that may be!). Using gene products (eg bone morphogenic protein for fractures) or platelet-derived growth factors to speed up healing, as we routinely do with non-sporting patients, runs the risk of an athlete being banned from competition. We then have the double-whammy of athletes potentially being denied routine medical therapy for the treatment of injury where the treatment has no anabolic or performance-enhancing effect beyond the accelerated injury recovery.

Where then do we go when drugs such as Viagra (sildenafil) are used therapeutically for particular effects and yet can also be used to boost athletic performance at altitude,² or when drugs such as modafinil, armodafinil and CX717 are used to manipulate alertness in both normal people and combat soldiers.³ At what point does the therapeutic use of a drug become doping for an athlete? More importantly, who should make this determination?

If the existing system is so good, why doesn't it seem to work? Is it time to go back to the drawing board and start again or shall we simply push ahead and jail all athletes guilty of doping offences? Or shall we take it to the logical conclusion and convict all those athletes who even think of doping—let us have a new category for doping offences called "doping thought crime".

I think we have heard it all before, brother.

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REFERENCES

- 1 WADA. Press release, 2 October 2006. <http://www.wada-ama.org/en/newsarticle.ch2?articleId=3115331>
- 2 Hsu AR, Barnholt KE, Nicolas K, et al. Sildenafil improves cardiac output and exercise performance during acute hypoxia, but not normoxia. *J Appl Physiol* 2006;**100**:2031–40.
- 3 Lawton G. Get ready for 24-hour living. *New Scientist*. 18 February 2006;**2539**:34, <http://www.newscientist.com/channel/health/mg18925391.300-get-ready-for-24hour-living.html>.