THE ATHLETE IS ULTIMATELY RESPONSIBLE FOR WHAT GOES INTO HIS/HER OWN BODY

– ASADA

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Drugs in sport are typically grouped into those used as stimulants, those used to reduce tremors and heart rate and those used to alter body composition. Stimulants include amphetamines, ephedrine and cocaine, all of which stimulate the central nervous system and increase the release of dopamine in the brain, thus increasing arousal and potentially masking pain or fatigue. Drugs used to reduce tremors include beta-blockers as used by Jong- ao and those used to alter body composition include anabolic-androgenic steroids, human growth hormone, beta-agonists and diuretics.

In addition to the anabolic and anti-catabolic effects of anabolic-androgenic steroids, these steroids also affect motivation. Athletes using anabolic-androgenic steroids experience euphoria, diminished fatigue and aggressiveness, which allow for longer, harder training sessions. In many cases an athlete may compete ‘clean’, but has used drugs in training to increase training effect.

A few years ago the World Anti-Doping Agency (WADA) recognised this strategy and introduced out-of-competition random drug testing to complement in-competition testing in an attempt to prevent the practice.

Current drug testing methods commonly include urine and/or blood sampling. A sample taken in the presence of an official of the same gender, is split into two bottles and sealed by the athlete. A code number is attached to the bottle and recorded on the relevant documentation to ensure the correct result is given to the athlete whilst retaining his/her anonymity.

Following the sampling procedure the athlete then completes a medical declaration, which lists all medicines, drugs and substances taken over the previous week. If any of those substances are on the prohibited list the athlete must have been issued with a Therapeutic Use Exemption (TUE). The athlete, representative and official all check the form before the official and athlete sign it and both parties are given a copy.

The samples are then sent to a laboratory if there is not one on site where sample ‘A’ is tested using gas chromatography that uses separation techniques to divide the contents of the sample, and mass spectrometry that provides the exact molecular specification of the compounds. If a positive result is found with sample ‘A’, the athlete is notified before sample ‘B’ is tested.

The athlete or his/her representative is entitled to be present at the unsealing and testing of the second sample. If this too is positive, the relevant sporting organisation is responsible for deciding what penalties or bans will be imposed or notified.

Athlete passports are also being developed to provide longevity in testing data. It is often discussed, that a successful drug cheat is part of a well organised team with access to a chemist for drug control. Manipulation on a small, regular scale, may disguise results or current testing may not be sensitive enough.

Athletes’ results are recorded on their passports and trends in blood markers and urine data can be viewed long term rather than just test by test. Through the athlete passport it is hoped that a longitudinal picture of the athlete’s health and blood work is developed to allow urine markers to stand out and thus drug use is determined more easily.

As ASADA states “the athlete is ultimately responsible for what goes into his/her own body”. So if, as an athlete or a coach, you have any doubts about what you are using, you can refer to the following websites for further information:

- The Australian International Shooting Limited which provides details on WADA policies and ISSF rules regarding Drugs in sport at http://aussie shooting.org/index.php?option=com_content&view=category&layout=blog&id=47&Item id=142;
- The ISSF list of prohibited substances at http://www.issf sports.org/antidoping/prohibited_substances.php;
- ASADA’s testing process at http://www.asada.gov.au/testing/;

References