



ATHLETE ADVISORY

The World Anti-Doping Agency (WADA) has published the 2008 Prohibited List. For a full copy of the 2008 Prohibited List, visit the USADA Web site at www.usada.org/go/prohibitedlist.

KEY CHANGES FOR 2008

SUBSTANCES AND METHODS PROHIBITED AT ALL TIMES (IN- AND OUT-OF-COMPETITION)

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S1. Anabolic Agents

Anabolic Steroids: An athlete will have a signature pattern of steroids that occur in the urine and that will be fairly consistent over time. WADA, International Federations and National Anti-Doping Organizations are now starting to monitor the pattern (or profile) of steroids in the urine of individual athletes. These profiles will change in an athlete with use of anabolic steroids and certain other performance-enhancing substances and the changes can be used to create a suspicion of doping. The 2008 Prohibited List requires that any unusual pattern in a steroid screen be reported as an “atypical” result rather than as an “adverse analytical finding.” The changes to allow this type of reporting have been made under the Anabolic Agents section of the 2008 Prohibited List. A laboratory will still report an adverse analytical finding for an anabolic agent when the presence of an anabolic agent is proven by laboratory testing.

Other Anabolic Agents: The Selective Androgen Receptor Modulators (SARMs) are prohibited under this section. Members of this new family of non-steroidal substances can be designed to be anabolic and have the potential to be used in doping.

S4. Hormone Antagonists and Modulators

The title of the S4 category, formerly “Agents with Anti-Estrogenic Activity” has been changed to “Hormone Antagonists and Modulators.”

Myostatin is a hormone normally produced by the body that controls (limits) muscle size – blocking the myostatin allows increased muscle size. Agents that will block (or reduce) the effect of the myostatin and thus allow additional muscle development have been added to the 2008 Prohibited List as substances in this category.

M2. Chemical and Physical Manipulation

The use of intravenous (IV) infusions continues to be prohibited; according to the 2008 Prohibited List an IV infusion may be administered only in “an acute medical situation” and must be followed immediately by the submission of a retroactive Therapeutic Use Exemption (TUE) to document the need for the infusion. This means that IV infusions may only be used for emergency medical situations and must be followed by the TUE submission to the proper authority.

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SUBSTANCES PROHIBITED IN PARTICULAR SPORTS

P2. Beta-blockers

The International Federation for Powerboating (UIM) has added beta-blockers to the list of substances prohibited in-competition. The UIM believes these drugs can be used to enhance performance in Powerboating.

Propecia, Proscar (finasteride) and Avodart (dutasteride) are prohibited as masking agents for androgenic steroids. These alpha reductase inhibitors are now considered Specified Substances and have been added to that list.

IMPORTANT POINTS TO REMEMBER

1. Beta-2 agonists are prohibited both in- and out-of-competition. There are four beta-2 agonists that may be used by inhalation following the submission of an Abbreviated Therapeutic Use Exemption (TUE) - salbutamol, salmeterol, formoterol, and terbutaline. Albuterol (salbutamol) concentrations greater than 1000 ng/mL in the urine will result in an adverse analytical finding even if an Abbreviated TUE has been filed.
2. Glucocorticosteroids used as dermal (topical, iontophoresis, phonophoresis), eye drops, ear drops, nasal sprays and mouth (buccal) treatments are permitted and do not require an Abbreviated TUE.
3. Insulin use requires the submission of a Standard TUE.
4. Certain International Federations (IFs) have requirements for Abbreviated TUEs that are beyond the WADA Code requirements. Check the rules of your IF to determine any specific requirements that apply.
5. Use of gaseous (bottled) oxygen is prohibited.
6. The substances listed in the 2008 Monitoring List are not prohibited and their presence in the body will not result in a doping violation.

IT'S A JUNGLE OUT THERE

Over the past 15 to 20 years there has been a resurgence of interest in herbs as supplements and as medications. A common advertising approach is to claim that supplements are "all natural", with the implication that "all natural" herbs are inherently better than many other more common fruits and vegetables that are somehow not "all natural." The "all natural" description may be true; however, the implication that the products are safe and beneficial may be far from the truth. For example, cashew nuts may be considered all natural; however, the tree (*Anacardium occidentale*) producing the cashew nut belongs to the same plant family as poison ivy, poison oak and poison sumac and coats the nut with a toxic oily substance. The toxin is removed during processing and roasting to allow the safe sale and use of cashews.

When one is walking through a meadow or a field filled with green plants and flowers there is a feeling of quiet and peacefulness. That may be the sense for the human, depending on the insects that inhabit the area; however, the truth is that "it is a jungle out there" as the plants and insects compete to survive. As a result of that competition, many of the substances produced by plants are to protect against predatory insects and disease. The toxic substances produced may, at the same time, protect that plant against you as a consumer and be lethally toxic or toxic to certain organs of man. The message is that you, as a consumer of herbal supplements, need to educate yourself, not by relying on the promotional materials from the company selling the product, but by checking sources of information that can point out the many substances that are known to be included in supplements and that may, in fact, damage the health of a consumer.