



Preserving

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True Sport

Athlete Guide to the WADA 2014 Prohibited List



Substances and Methods Prohibited at All Times (Both In- and Out-of Competition)

The first section of the Prohibited List discusses substances and methods that are prohibited at all times, both in-competition and out-of-competition. *Any* athlete, including elite (Registered Testing Pool) athletes or non-national level (e.g. Masters, juniors) can be tested for these substances at any time:

S0. Non-Approved Substances

This “open” section addresses the issue of the abuse of pharmacological substances for the purpose of performance enhancement that are not included in other sections of the Prohibited List. They include substances that are not approved by any governmental regulatory health authority for human therapeutic use (i.e. drugs under pre-clinical or clinical development or discontinued, designer drugs, or veterinary drugs). These substances are prohibited at all times (in- and out-of-competition).

Advisory:

- Athletes that want to participate in drug research trials for drugs that are not yet approved for human use by the FDA should contact AthleteExpress@USADA.org.
- Athletes participating in research projects (academic or otherwise) involving prohibited substances or methods must contact USADA **before** participation to determine TUE requirements.

S1. Anabolic Agents

Anabolic Agents are prohibited. This includes the use of prescription testosterone creams (such as Androgel) or injections, or the use of any other anabolic substance (such as DHEA in a dietary supplement). The list of anabolic agents is extensive and even if an anabolic agent is not specifically listed, it is still prohibited if it has “a similar chemical structure or similar biological effect(s)”.

Advisory:



- Clenbuterol is sometimes prescribed outside of the US to treat asthma, and may be used in other countries to “bulk up” livestock. There is no threshold limit for clenbuterol, meaning the detection of ***any*** amount of clenbuterol in the sample is a positive test.
- Clenbuterol may also be found in some products marketed as dietary supplements, and may be publicized as a weight loss drug. Make sure to review the [WADA Q&A on Clenbuterol](#)

There have been *many* instances of products marketed as dietary supplements that contain one or more anabolic agents. For a few examples, see the [High Risk List](#) on [Supplement411.org](#). Use of any supplement is at your own risk.

S2. Peptide Hormones, Growth Factors, and Related Substances

This class of substances includes erythropoietin (EPO), human chorionic gonadotropin (HCG), luteinizing hormone (prohibited in males only), growth hormone, insulin-like growth factor-1 (IGF-1), corticotrophins, and a number of other growth factors. The definition of growth factors includes any “growth factor affecting muscle, tendon, or ligament protein synthesis/degradation, vascularization, energy utilization, regenerative capacity or fiber-type switching.

Advisory:

- There are products marketed as dietary supplements that claim to contain these substances or to boost the release of EPO, IGF-1, and growth hormone. *Peptide hormones and their releasing factors, AND other substances with similar chemical structure or biological effect(s) are prohibited. If such products actually contain what they claim, they are prohibited.*¹

¹ Many products marketed as dietary supplements make false, misleading, or deceptive claims of what they actually do. Thus, such products may not actually boost EPO or IGF-1 or growth hormone at all, but if they do, they are prohibited. USADA considers such products to be high risk for causing positive anti-doping tests or health problems. The use of any dietary supplement is at your own risk.



Supplement Facts		
Servings Size: 1 Level Scoop (1.5g)		
Servings Per Container: 60		
	Amount Per Serving	% DV*
Custom Engineered Bio-Pro Bio-Active Peptides	1.5g	**
Extracted from Micro-Concentrated Colostrum, yielding:		
Proline Rich Peptides, Growth Factors (IGF-1, TGF beta-2, EGF, PDGF)		
Immunoglobulins (IgG, IgA), Lactoferrin, Fibroblast-GF		
** Daily value not established		

- Human chorionic gonadotrophin (HCG) is prohibited in sport at all times, and is a Food and Drug Administration (FDA) approved prescription medication for the treatment of female infertility. *It is not approved as a weight loss drug.* The FDA warns consumers to avoid "homeopathic" HCG weight-loss products because they are illegal. These are sold in the form of oral drops, pellets and sprays and can be found online and in some retail stores.
- Even though Platelet Rich Plasma (PRP) contains some growth factors, [WADA has clarified](#) that PRP is not prohibited. Note that individual growth factors are still prohibited when given separately as purified substances as described in S.2.5.
- According to a WADA statement, colostrum is not prohibited per se, however it contains certain quantities of IGF-1 and other growth factors which are prohibited and can influence the outcome of anti-doping tests. Therefore WADA does not recommend the ingestion of such products.

S3. Beta-2 Agonists

All oral (taken by mouth and swallowed) beta-2 agonists are prohibited.



Inhaled beta-2 agonists are prohibited and require a Therapeutic Use Exemption (TUE), except for albuterol (dosages under 1600 micrograms/24 hours), formoterol (dosages less than 54 micrograms/24 hours), salmeterol (when taken according to manufacturer's instructions). If you use more than the amounts listed in the table below, you are required to submit a TUE for use. Search GlobalDRO.com to determine if the inhaler that you are using contains a substance that requires a TUE for use in sport.

Inhaler Brands and Strengths	Recommended Dosing by Manufacturer	WADA Maximum doses per 24 hours (do not exceed)
Advair Diskus 100/50, 250/50, or 500/50 Each have salmeterol 50mcg per puff	1 puff twice each day (100 mcg)	Take as directed by the drug manufacturer
Advair HFA 45/21, 115/21, or 230/21 Each has salmeterol 21 mcg per puff	2 puffs twice each day (84 mcg)	Take as directed by the drug manufacturer
Albuterol 90mcg per puff	1-2 puffs every 4 hours as needed for wheezing	Salbutamol 90 mcg per puff: 17 puffs a day (<1600 mcg)
Dulera 100mcg/5mcg per puff or 200mcg/5mcg per puff	2 puffs twice each day (20 mcg)	Formoterol 5 mcg per puff: 10 puffs a day (<54 mcg)
ProAir (albuterol) 108 mcg/puff	1-2 puffs every 4 hours as needed for wheezing	Salbutamol 108 mcg per puff: 14 puffs a day (<1600 mcg)
Proventil (albuterol) 108 mcg/puff	1-2 puffs every 4 hours as needed for wheezing	Salbutamol 108 mcg per puff: 14 puffs a day (<1600 mcg)
Serevent Diskus 50 mcg per puff	1 puff twice each day (100 mcg)	Take as directed by the drug manufacturer

Advisory:

- Some dietary supplements claim to contain ingredients that have beta-2 agonist activity such as norcochlorine. It is not known whether such products actually contain norcochlorine, but USADA considers such products to be high risk.



Supplement Facts		
Serving Size 1 Scoop (3.65 g)		
Servings Per Container: 40 20		
Amount per serving	1 Scoop %DV	2 Scoops %DV
Super Performance System™	2247 mg *	4494 mg *
L-Citrulline, Arginine Nitrate, Agmatine Sulfate, Grape Seed (95% Proanthocyanidins) Extract		
CNS Contractile Stimulant System™	182 mg *	364 mg *
Caffeine (125 mg) Norcocaine HCl		
3,4-Dihydroxycinnamic Acid		
Vitamin C (Ascorbic Acid)	50 mg 84%	100 mg 167%

*Daily value not established

- The dosage of albuterol or formoterol that may be used in sport without a TUE may translate into a wide range of “puffs.” You should examine your inhaler closely to determine the dosage. You must apply for a TUE if you need to take more than the non-prohibited dosage.
- Albuterol (urine amount over 1000 ng/mL) and formoterol (urine amount over 40 ng/mL) are “threshold substances” which means they may be used in sport without a TUE as long as they are used under a certain threshold. However, if you also need to use a substance that falls into the category of diuretics and masking agents you need to have a TUE for albuterol or formoterol even though you have a TUE for the diuretic or masking agent.
- The presence of albuterol in urine in excess of 1000ng/mL is presumed NOT to be an intended therapeutic use, and may be considered as an Adverse Analytical Finding.
- Use of **oral** beta-2 agonists are prohibited *even if you have a TUE for the same inhaled beta-2 agonist*. If your doctor prescribes an oral beta-2 agonist you should submit an application for a TUE.
- Some inhalers have more than one active ingredient. Make sure you check all the ingredients on GlobalDRO.com.



S4. Hormone and Metabolic Modulators

In short, the following are prohibited: aromatase inhibitors, selective estrogen receptor modulators (SERMs), other substances that block estrogen effects (anti-estrogens), and agents modifying myostatin function(s), and insulin. Please consult the Prohibited List for examples of substances in each of the above classes.

Advisory:

- Athletes diagnosed with Insulin-Dependent Diabetes are required to submit a TUE for use of insulin.

S5. Diuretics and Other Masking Agents

Masking agents are prohibited, including diuretics (water pills) and plasma expanders, which increase blood volume.

Advisory:

- WADA has clarified that drospirenone, pamabram, topical dorzolamide and brinzolamide, and the local administration of Felypressin for dental anesthesia are not prohibited.
- The use of any quantity of a threshold substance (i.e. albuterol, formoterol, cathine, ephedrine, methylephedrine and pseudoephedrine) at the same time as using a diuretic or other masking agent requires a TUE for the threshold substance AND the diuretic. (This means two TUEs are needed. This is the one case where an otherwise permitted substance when used under its threshold requires a TUE.)
- Some dietary supplements that claim to be natural “water pills” actually contain prescription diuretics. “Natural” weight loss products & dietary supplements that claim to reduce water weight may contain undeclared diuretics. Use of any supplement is at your own risk.
- Glycerol is prohibited as a plasma expander which requires the ingestion of quantities far beyond that which are commonly found in foodstuffs and toiletries.



According to the WADA: "The prohibition of glycerol is not intended to prevent the ingestion of this substance which is commonly found in a variety of foodstuffs and toiletries. Such use will not cause a competitor to test positive for this Prohibited Substance."

Prohibited Methods

M1. Manipulation of Blood and Blood Components

Blood doping, the use of red blood cells from any source, or otherwise artificially enhancing the uptake, transport, or delivery of oxygen is prohibited. Any type of intravenous (IV) manipulation of the blood or blood components by physical or chemical means is prohibited.

Advisory:

- Supplemental oxygen (e.g. breathing an oxygen rich air mixture temporarily, such as on the side-lines) is not prohibited.
- Use of hyperbaric or hypobaric tents is not prohibited.
- Hemodialysis is prohibited under M1.1, as blood is taken out from the patient (in a closed circuit) and then reintroduced into the circulatory system. An athlete needing this treatment requires a TUE.
- Donating plasma: for the donor, plasmapheresis is prohibited under M1.1 because the donor's own red blood cells (and other blood components) are being reintroduced into the circulatory system after the plasma has been separated.
- Intravenous laser therapy is prohibited. Ozone and/or ultraviolet light therapies which includes removal, treatment and manipulation of blood or blood components are prohibited.

M2. Chemical and Physical Manipulation

Tampering or attempting to tamper with a collected sample in order to affect its validity is prohibited.



Intravenous infusions or any intravenous injection of more than 50mL per six-hour period are prohibited except for those legitimately received in the course of hospital admissions or clinical investigations.

Advisory:

- Even if the substance delivered by intravenous infusion is not prohibited (such as iron), the method remains prohibited outside if given outside of a hospital admission/clinical investigation).
- In an emergency, you should always receive appropriate medical care. If the emergency physicians need to insert an intravenous line to save your life or provide emergency medication, request copies of all the clinical documentation for the diagnosis and decision to start the IV and the amount of fluid administered. Once the emergency is over you can communicate with USADA to determine if a TUE is required for the emergency.
- Physicians frequently raise concerns about the use of IV infusions in place of/in addition to oral fluid intake in cases of severe gastrointestinal (GI) distress (such as during travel) and dehydration. WADA clarified “the use of IV fluid replacement following exercise to correct mild rehydration is not clinically indicated nor substantiated by the medical literature”.

M3. Gene Doping

The transfer of polymers of nucleic acids or nucleic acid analogues, or the use of normal or genetically modified cells is prohibited.

Substances and Methods Prohibited In-Competition

This section focuses on substances that are prohibited in-competition only. These substances are not tested for out-of-competition.

It is very important to be aware of the definition of “in-competition.” Each International Federation (IF) may have a different definition and it may vary by event.



For some events, this period may be defined as “12 hours before the start of the competition” and different rules may apply to multi-day events (for example, the Olympic Games). As an athlete, it is your responsibility to learn the definition of “in-competition” for the sporting events in which you compete.

Athletes must ensure that all substances prohibited in-competition have completely cleared from their body before competition. This means it is not detected in the sample. If this is not possible for USADA to list specific stop times for substances prohibited in-competition. If the on-going or daily use of one or more of these medications is needed, the athlete should apply for a Therapeutic Use Exemption (TUE).

S6. Stimulants

All stimulants and their optical isomers (*d*, *l*) when they exist are prohibited, except for imidazole derivatives for topical use and those stimulants on the 2014 Monitoring Program (bupropion, caffeine, nicotine, phenylephrine, phenylpropanolamine, pipradrol, pseudoephedrine over 150 microgram/L, and synephrine).

Advisory:

- Athletes diagnosed with Attention Deficit Disorder (ADD) or Attention Deficit Hyperactivity Disorder (ADHD) who are taking stimulants and competing at any time within a few weeks of taking this medication should obtain a TUE for their medication. Athletes who are not competing do not need to obtain a TUE in order to use these medications.
- Athletes diagnosed with Parkinson’s Disease and take selegiline, or are diagnosed with narcolepsy and are prescribed medications that contain modafinil or armodafinil, for example, should obtain a TUE if they need to take these medications just prior to or during competition. Nicotine and caffeine are not prohibited but they are part of the WADA monitoring program.
- Pseudoephedrine is an ingredient in several cold and flu products. WADA has issued an advisory to athletes that they should discontinue taking



medications containing pseudoephedrine less than 240mg per day AT LEAST 24 hours prior to the time defined as “in-competition.” Be advised, in some cases this may not be enough time for the substance to clear from the body, such as a slow-metabolizer or because of drug interactions.. USADA recommends avoiding pseudoephedrine-containing cold and flu products for several days in advance of competition, and using a non-prohibited alternative instead.

- Levmetamfetamine is prohibited in-competition and is also found in some non-drowsy cold and flu products. Read the label of your cold and flu, or allergy product carefully and check the ingredients against GlobalDRO:



Drug Facts	
Active ingredient (per inhaler) Levmetamfetamine 50 mg	Purpose Nasal decongestant
Uses temporarily relieves nasal congestion due to: • a cold • hay fever or other upper respiratory allergies	
Warnings When using this product • do not exceed recommended dosage • temporary burning, stinging, sneezing, or increased nasal discharge may occur • use of this container by more than one person may spread infection • do not use for more than 7 days • use only as directed • frequent or prolonged use may cause nasal congestion to recur or worsen Stop use and ask a doctor if symptoms persist If pregnant or breast-feeding, ask a health professional before use. Keep out of reach of children. If swallowed, get medical help or contact a Poison Control Center right away.	
Directions • the product delivers into each 800 ml of air 0.04 to 0.150 mg of levmetamfetamine • do not use more often than every 2 hours	
adults and children 12 years and over	2 inhalations in each nostril
children 6 to under 12 years (with adult supervision)	1 inhalation in each nostril
children 2 to under 6 years	ask a doctor
children under 2 years	do not use
Other information • store at room temperature • keep inhaler tightly closed • this inhaler is effective for a minimum of 3 months after first use	
Inactive ingredients boric acid, camphor, lavender oil, menthol, methyl salicylate	
Questions? 1-800-873-8278	

Dist. by Procter & Gamble, Cincinnati OH 45302. 9588995Z

QUIET ZONE 3 23900 00102 2



- Common Cough, Cold and Flu active ingredients:

Drug Facts	
Active ingredients <i>(in each 5 ml. tsp)</i>	Purposes
Dextromethorphan HBr, USP 10 mg.....	Cough suppressant
Guaifenesin, USP 200 mg.....	Expectorant
Phenylephrine HCl, USP 5 mg.....	Nasal decongestant
Uses	
<ul style="list-style-type: none"> ■ helps loosen phlegm (mucus) and thin bronchial secretions to drain bronchial tubes ■ temporarily relieves these symptoms occurring with a cold: <ul style="list-style-type: none"> ■ nasal congestion ■ cough due to minor throat and bronchial irritation 	
Warnings	
Do not use if you are now taking a prescription monoamine oxidase inhibitor (MAOI) (certain	

S7. Narcotics

Certain narcotics are prohibited in-competition: buprenorphine, dextromoramide, diamorphine (heroin), fentanyl and its derivatives, hydromorphone, methadone, morphine, oxycodone, oxymorphone, pentazocine, and pethidine (meperidine). Use of these narcotics in-competition requires an approved TUE.

Advisory:

- Opium, the latex extract of the poppy plant, contains morphine and therefore it is also prohibited.
- Hydrocodone, mitrignine, tapentadol and tramadol are in the monitoring program and are not prohibited.

S8. Cannabinoids

Natural or synthetic tetrahydrocannabinol (THC) and THC-like cannabinoids (e.g. hashish, marijuana, Spice, JWH018, HU-210) are prohibited.



Advisory:

- Athletes should be aware that cannabinoids may be retained in fat tissue following frequent or repeated use and may be detected weeks after use. There have been situations where sudden weight loss has caused cannabinoid metabolites stored in fat to be released in detectable levels, even if not used recently. USADA strongly advises athletes not to use cannabinoids at any time.
- Athletes who choose to consume hemp products may be at risk for a positive anti-doping test, even though many of these products claim not to contain THC.
- While the use of medical marijuana may be decriminalized in some states, it is still illegal under Federal Law. Currently USADA will only consider TUE applications for legal, FDA-approved uses of THC, such as Dronabinol to manage some of the symptoms of AIDS, or to treat nausea and vomiting caused by cancer chemotherapy.

S9. Glucocorticosteroids

The systemic use of glucocorticosteroids (often called “steroids” by the prescriber) is prohibited in-competition. This includes oral intake (like a Medrol Dose Pak), a systemic injection by IV or intramuscular (IM), or by rectal routes.

Advisory:

- Athletes who are prescribed oral, rectal, IV or IM glucocorticosteroids may take these medications out-of-competition without submitting a TUE, as long as the prohibited substance has cleared their system prior to the time defined as “in-competition”. If athletes need to use these routes shortly before or during competition, they must obtain a TUE.
- The time it takes for glucocorticosteroids to clear from the athlete’s body depends on many variables and cannot be predicted by USADA. This is up to the athletes, their prescriber, and their pharmacist to determine. Read



the Clearance Time FAQ on the TUE page.

- Injections of glucocorticosteroids around tendons, into joints, and epidurals (into the spine) are not prohibited, but *injection into a muscle is prohibited*.
- Inhalation of glucocorticosteroids (e.g. for asthma) is not prohibited.
- Topical use of glucocorticosteroids (anti-rash cream, hemorrhoidal creams used on the surface, etc.) are not prohibited. But, be aware that some hemorrhoidal suppositories or rectal creams that are inserted contain glucocorticosteroids. This would be considered a rectal route of delivery and is prohibited in-competition.

Substances Prohibited in Particular Sports

Some sports have additional rules about the use of substances such as alcohol or beta-blockers. If you participate in any of the following sports please consult the [WADA Prohibited List](#) or Global Drug Reference Online ([GlobalDRO.com](#)) before using alcohol or beta-blockers:

- Aeronautic (FAI)
- Archery (WA)
- Automobile (FIA)
- Billiards (WCBS)
- Darts (WDF)
- Golf (IGF)
- Karate (WKF)
- Motorcycling (FIM)
- Powerboating(UIM)
- Shooting (ISSF)
- Skiing/Snowboarding (FIS)

USADA References and Resources

This guide was intended to introduce athletes, and others involved in sport, to the



Prohibited List and to provide practical guidance on how the Prohibited List may affect them. This guide is not intended to be exhaustive, and should be read in conjunction with the Prohibited List. Ultimately, the athlete is solely responsible for the substances in his or her body. Further information on the topics contained in this guide can be obtained by consulting the references and resources below.

- The 2014 Prohibited List can be downloaded [here](#).
- Global DRO (GlobalDRO.com) is a searchable online database of medications available in the United States, Canada, United Kingdom, and Japan that details the status of medications.
- You may contact USADA's Drug Reference Department on 719-785-2045 for questions on Therapeutic Use Exemptions.
- **Note:** USADA does not provide medical advice or recommendations. Athletes should make all treatment-related decisions with their physician in conjunction with the 2014 Prohibited List.