

SUBSTITUTES APPENDIX A OF THE OMAC 1999

OLYMPIC MOVEMENT ANTI-DOPING CODE
APPENDIX A

PROHIBITED CLASSES OF SUBSTANCES AND PROHIBITED METHODS
2003

1 January 2003

I. PROHIBITED CLASSES OF SUBSTANCES

A. STIMULANTS

a

Prohibited substances in class **A.a** include the following examples with both their L- and D-isomers

amiphenazole, amphetamines, bromantan, caffeine*, carphedon, cocaine, ephedrines, fencamfamin, mesocarb, pentetrazol, pipradrol, ... and related substances.**

* For caffeine the definition of a positive is a concentration in urine greater than 12 micrograms per millilitre.

** For ephedrine and methylephedrine, the definition of a positive is a concentration in urine greater than 10 micrograms per millilitre. For cathine, the definition of a positive is a concentration in urine greater than 5 micrograms per millilitre. For phenylpropanolamine and pseudoephedrine, the definition of a positive is a concentration in urine greater than 25 micrograms per millilitre.

NOTE: All imidazole preparations are acceptable for topical use. Vasoconstrictors may be administered with local anaesthetic agents. Topical preparations (e.g. nasal, ophthalmological, rectal) of adrenaline are permitted. Bupropion, synephrine and phenylephrine are permitted

b

Prohibited substances in class **A.b** include the following examples with both their L- and D-isomers

formoterol*, salbutamol***, salmeterol*** and terbutaline*** ... and related substances**

*** permitted by inhaler only to prevent and/or treat asthma and exercise-induced asthma. Written notification by a respiratory or team physician that the athlete has asthma and/or exercise-induced asthma is necessary to the relevant medical authority prior to competition. At the Olympics Games, athletes who request permission to inhale a permitted beta-2 agonist, will be assessed by an independent medical panel.

B. NARCOTICS

Prohibited substances in class (B) include the following examples:

buprenorphine, dextromoramide, diamorphine (heroin), methadone, morphine, pentazocine, pethidine,... and related substances.

NOTE: codeine, dextromethorphan, dextropropoxyphene, dihydrocodeine, diphenoxylate, ethylmorphine, pholcodine, propoxyphene and tramadol are permitted.

C. ANABOLIC AGENTS

Prohibited substances in class (C) include the following examples:

1. Anabolic androgenic steroids

a.

clostebol, fluoxymesterone, metandienone, metenolone, nandrolone, 19-norandrostenediol, 19-norandrostenedione, oxandrolone, stanozolol, ... and related substances.

b.

androstenediol, androstenedione, dehydroepiandrosterone (DHEA), dihydrotestosterone, testosterone*, ... and related substances.

Evidence obtained from metabolic profiles and/or isotopic ratio measurements may be used to draw definitive conclusions.

* The presence of a testosterone (T) to epitestosterone (E) ratio greater than six (6) to one (1) in the urine of a competitor constitutes an offence unless there is evidence that this ratio is due to a physiological or pathological condition, e.g. low epitestosterone excretion, androgen producing tumour, enzyme deficiencies.

In the case of T/E greater than 6, it is mandatory that the relevant medical authority conducts an investigation before the sample is declared positive. A full report will be written and will include a review of previous tests, subsequent tests and any results of endocrine investigations. In the event that previous tests are not

available, the athlete should be tested unannounced at least once per month for three months. The results of these investigations should be included in the report. Failure to co-operate in the investigations will result in declaring the sample positive.

2. Other anabolic agents

clenbuterol, salbutamol *

* For salbutamol, a concentration in urine greater than 1000 nanograms per millilitre of non-sulphated salbutamol constitutes a doping violation.

D. DIURETICS

Prohibited substances in class (D) include the following examples:

acetazolamide, bumetanide, chlortalidone, etacrynic acid, furosemide, hydrochlorothiazide, mannitol*, mersalyl, spironolactone, triamterene, ... and related substances.

* Prohibited by intravenous injection.

E. PEPTIDE HORMONES, MIMETICS AND ANALOGUES

Prohibited substances in class (E) include the following examples and their analogues and mimetics:

1. **Chorionic Gonadotrophin** (hCG) prohibited in males only;
2. **Pituitary and synthetic gonadotrophins** (LH) prohibited in males only;
3. **Corticotrophins**(ACTH, tetracosactide);
4. **Growth hormone** (hGH);
5. **Insulin-like Growth Factor** (IGF-1); and all the respective releasing factors and their analogues;
6. **Erythropoietin** (EPO);
7. **Insulin***

*permitted only to treat athletes with certified insulin-dependent diabetes.

The term 'insulin-dependent' is used here to describe people with diabetes in whom insulin treatment is required, in the judgement of a suitably qualified physician. It will always be the case in Type 1 and sometimes in Type 2 diabetes mellitus.

Written certification of insulin-dependent diabetes must be obtained from an endocrinologist or team physician.

The presence of an abnormal concentration of an endogenous hormone in class (E) or its diagnostic marker(s) in the urine of a competitor constitutes an offence unless it has been proven to be due to a physiological or pathological condition.

F. AGENTS WITH ANTI-OESTROGENIC ACTIVITY

Aromatase inhibitors, clomiphene, cyclofenil, tamoxifen are prohibited only in males.

G. MASKING AGENTS

Prohibited substances in class (G) include the following examples:

diuretics, epitestosterone*, probenecid, plasma expanders (e.g . hydroxyethyl starch)

Masking agents are prohibited. They are products that have the potential to impair the excretion of prohibited substances or to conceal their presence in urine or other samples used in doping control.

* The presence of a urinary concentration of epitestosterone greater than 200 ng/mL constitutes an anti-doping violation unless there is evidence that it is due to a physiological condition. Isotopic ratio mass spectrometry (IRMS) may be used to draw definitive conclusions. If the results of the IRMS are inconclusive, the relevant medical authority shall conduct an investigation before the sample is declared positive.

II. PROHIBITED METHODS

The following procedures are prohibited:

A. ENHANCEMENT OF OXYGEN TRANSFER

- a. Blood doping. Blood doping is the administration of autologous, homologous or heterologous blood or red blood cell products of any origin, other than for legitimate medical treatment.
- b. The administration of products that enhance the uptake, transport or delivery of oxygen, e.g. modified haemoglobin products including but not limited to bovine and cross-linked haemoglobins, microencapsulated haemoglobin products, perfluorochemicals, and RSR13.

B. PHARMACOLOGICAL, CHEMICAL AND PHYSICAL MANIPULATION

Pharmacological, chemical and physical manipulation is the use of substances and methods, including masking agents (ref I . G), which alter, attempt to alter or may reasonably be expected to alter the integrity and validity of specimens collected in doping controls. These include, without limitation, catheterisation, urine substitution and/or tampering, inhibition of renal excretion and alterations of testosterone and epitestosterone (ref I. G) measurements.

C. GENE DOPING

Gene or cell doping is defined as the non-therapeutic use of genes, genetic elements and/or cells that have the capacity to enhance athletic performance.

III. CLASSES OF PROHIBITED SUBSTANCES IN CERTAIN SPORTS

A. ALCOHOL

Where the rules of the governing body so provide, tests will be conducted for ethanol.

B. CANNABINOIDS

Where the rules of the governing body so provide, tests will be conducted for cannabinoids (e.g. Marijuana, Hashish). At the Olympic Games, tests will be conducted for cannabinoids. A concentration in urine of 11-nor-delta 9-tetrahydrocannabinol-9-carboxylic acid (carboxy-THC) greater than 15 nanograms per millilitre constitutes doping.

C. LOCAL ANAESTHETICS

Injectable local anaesthetics are permitted under the following conditions:

- a. bupivacaine, lidocaine, mepivacaine, procaine, and related substances, can be used but not cocaine. Vasoconstrictor agents may be used in conjunction with local anaesthetics;
- b. only local or intra-articular injections may be administered;
- c. only when medically justified.

Where the rules of the governing body so provide, notification of administration may be necessary.

D. GLUCOCORTICOSTEROIDS

The systemic use of glucocorticosteroids is prohibited when administered orally, rectally, or by intravenous or intramuscular injection.

When medically necessary, local and intra-articular injections of glucocorticosteroids are permitted.

Where the rules of the governing body so provide, notification of administration may be necessary

E. BETA-BLOCKERS

Prohibited substances in class (E) include the following examples:

**acebutolol, alprenolol, atenolol, labetalol, metoprolol, nadolol, oxprenolol, propranolol, sotalol,
... and related substances.**

Where the rules of the governing body so provide, tests will be conducted for beta-blockers.

IV. SUMMARY OF URINARY CONCENTRATIONS ABOVE WHICH A DOPING VIOLATION HAS OCCURED

caffeine	> 12 micrograms/millilitre
carboxy-THC	> 15 nanograms/millilitre
cathine	> 5 micrograms / millilitre
ephedrine	> 10 micrograms / millilitre
epitestosterone*	> 200 nanograms / millilitre
methylephedrine	> 10 micrograms / millilitre
morphine	> 1 microgram / millilitre
19-norandrosterone	> 2 nanograms /millilitre in males
19-norandrosterone	> 5 nanograms/millilitre in females
phenylpropanolamine	> 25 micrograms / millilitre
pseudoephedrine	> 25 micrograms / millilitre
salbutamol	
(as anabolic agent)	> 1000 nanograms/millilitre
T/E ratio*	> 6

* referred to **I.C.b** and **I.G.**

V. SUBSTANCES AND METHODS PROHIBITED OUT-OF-COMPETITION

- I.C.** Anabolic Agents
- I.D.** Diuretics
- I.E.** Peptide Hormones, Mimetics and Analogues
- I.F.** Agents with Anti-Oestrogenic Activity
- I.G.** Masking Agents
- II.** Prohibited Methods

LIST OF EXAMPLES OF PROHIBITED SUBSTANCES AND PROHIBITED METHODS

CAUTION: This is not an exhaustive list of prohibited substances. Many substances that do not appear on this list are considered prohibited under the term "and related substances".

Athletes must ensure that any medicine, supplement, over-the-counter preparation or any other substance they use does not contain any Prohibited Substance.

STIMULANTS:

amfepramone, amiphenazole, amphetamine, bambuterol, bromantan, caffeine, carphedon, cathine, clobenzorex, cocaine, cropropamide, crotethamide, ephedrine, etamivan, etilamphetamine, etilefrine, fencamfamin, fenetylline, fenfluramine, fenproporex, formoterol, heptaminol, mefenorex, mephentermine, mesocarb, methamphetamine, methoxyphenamine, methylenedioxyamphetamine, methylenedioxymethamphetamine, methylephedrine, methylphenidate, nikethamide, norfenfluramine, parahydroxyamphetamine, pemoline, pentetrazol, phendimetrazine, phentermine, phenmetrazine, phenylpropanolamine, pholedrine, pipradrol, prolintane, propylhexedrine, pseudoephedrine, reproterol, salbutamol, salmeterol, selegiline, strychnine, terbutaline.

NARCOTICS:

buprenorphine, dextromoramide, diamorphine (heroin), hydrocodone, methadone, morphine, pentazocine, pethidine.

ANABOLIC AGENTS :

androstenediol, androstenedione, bambuterol, bolasterone, boldenone, clenbuterol, clostebol, danazol, dehydrochlormethyltestosterone, dehydroepiandrosterone (DHEA), dihydrotestosterone, drostanolone, fenoterol, fluoxymesterone, formebolone, formoterol, gestrinone, mesterolone, metandienone, metenolone, methandriol, methyltestosterone, mibolerone, nandrolone, 19-norandrostenediol, 19-norandrostenedione, norbolethone, norethandrolone, oxandrolone, oxymesterone, oxymetholone, reproterol, salbutamol, salmeterol, stanozolol, terbutaline, testosterone, trenbolone.

DIURETICS

amiloride, acetazolamide, bendroflumethiazide, bumetanide, canrenone, chlortalidone, ethacrynic acid, furosemide, hydrochlorothiazide, indapamide, mannitol (by intravenous injection), mersalyl, spironolactone, triamterene.

MASKING AGENTS

diuretics (see above), epitestosterone, probenecid, hydroxy ethyl starch.

PEPTIDE HORMONES, MIMETICS AND ANALOGUES

ACTH, erythropoietin (EPO), hCG*, hGH, insulin, LH*, IGF-1.

SUBSTANCES WITH ANTIOESTROGENIC ACTIVITY

clomiphene*, cyclofenil*, tamoxifen*.

*** prohibited in males only**

BETA BLOCKERS

acebutolol, alprenolol, atenolol, betaxolol, bisoprolol, bunolol, carteolol, carvedilol, celiprolol, esmolol, labetalol, levobunolol, metipranolol, metoprolol, nadolol, oxprenolol, pindolol, propranolol, sotalol, timolol.

**Explanatory note concerning the IOC/WADA
List of prohibited classes of substances and prohibited methods – 2003**

I – Prohibited Classes of Substances

A - Stimulants

The stimulants class has been split into two groups a) and b) in order to better identify the beta-2 agonists

Amineptine, bupropion, synephrine and phenylephrine have been removed from the list.

C – Anabolic agents

In the anabolic class, paragraph 2 has been rephrased as “other anabolic agents”.
The anabolic nature of salbutamol above a concentration of 1000 ng/ml has been clearly expressed.

E – Peptide hormones, mimetics and analogues

In the “Insulin” section, the note has been changed.

F - Agents with an antioestrogenic activity

A class F, of substances bearing the name of “agents with an antioestrogenic activity” has been created.

G – Masking agents

A separate class bearing the name of “masking agents” has been created.

II – Prohibited methods

In the “prohibited methods” section, different classes have been created relating to:

- The definition of blood doping
- The identification of oxygen carriers

The pharmacological, chemical and physical manipulation section has been expanded.

A class C, Gene Doping, has been created.

III - Classes of prohibited substances in certain sports

In the paragraph “Classes of prohibited substances in certain sports”, the expression “responsible authority ” has been changed to “governing body”.

IV – Summary of urinary concentrations above which a doping violation has occurred.

In this paragraph, only the concentration >1000 ng/ml for salbutamol remains considered as anabolic. Thus, below 1000 ng/ml a therapeutic justification and/or a examination by a medical panel is necessary; while above 1000 ng/ml is considered as having an anabolic effect.

V – Substances and methods prohibited out-of-competition

Chapter V has been changed taking into account the modifications above.

In the list of examples, some modifications have been made.

1. Stimulants

Amineptine, bupropion and phenylephrine have been removed.
Clobenzorex, fenproporex, methylenedioxymethamphetamine and phenmetrazine have been added.

2. Anabolic agents

Bolasterone and norbolethone have been added.

3. Diuretics

Amiloride has been added.

4. Masking agents

Bromantan has been removed and hydroxy ethyl starch added.

5. Substances with an antioestrogenic activity

This class has been added; clomiphene, cyclofenil and tamoxifen included therein.

6. Beta Blockers

Carvedilol has been added