

Annex B
NSF International Banned Substance Screen
(normative)

Prohibited Substances Included in Analytical Test Method^{Note 1}

Drugs of Abuse	Report Threshold (ng/g)	Maximum Allowable Level per Serving (ug/serving)
Codeine	10	0.1
JWH-018	5	0.02
JWH-073	5	0.02
HU-210	5	0.02
LSD	10	0.1
Marijuana (delta-9-THC)	100	0.15
Morphine	100	1.0
Oxycodone	10	0.1
Phencyclidine (PCP)	10	0.1

Anabolic Agents (* = endogenous) ^{Note 2}	Report Threshold (ng/g)	Maximum Allowable Level per Serving (ug/serving)
*Androstenediol	20	0.5
*5 α -Androstan-3 α ,17 α -diol	20	0.5
*5 α -Androstan-3 α ,17 β -diol	20	0.5
*5 α -Androstan-3 β ,17 α -diol	20	0.5
*5 α -Androstan-3 β ,17 β -diol	20	0.5
Androstenedione	5	0.02
1-Androstenediol	5	0.02
1-Androstenedione	5	0.02
*4-Androsten-3 α ,17 β -diol	20	0.5
*4-Androsten-3 β ,17 α -diol	20	0.5
*5-Androsten-3,17-dione	20	0.5
*5-Androsten-3 β ,17 α -diol	20	0.5
*4-Androstenediol	20	0.5
*4-Androstenedione	20	0.5
4-Androsten-3 α -ol-17-one	5	0.02
4-Androsten-3 β -ol-17-one (4-DHEA)	5	0.02
2-Androsten-17-one	5	0.02
*Androsterone	20	0.5
Bolandiol (19-Norandrostenediol)	10	0.02

Anabolic Agents (* = endogenous) ^{Note 2}	Report Threshold (ng/g)	Maximum Allowable Level per Serving (ug/serving)
Bolasterone	5	0.02
Boldenone	10	0.02
1-Androsterone (Androst-1-ene-3 β -ol-17-one)	5	0.02
Boldione (Androstadienedione)	5	0.02
Calusterone	5	0.02
Clostebol	5	0.02
Danazol	5	0.02
Dehydroandrosterone	5	0.02
*Dehydroepiandrosterone (DHEA)	20	0.5
Desoxymethyltestosterone (madol)	10	0.02
*Dihydrotestosterone (Stanolone)	20	0.5
Drostanolone	5	0.02
*Epiandrosterone	20	0.5
*Epidihydrotestosterone	20	0.5
Estra-4,9-diene-3,17-dione	5	0.02
Estra-4,9,11-triene-3,17-dione	5	0.02
Ethylestrenol	10	0.02
*Etiocholanolone	20	0.5
Fluoxymesterone	10	0.02
Formebolone	5	0.02
Furazabol	5	0.02
Gestrinone	5	0.02
11 α -Hydroxymethyltestosterone	5	0.02
4-Hydroxytestosterone	5	0.02
*17-Hydroxyprogesterone	20	0.5
Mestanolone	5	0.02
Mesterolone	5	0.02
Methandienone	2	0.008
Methandriol	5	0.02
Methasterone	5	0.02
Methenolone	5	0.02
17 α -Methylclostebol	5	0.02
Methylclostediol	5	0.02
Methyldienolone	5	0.02
Methylnortestosterone	5	0.02
Methylstenbolone	5	0.02
Methyltestosterone	2	0.008
Methyl-1-testosterone	5	0.02

Anabolic Agents (* = endogenous) ^{Note 2}	Report Threshold (ng/g)	Maximum Allowable Level per Serving (ug/serving)
Methyltrienolone (Metribolone)	5	0.02
Mibolerone	5	0.02
Nandrolone	5	0.02
19-Nor-5-Androstenediol	5	0.02
19-Norandrostenedione	5	0.02
*19-Norandrosterone	20	0.5
*19-noretiocholanolone	20	0.5
Norbolethone	5	0.02
Norclostebol	5	0.02
Norethandrolone	5	0.02
Oxabolone	5	0.02
Oxandrolone	5	0.02
Oxymesterone	5	0.02
Oxymetholone	5	0.02
*Progesterone	100	10
Prostanozol	5	0.02
Quinbolone	5	0.02
Stanozolol	2	0.008
Stenbolone	5	0.02
1-Testosterone	5	0.02
*Testosterone	20	0.5
Tetrahydrogestrinone	5	0.02
Tibolone	5	0.02
Trenbolone	5	0.02
Turinabol-oral	2	0.008
Zeranol(alpha-Zearalanol)	5	0.02
Zilpaterol	5	0.02

Diuretics	Report Threshold (ng/g)	Maximum Allowable Level per Serving (ug/serving)
Acetazolamide	20	2
Althiazide	20	2
Amiloride	20	2
Bendroflumethiazide	20	2
Benzthiazide	20	2
Bumetanide	20	2
Buthiazide	20	2
Canrenone	20	2

Diuretics	Report Threshold (ng/g)	Maximum Allowable Level per Serving (ug/serving)
Chlorthalidone	20	2
Chlorthiazide	20	2
Cyclothiazide	20	2
Ethacrynic Acid	20	2
Furosemide	20	2
Hydrochlorothiazide	20	2
Hydroflumethiazide	20	2
Indapamide	20	2
Methiazide	20	2
Methylchlorothiazide	20	2
Metolazone	20	2
Polythiazide	20	2
Quinethazone	20	2
Spirolactone	20	2
Triamterene	20	2
Trichloromethiazide	20	2

Beta-2 Agonists	Report Threshold (ng/g)	Maximum Allowable Level per Serving (ug/serving)
Bambuterol	20	2
Brombuterol	20	2
Clenbuterol	2	0.002
Fenoterol	20	2
Formoterol	20	2
Procaterol	20	2
Ractopamine	20	2
Ritodrine	20	2
Salbutamol	20	2
Salmeterol	20	2
Terbutaline	20	2

Masking agents (* = endogenous) ^{Note 2}	Report Threshold (ng/g)	Maximum Allowable Level per Serving (ug/serving)
*Epi-testosterone	20	0.4
Dutasteride	20	2
Finasteride	20	2
Probenecid	20	2

Hormone Antagonists	Report Threshold (ng/g)	Maximum Allowable Level per Serving (ug/serving)
Aminoglutethimide	20	0.2
Anastrozole	20	0.2
5 α -androstan-17 β -ol-3,6-dione	20	0.2
5 α -Androstan-3,6,17-trione	20	0.2
6-alpha-bromoandrostadiendione	20	0.2
6-alpha-bromoandrostenedione	20	0.2
6-alpha-bromotestosterone	20	0.2
Androsta-1,4,6-triene-17 β -ol-3-one	20	0.2
Androsta-1,4,6-triene-3,17-dione	20	0.2
4-Androsten-3,6,17-trione	20	0.2
6-beta-bromoandrostadiendione	20	0.2
6-beta-bromoandrostenedione	20	0.2
6-beta-bromotestosterone	20	0.2
Clomiphene	20	0.2
Cyclofenil	20	0.2
N-Desmethyltamoxifen	20	0.2
Exemestane	20	0.2
Formestane	20	0.5
Fulvestrant	20	0.2
Letrozole	40	0.2
Raloxifene	20	0.2
Tamoxifen	20	0.2
Toremifene	20	0.2
Testolactone	20	0.2

Hormone and Metabolic Modulators	Report Threshold (ng/g)	Maximum Allowable Level per Serving (ug/serving)
AICAR	25	1
GW501516	10	0.2
GW0742	10	0.2

SARM	Report Threshold (ng/g)	Maximum Allowable Level per Serving (ug/serving)
Andarine	5	0.02
Ibutamoren	5	0.02
LGD-2226	5	0.02
Ostarine	5	0.02

SARM	Report Threshold (ng/g)	Maximum Allowable Level per Serving (ug/serving)
S-1	5	0.02
C-6	5	0.02
CAS#541497-95-4	5	0.02

Growth Hormone Releasing Peptides	Report Threshold (ng/g)	Maximum Allowable Level per Serving (ug/serving)
Alexamorelin	200	1
GHRP-1	200	1
GHRP-2	200	1
GHRP-4	200	1
GHRP-5	200	1
GHRP-6	200	1
Hexarelin	200	1
Ipamorelin	200	1

Stimulants	Report Threshold (ng/g)	Maximum Allowable Level per Serving (ug/serving)
Adrafinil	25	1
Amfepramone (Diethylpropion)	25	1
2-Aminoheptane	25	1
6-Amino-2-methyl-heptanol	25	1
Amiphenazole	40	1
Amphetamine	25	1
Amphetaminil	25	1
Benfluorex	25	1
Benzphetamine	25	1
Benzylpiperazine	25	1
Bromantan	25	1
Carphedone	25	1
Cathine	25	1
p-Chloroamphetamine	25	1
Chlorphentermine	25	1
Clobenzorex	25	1
Cocaine	25	1
Cropropamide	25	1
Crotethimide	25	1
N-Desmethylsibutramine	25	1
N-Desmethylselegiline	25	1

Stimulants	Report Threshold (ng/g)	Maximum Allowable Level per Serving (ug/serving)
N,N-Didesmethylsibutramine	25	1
N, α -Diethylphenylethylamine	25	1
N, β -Diethylphenylethylamine	25	1
Dimethylamphetamine	25	1
1,3-Dimethylbutylamine	25	1
N,N-Dimethylphenylethylamine	25	1
Ephedrine	10	1
Etamivan	25	1
Ethylamphetamine	25	1
Etilefrine	25	1
Famprofazone	25	1
Fenbutrazate	25	1
Fencamine	25	1
Fencamfamine	25	1
Fenetylline	25	1
Fenfluramine	25	1
Fenproporex	25	1
Furfenorex	25	1
4-Hydroxyamphetamine	25	1
Isometheptene	25	1
Mazindol	25	1
Meclofenoxate	25	1
Mefenorex	25	1
Mephentermine	25	1
Methamphetamine	25	1
Mesocarb	25	1
2-Methoxyphenylethylamine	25	1
4-Methylamphetamine	25	1
3,4-Methylenedioxyamphetamine	25	1
3,4-Methylenedioxymethamphetamine	25	1
Methylephedrine	10	1
Methylhexanamine	25	1
beta-Methylphenethylamine	25	1
N-Methylphenethylamine	25	1
Methylphenidate	25	1
Methyl-(3-phenylpropyl)-amine	25	1
Methylpseudoephedrine	25	1
Methylsynephrine (Oxilofrine)	25	1
Modafinil	25	1

Stimulants	Report Threshold (ng/g)	Maximum Allowable Level per Serving (ug/serving)
Nikethamide	25	1
Norfenefrine	25	1
Norfenfluramine	25	1
Octopamine	100	10
Oxethazaine	25	1
Pemoline	25	1
Pentylentetrazole	25	1
Phenpentermine	25	1
Phenpromethamine	25	1
Phentermine	25	1
Phendimetrazine	25	1
Phenmetrazine	25	1
1-Phenyl-2-butanamine	25	1
1-Phenylpentan-2-amine	25	1
Phenylpropanolamine	25	1
Prenylamine	25	1
Prolintane	25	1
Propylhexedrine	25	1
Pseudoephedrine	10	1
Pyrovalerone	25	1
Selegiline (Deprenyl)	25	1
Sibutramine	25	1
Strychnine	25	1
Trimetazidine	25	1

Beta-Blockers	Report Threshold (ng/g)	Maximum Allowable Level per Serving (ug/serving)
Acebutolol	25	1
Atenolol	25	1
Carteolol	25	1
Esmolol	25	1
Levobunolol	25	1
Metoprolol	25	1
Nadolol	25	1
Oxprenolol	25	1
Pindolol	25	1
Propranolol	25	1
Sotalol	25	1
Timolol	25	1

Note 1 Maximum allowable level per serving has been determined based on consideration of the urine concentration necessary to be perceived as a risk to an athlete based on World Anti-Doping Agency (WADA) thresholds and the per serving limit was set in order to effectively eliminate that risk. The report threshold is set at a concentration suitable for analysis for most samples and consistent with the serving size of the majority of supplements or functional foods tested. When analysis of the finished product does not allow for the achievement of the detection level necessary to ensure the protection of an athlete, a human exposure feeding study may be performed followed by analysis of the urine. If this option is taken, the detection limits in the urine sample shall meet World Anti-Doping Agency (WADA) requirements.

Note2 This anabolic agent is endogenous in humans. Other animals produce these substances and therefore animal sourced dietary supplement and food ingredients have been observed to contain trace levels of these endogenous compounds (i.e. progesterone and androstenedione in dairy products, testosterone and DHEA in fish and eggs). Due to complications related to detection of the misuse of endogenous steroids, WADA prescribes threshold values whereby urine samples below the threshold levels would not be subject to further analysis unless another criterion for suspicion was met. The threshold levels are all in excess of 10 nanogram per milliliter in urine. Based on these considerations, a detectable level of this endogenous anabolic agent which is found to be less than 500 ng/serving in the dietary supplement or functional food or ingredient will be deemed acceptable under this guideline. This assumes that the consumption of the serving will not concentrate in less than 50 mL of urine. The allowance for progesterone is elevated based on this compound not being present on the WADA Prohibited Substance List and on the prevalence of this compound in dairy products. Tolerance for the presence of endogenous agents is consistent with regulations related to the world food supply where the trace level occurrence of such endogenous compounds is common.