

Top Five Offenders

Athletes will most often encounter prohibited substances in dietary supplements that claim to build muscle mass, enhance recovery, promote weight loss, and boost energy levels. However, athletes must carefully read the labels of ALL dietary supplements and over-the-counter medications before use. (The following is NOT a complete list of substances prohibited for use in international competition.)

Prohibited Substance		Description	Reason for Banning	Supplement Ingredients	Product Examples
Anabolic Steroid	Dehydroepian-drosterone	Precursors of the male hormone testosterone. Precursors to testosterone such as Androstenedione, Androstenediol, and Dehydroepiandrosterone (DHEA) are prohibited by IOC regulations as are 19-Norandrostenedione and 19-Norandrostenediol, which are precursors to the anabolic steroid nandrolone.	<p>Unfair Advantage: Precursors to anabolic/androgenic hormones, these ingredients are alleged to increase muscle mass and strength, reduce body fat, prevent muscle loss (catabolism), and enhance recovery following intense exercise.</p> <p>Health Risk: Side effects of anabolic/androgenic precursors may include liver damage, aggressiveness, interference with hormone balance, elevated cholesterol levels, excessive hair growth, increased risk of muscle/tendon injury, and potential for cardiovascular complications.</p>	DHEA, Dehydroepiandrosterone	BodyWorx DHEA, [™] DHEA, DHEA Fuel, [™] DHEA MAX, [™] DHEA Power Mens Formula, [™] Go Pro, [™] MetaboStart, [™] Testosterone Fuel Booster [™]
	Androstenedione			<p>“Andro,” Androstenediol, 19-Norandrostenedione, 19-Norandrostenediol, 4-Androstenediol, 5-Androstenediol</p>	100 Poppers, [™] 3-Andro Extreme, [™] Androsol, [™] Androstat Pro Six, [™] Andro-Stack 850, [™] Andro Spray, [™] Depo Andro SL, [™] Nor-Andro Fuel, [™] Testroxin, [™] Testro Gel, [™] Ultimate Release 24 [™]
Stimulant	Ephedrine	Often found in products marketed as appetite suppressants (to reduce food intake) and “thermogenics” (to increase calorie expenditure). Dietary supplements may contain herbal extracts as sources of prohibited substances such as Ma Huang/Ephedra (ephedrine and pseudoephedrine), Guarana (caffeine), Kola Nut (caffeine), or Citrus aurantium/Zhi shi (synephrine). Some of these prohibited compounds may also be found in food and soft drinks (caffeine) as well as in over-the-counter cold medicines, diet aids, and pain relievers (caffeine, ephedrine, pseudoephedrine).	<p>Unfair Advantage: Central nervous system stimulants can produce both psychological and physiological effects that can aid athletic performance (increased alertness, reduced fatigue, higher energy levels).</p> <p>Health Risk: Stimulants are routinely associated with adverse side effects such as insomnia, elevated heart rate and blood pressure, headaches, and possibly the increased risk of stroke and heart attack in susceptible individuals.</p>	Pseudoephedrine, Ephedra, Ma Huang, Sida cordifolia	BetaLean HP, [™] ECA Stack, [™] Ephadrene, [™] Metabolife 356, [™] Metabolift, [™] Metab-O-Lite, [™] MetaboMax, [™] Norexin, [™] Simply Cut, [™] Super Power Trim, [®] Thermicore, [™] Yellow Jacket, [™] Xetaleen [™]
	Synephrine			Citrus aurantium, Zhi shi, Bitter Orange, Sour Orange, Phenylephrine, Advantra Z [™]	Bitter Orange, [™] Dexatrim Natural, [™] Green Ephedra Free, [™] LEAN Formula, [™] Thermojetics, [®] Vital Trim, [™] Xenadrine, [™]
	Caffeine			Guarana, Kola Nut, Yerba Mate	Adrenerlin, [™] Appetite Intercept, [™] Chew Slim Gum, [™] Energy Fuel, [™] Metabolic Boost, [™] Metabo Shape, [™] Stacker 2, [™] Thermicore CRT, [™] Turbo Charge, [®] Xenadrine [™]

Pharmanex

Pharmanex knows that dietary supplements play an important role in helping many athletes achieve peak performance. However, readily available supplements all too frequently contain substances prohibited from international competition. Athletes who use supplements may inadvertently be consuming these prohibited substances, whether through lack of education about these substances or through inaccurate product labeling by the supplement company.

Pharmanex has launched a proactive educational program stressing the responsible use of dietary supplements in athletic competition. In addition to identifying common prohibited substances and how they are most frequently used in dietary supplements, we also have provided a list of suggested guidelines for choosing safe, quality supplements.

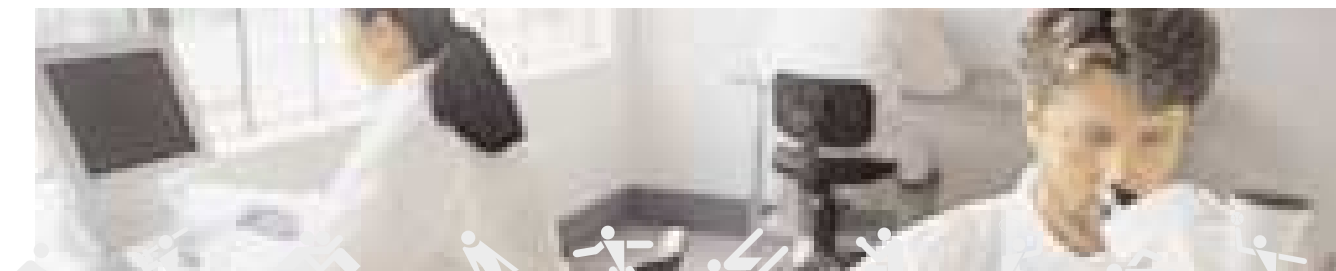
This guide outlines several of the most common ingredients that, although legally approved for use as ingredients in dietary supplements, are prohibited for use in athletic competition by the Olympic Movement Anti-Doping Code (OMADC). (Clarifications to OMADC are made by the International Olympic Committee and its Medical Commission.) This guide also provides competitive athletes with a list of prohibited substances that are most commonly found in dietary supplements. It is important to note that this guide is not a complete list of prohibited substances. For a more comprehensive list of prohibited substances athletes should visit the USADA's Web site at www.usantidoping.org, or call the USADA Drug Reference Line at 1-800-233-0393.

Choosing a Safe Supplement

As explained in this guide, some dietary supplements have been formulated with substances that are prohibited for use in international competition. Athletes must carefully read product labels and educate themselves about which ingredients and dietary products pose a doping risk. They must also know that the absence of prohibited substances on a product label does not guarantee a clean product. There have been reports of dietary supplements that contain unlabeled prohibited substances that have resulted in positive doping tests for unsuspecting athletes. The bottom line is that even though dietary products may look the same, they can vary in potency and quality.

It is important that athletes select products only from companies that:

- Do not use ingredients that are classified as prohibited substances or have negative health risks
- Select and utilize only the highest quality raw materials for consistent effectiveness and potency
- Follow recognized GMP (Good Manufacturing Practices) standards when producing their products
- Substantiate product claims with rigorous scientific evidence—including clinical evidence of product safety and effectiveness
- Regularly subject their products to independent third-party analyses to confirm the absence of prohibited substances



We have created this guide to:

- **Educate athletes** about dietary supplement ingredients prohibited from international competition
- **Help athletes** avoid an inadvertent doping offense resulting from the use of supplements
- **Allow athletes** to focus on the sound use of dietary supplements to support unique nutritional needs



Pharmanex is a world leader in the development and distribution of nutritional supplements. Provided by Nature and Proven by Science™, Pharmanex products are made with only the highest quality, safe ingredients following strict pharmaceutical manufacturing practices. For more information about Pharmanex products, visit our Web site at www.pharmanex.com. Additional copies of this guide are available at no charge to athletic associations and teams around the world. Call 801-345-2044.

Athletes' Frequently Asked Questions about Supplements

- Q.** Can using a dietary supplement cause me to test positive in a prohibited substance test?
- A.** Yes. There are several ingredients that, although approved for use as ingredients in dietary food products, are prohibited from collegiate, national, and international competition. The use of dietary supplements that contain these substances will result in a positive test for prohibited substances.
- Q.** I know many athletes who regularly use dietary supplements. Can I safely use dietary supplements without testing positive for prohibited substances?
- A.** Yes, provided that the supplements have not been formulated with prohibited ingredients or have not been tainted with prohibited substances in the manufacturing process. Athletes should carefully review the labels of all products they wish to use and only use products from reputable manufacturers.
- Q.** Why are ingredients such as ephedra and androstenedione, that are sometimes used in dietary supplements and over-the-counter medications, prohibited from athletic competition?
- A.** The Olympic Movement Anti-Doping Code prohibits the use of substances that are potentially harmful to an athlete's health or capable of unfairly enhancing performance.

- Q.** Should athletes take dietary supplements?
- A.** The decision to add dietary supplements to your diet and training regimen is a personal one. Athletes who feel that their diets are inadequate due to the demands of training, travel, or weight maintenance efforts may benefit from additional nutritional assistance provided by dietary supplements. Consult your athletic trainer or healthcare professional to determine if dietary supplementation is appropriate for you.
- Q.** How can athletes be sure that their dietary supplements are free of prohibited substances?
- A.** Athletes should educate themselves on the prohibited substances that are sometimes used as ingredients in dietary supplements and over-the-counter drugs and should carefully review product labels before use. To be sure that their dietary supplements are "clean" and completely free of prohibited substances, athletes should choose products only from companies that follow strict quality control and good manufacturing practices conduct independent tests to confirm that their products are free of prohibited substances.
- Q.** Where can I find a complete list of prohibited substances?
- A.** This guide provides a list of some of the common ingredients used in dietary supplements that are prohibited from use in international athletic competition. For a more comprehensive list of prohibited substances, athletes should visit the United States Anti-doping Agency's Web site at www.usantidoping.org.

athletes' guide



to safe supplementation