



Anabolic Steroids Are Not Dietary Supplements

BACKGROUND:

This fact sheet clears up some misconceptions regarding dietary supplements and clarifies differences between legal, safe dietary supplements and illegal, controlled substances. The Council for Responsible Nutrition (CRN), the leading trade association representing the dietary supplement industry, encourages the responsible use of dietary supplements along with other healthy habits, including a healthy diet and exercise, as part of individuals' overall health and wellness regimen.

Question: What is the difference between anabolic steroids and dietary supplements?

Answer: Dietary supplements are legal products used by more than 150 million Americans each year and anabolic steroids are controlled substances that are illegal without a prescription. Specifically, anabolic steroids are hormones that amount to extra testosterone and are often used to increase muscle size, strength and reduce post-exercise recovery time. Dietary supplements do not result in such drastic changes in the body and should not be expected to replace hard work and the necessary healthy habits that athletes must develop to be well-conditioned. Anabolic steroids are currently listed as controlled substances, making the possession of such substances without a prescription punishable by up to seven years in prison. Dietary supplements are available over-the-counter, in health stores, drug stores, supermarkets, other chain stores and through direct selling companies, physicians and direct mail catalogues and the internet. Finally, anabolic steroids are most commonly administered via injection and dietary supplements, by definition and by law, are substances that must be orally ingested in "pill, capsule, tablet, powder or liquid form."

Question: Is the Dietary Supplement Health and Education Act (DSHEA), the law which oversees all dietary supplements, too lax?

Answer: No. DSHEA is the appropriate regulatory framework for the supplement industry. DSHEA affords the government the enforcement authority to protect consumers through reasonable regulation, while providing consumers with appropriate access to a wide variety of safe, legal and beneficial vitamins, minerals, botanicals, and sports nutrition products that are used by more than 150 million Americans annually. CRN supports full implementation and stronger enforcement of DSHEA.

Question: Do dietary supplements contain illegal anabolic steroids that will cause athletes to test positive for steroids?

Answer: No legitimate dietary supplement should cause a positive result from an anabolic steroid test. By law, any supplements that either intentionally contain or are contaminated with anabolic steroid-like chemicals that would cause a positive anabolic steroid test result are adulterated products and would violate the federal law that regulates dietary supplements. Dietary supplements include multivitamins, minerals (like calcium), herbals (like green tea supplements), sports nutrition supplements (like amino acid tablets), specialty supplements (like omega-3s and glucosamine-chondroitin) and weight management supplements. Federal law prohibits the inclusion of anabolic steroids (and their precursors) in these products and all of these products are subject to good manufacturing practices that help eliminate the risk for accidental contamination.

Question: So androstenedione (“andro”) is no longer available for purchase?

Answer: Andro has been on the Controlled Substances List since 2005 and is no longer classified as a dietary supplement; therefore, is not available to be sold over-the-counter. If a company is selling andro, it is doing so illegally—in direct violation of the law.

Question: Isn’t dehydroepiandrosterone (DHEA) a pre-cursor steroid, and if so, why isn’t it included on the Controlled Substances List?

Answer: Many food components are technically “steroids”—cholesterol, for example is a steroid, but it is not anabolic and it is not a controlled substance. Efforts to make DHEA—a legal and safe supplement product—illegal under the guise of protecting consumers from “performance-enhancing drugs” is a solution in search of a problem. When the Anabolic Steroid Control Act of 2005 was passed, Congress specifically and intentionally omitted DHEA from the anabolic steroid category, recognizing that not all steroids are created equal. DHEA is not an anabolic steroid—it is naturally produced and is the most common steroid hormone in the body. Furthermore, under normal physiologic conditions, the body safely knows when it has enough DHEA and discharges any excess. Hundreds of thousands of older adults safely and responsibly use DHEA due to their bodies’ inability to effectively maintain normal hormone levels on their own. This supplement has promising use to help support immune function, maintain cognitive function and elevate mood, improve sleep patterns, maintain strong bones and normalize glucose metabolism for this population suffering from declining hormone levels. There are no scientific studies that suggest that DHEA has the same effect as anabolic steroids, so athletes should not take DHEA expecting those kinds of muscle-building results. If there is advertising making claims that DHEA will have such effects, then those ads should be investigated under the consumer protection laws as false and misleading advertising—but the products themselves are safe.

Question: What about creatine—is it dangerous and should it be put on the Controlled Substances List?

Answer: Creatine has a large body of evidence demonstrating benefit, and little, if any, research demonstrating adverse effects. Creatine is a naturally occurring amino acid-like compound made in the liver, kidneys and pancreas and is a substance which is readily available in the food supply—found mostly in red meat, fish and poultry. The vast majority of the published clinical trials have been positive, showing the safe and beneficial effects from creatine supplementation, particularly during short, repeated bursts of high-intensity activity. It should not be used by people with kidney problems and consumers should talk with their healthcare professional before they start using it. While more studies can always be done, there is no evidence that creatine use is unsafe in otherwise healthy people.

Question: What about human growth hormone (HGH)—is it a dietary supplement?

Answer: HGH is not a dietary supplement. HGH, like insulin, is a “peptide hormone” and therefore must be administered by injection, in order to be utilized by the body. Injected products, by law, are not dietary supplements. Consumers should be wary of supplement products that call themselves “HGH boosters” or claim to have HGH benefits. A supplement product that contains HGH would be an unapproved drug, not a supplement. On the other hand, supplement products that claim to have HGH-like effects are most likely misrepresenting what the product really does and are subject to the false advertising laws enforced by the Federal Trade Commission (FTC).

Question: Can dietary supplement manufacturers make any marketing or advertising product claims that they wish—whether they’re true or not?

Answer: Dietary supplement advertising is regulated by the Federal Trade Commission (FTC) to ensure that all advertising claims are truthful and can be substantiated.

Companies must be able to provide sufficient scientific background for their claims. The FTC can impose heavy fines for ads that are untruthful or misleading. In addition, CRN has provided a series of grants to the National Advertising Division (NAD) of the Better Business Bureau (BBB), to establish a self-regulatory initiative that allows the NAD to increase its scrutiny of dietary supplement advertising.

Question: Can dietary supplements be taken a number of ways, including being injected into the body?

Answer: No. Under the Dietary Supplement Health and Education Act (DSHEA), a dietary supplement “must be intended for ingestion in pill, capsule, tablet, powder or liquid form.” Therefore, any products that are taken by injection are not classified as dietary supplements, even if they contain vitamins. As an example, if an athlete gets injections of vitamin B, and then claims the vitamin B caused him or her to test positive for steroids that has nothing to do with dietary supplements. Prescribed vitamins administered by injection are regulated as a category of prescription drugs.

Question: Can athletes legally and safely take dietary supplements?

Answer: Yes. Dietary supplements enjoy very strong safety records with very few side effects and companies that have a vested interest in long-term relationships with their customers ensure their products are made to high-quality standards. Athletes, however, must be very familiar with the specific rules of their sports’ governing body when it comes to what will cause a “positive test.” In some instances, for competitive or other reasons, legal products (including caffeine and some dietary supplements and over-the-counter medicines) may be on a competitive organization’s banned substance list. Competitive athletes should consult with their coaches, trainers and healthcare professionals to be very sure what substances might be included on a banned list. When selecting supplements, athletes should choose wisely from companies and sources they know and trust.

Question: Do athletes need dietary supplements, since they are already in optimal shape?

Answer: Most people can benefit from dietary supplements, but athletes may specifically need them. Because the physical stress from intense exercise increases an athlete’s oxidative stress and nutrient needs, and depletes electrolytes and certain vitamins, supplements can play a vital role for athletes. Athletes should never let supplements take the place of hard work and a healthy diet, but should consider how these products can complement those efforts. Professional athletes should speak with their coaches, doctors and other healthcare professionals about the types of supplements they are taking. For younger athletes, such as teenagers, who wish to take dietary supplements, they should consult also consult their parents, coaches and doctors.