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LEGALIZE AND REGULATE: A PRESCRIPTION FOR REFORMING ANABOLIC STEROID LEGISLATION

*John Burge**

[S]teroids do affect appearance, capacity for performance (strength, power, speed) and mental attitude. They can make you bigger, stronger, faster and more aggressive, all of which are more highly valued by today's society than ever before. These characteristics bring respect, power and sometimes financial rewards. It should be no surprise that four or five messages a day urging [individuals] to say no to drugs have little impact and do virtually nothing to deter use in the face of thousands of positive messages and overwhelming approval from society at large.¹

I. INTRODUCTION

Anabolic steroids (“steroids”) are high-technology drugs. They can significantly alter the human physiology by accelerating the rate of muscle development through weight training. This technology is being used by both competitive athletes who want to improve their performance and individuals who want to improve their appearance. Due to the health risks of such use, federal prosecutors have aggressively pursued physicians who prescribe steroids for these purposes, and Congress has criminalized this type of steroid use. Undeterred, there are more steroid users today than ever — most of whom are self-administering these powerful drugs.

Sports medicine experts estimate that, depending on the particular sport, 5% to 75% of professional athletes and 2% to 20% of college

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1. James E. Wright, Ph.D., *Flex Seminar: Anabolic Steroids, The Real Story*, FLEX, May 1993, at E.

athletes use steroids.² For sports heavily dependent upon strength and speed (e.g., football, powerlifting and track), the estimates are staggering: some studies suggest that as many as 96% of professional football players and 80% to 99% of male bodybuilders use steroids.³ Other experts believe that half of the 9,000 athletes who competed in the 1988 Olympics used steroids at some time during their training.⁴ Recent studies of non-athletes, mostly adolescents, indicate that as many as two million may have already experimented with steroids.⁵ Estimates of high school usage rates range from 3% to 18%.⁶ According to Dr. Frank Young, former U.S. Food and Drug Administration Commissioner: "[f]eeling the need to look good — for college coaches, for friends or for themselves — is leading approximately 10 percent of the nation's high school students to use anabolic steroids"⁷ Steroid use produces side effects which often result in serious health consequences. Widespread use, particularly among adolescents, poses serious health problems. Congress chose criminalization as the method to combat this problem.

Today, under the Federal Controlled Substances Act⁸ and many state controlled substances acts,⁹ steroids are classified as Schedule III substances,¹⁰ which places them in the same category as amphetamines, methamphetamines, opium and morphine.¹¹ Possession of any Schedule III substance is a felony offense punishable by up to five years in prison.¹² If an individual sells steroids, or possesses enough to evidence an intent to sell, the individual faces up to five years in prison and a \$250,000 fine.¹³

2. *Abuse of Steroids in Amateur and Professional Athletics: Hearing Before the Subcomm. on Crime of the House Comm. on the Judiciary*, 101st Cong., 2d Sess. 92, at 73 (March 22, 1990)[hereinafter *Hearings on the Abuse of Steroids in Athletics*](statement of Robert E. Larsen, M.D., Team Physician, University of Minnesota Football Team).

3. Paul J. Goldstein, *Anabolic Steroids: An Ethnographic Approach*, 102 ANABOLIC STEROID ABUSE 74, 75 (National Institute on Drug Abuse Research Monograph Series, 1990).

4. VIRGINIA ALVIN & ROBERT SILVERSTEIN, *STERIODS: BIG MUSCLES, BIG PROBLEMS* 65 (1992).

5. *Hearing on the Abuse of Steroids in Athletics*, *supra* note 2, at 67 (statement of Robert E. Larsen, M.D., Team Physician, University of Minnesota Football Team).

6. *Id.* at 73.

7. Steve Berkowitz, *High School Students Form Growing Marketplace for Drugs*, WASH. POST, Jan. 15, 1989, at D1.

8. 21 U.S.C. § 812(c) (1994).

9. Jon R. May, Ph.D., *State Laws/Regulations Pertaining to the Control of Anabolic Steroids* 1 FDA REP., Jan. 1991.

10. For a survey of state and federal steroid legislation see Norma H. Reddig, Comment, *Anabolic Steroids: The Price of Pumping Up!*, 37 WAYNE L. REV. 1647, 1661-65 (1991).

11. Rorie Sherman, *The Big Push*, NAT'L L.J., Feb. 10, 1992, at 40, 42.

12. See 21 U.S.C. § 841(b)(1)(C) (1988).

13. *Id.*

Even prior to the federal scheduling of steroids, steroid distributors were being pursued by the government; over 300 joint federal/state investigations had occurred,¹⁴ resulting in at least 175 steroid trafficking convictions.¹⁵ Despite vigorous enforcement, however, steroid legislation has had no discernable effect on the rate of use. In fact, national surveys indicate that steroid use is increasing.¹⁶

This Article takes the position that the current approach to the problem of steroid abuse, criminalization, has worsened a serious health problem. So far, governmental efforts have (1) greatly reduced the supply of FDA regulated product; (2) created a market for unregulated, imported or clandestinely manufactured product; and (3) reduced the likelihood that the average steroid user will seek or be able to obtain medical supervision. Athletes and increasing numbers of young adults are self-injecting large amounts of a powerful drug about which medical experts know little. This Article proposes a different approach to the problem.

This Article argues that (1) steroid use cannot be equated with the use of narcotics like heroin and cocaine; (2) the powerful social pressures that result in steroid use have been underestimated; (3) the threat of criminal penalties cannot overcome these pressures; and (4) only fundamental changes in societal values can affect the demand for steroids. Because the demand for steroids is so powerful, steroid use should be legalized and regulated to best mitigate adverse health effects.

Finally, this Article advocates a program that would require users to obtain steroids from licensed physicians pursuant to a prescription, and require physicians to both provide medical monitoring during the course of their use and regularly inform users of the health risks and the health impacts of their use.

II. STEROIDS: THEIR NATURE AND FUNCTION

To comprehend the problem created by the use of steroids for muscle building purposes, a brief background on their nature and function is necessary. By way of introduction, there are various categories of steroids (e.g., water-based, oil-based, etc.), and each individual steroid has its own

14. *Anabolic Steroids Control Act of 1990: Hearings on H.R. 4658 Before the Subcomm. on Crime of the House Comm. on the Judiciary*, 101st Cong., 2nd Sess. 90, at 42-3 (May 17, 1990) [hereinafter *Hearings on H.R. 4658*] (Statement of Robert G. Chesemore, Associate Commissioner for Regulatory Affairs, Food and Drug Administration, Public Health Service, Department of Health and Human Services).

15. Sherman, *supra* note 11, at 42.

16. Wright, *supra* note 1, at C.

unique properties. For simplicity, and for the purposes of this Article, all categories will be referred to as anabolic steroids.

Anabolic steroids are synthetic versions of the naturally occurring male hormone testosterone¹⁷ — an essential, natural chemical present in both males and females. Testosterone serves three primary physiological functions: (1) it stimulates protein production (hereinafter “anabolic effect”); (2) it reduces protein breakdown (hereinafter “anti-catabolic effect”); and (3) its high concentration in males induces inherently male characteristics (hereinafter “androgenic effects”).¹⁸ Anabolic steroids mimic these effects, although the magnitude of each effect varies depending upon the particular steroid used.

Steroids have several legitimate medical uses. They are most often used to induce protein synthesis,¹⁹ including testosterone replacement for patients with low testosterone production, and treatment of malnourishment and certain forms of anemia.²⁰ Other uses include treatment of breast cancer²¹ and improvement of a patient’s overall condition prior to undergoing surgery.²² In the 1970s, the World Health Organization began studying testosterone as a male contraceptive.²³ Recently, as a result of a worldwide trial, the World Health Organization established its efficacy for this purpose and reported that minimal physical side effects occurred.²⁴

When steroids are used for muscle building purposes, however, they are often taken in doses as much as ten times the amount used for legitimate medical purposes.²⁵ Athletes often take a combination of different steroids, in excess of 100 milligrams daily, for periods of weeks

17. ROBERT VOY, M.D., DRUGS, SPORT, AND POLITICS 13 (1991).

18. *Id.* at 13-14.

19. JAMES E. WRIGHT & VIRGINIA S. COWART, ANABOLIC STEROIDS: ALTERED STATES 35 (1990).

20. *Id.*

21. *Legislation to Amend the Controlled Substances Act (Anabolic Steroids): Hearings on H.R. 3216 Before the Subcomm. on Crime of the House of Representatives Comm. on the Judiciary, 100th Cong., 2d Sess. 99, at 74 (July 27, 1988)* [hereinafter *Hearings on H.R. 3216*] (testimony of Dr. Gloria Troendle, Deputy Director, Division of Metabolic and Endocrine Drug Products, Food and Drug Administration).

22. WRIGHT & COWART, *supra* note 19.

23. *Id.*

24. Charles Yesalis et al., *Anabolic-Androgenic Steroid Use in the United States*, 270 JAMA 1217, 1219 (1993).

25. Dori Stehlin, *For Athletes and Dealers, Black Market Steroids are Risky Business*, FDA CONSUMER, Sept. 1987, at 24.

or months at a time.²⁶ This is known as "stacking."²⁷ Stacking creates testosterone levels far in excess of the 2.5 to 10 milligrams secreted daily from the testes of a normal mature male.²⁸ At these high dosages, serious side effects may result.

The most serious side effect is liver damage.²⁹ Liver damage can result from use of oral (water-based) steroids which, taken internally, must be processed through the liver.³⁰ Liver tumors are not uncommon, although they generally regress after cessation of steroid use.³¹ Other serious concerns are heart attacks through increased cholesterol buildup,³² sexual changes, and mental disturbance.

The sexual changes, resulting from the androgenic effects of steroids, are often startling. Males may take on female characteristics such as higher voices, shrinking testicles, and breast growth, while females may take on male characteristics such as lower voices, shrinking breast tissue and facial hair growth.³³ The leading study on the mental effects of steroid use concluded that 12.2% of steroid users may demonstrate psychotic symptoms and 25% may demonstrate manic symptoms such as inflated recklessness and a feeling of invincibility.³⁴

Increased aggressiveness is the most commonly documented mental disturbance.³⁵ Several accounts of aggression by steroid users, commonly termed "Roid Rage," have been reported.³⁶ These psychological effects have even been raised as defenses in several criminal prosecutions.³⁷ In general, however, reported incidents of serious outcomes from steroid use have been "extremely low."³⁸ "[O]nly a handful of AAS-associated [Anabolic/Androgenic Steroid-associated] deaths of athletes have been reported" out of an estimated one million users over a four decade

26. Roger Miller, *Athletes and Steroids: Playing a Deadly Game*, FDA CONSUMER, Nov. 1987, at 17, 21.

27. *Id.*

28. *Id.*

29. WRIGHT & COWART, *supra* note 19, at 59.

30. *Id.*

31. *Id.*

32. *Id.* at 62.

33. *Id.* at 66-67.

34. Harrison G. Pope, Jr., M.D. & David L. Katz, M.D., *Affective and Psychotic Symptoms Associated With Anabolic Steroid Use*, 145 AM. J. PSYCH. 487 (Apr. 1988).

35. Reddig, *supra* note 10, at 1650-51.

36. DR. BOB GOLDMAN & DR. RONALD KLATZ, DEATH IN THE LOCKER ROOM II 26 (1992).

37. For a survey of criminal cases in which the mental effects of steroid use have been raised as a defense, see Reddig, *supra* note 10, at 1653-55.

38. Yesalis, *supra* note 24, at 1217.

period.³⁹ At the same time, the long-term health effects of steroid use have yet to be determined.⁴⁰

Human growth hormone ("Hgh"), although not an anabolic steroid, is another growth-inducing hormone commonly used either with, or as a substitute for, anabolic steroids.⁴¹ Because it is also commonly used as a performance enhancer and is thought to result in increased muscle growth,⁴² the analysis in this Article applies to Hgh use as well.

Like steroids, Hgh has legitimate medical uses.⁴³ It is a naturally occurring hormone, found in all individuals, which regulates human growth and development.⁴⁴ Because a shortage can result in dwarfism, Hgh has traditionally been used to treat dwarfism in young children caused by malfunctioning pituitary glands.⁴⁵ Hgh is also commonly used by athletes because (1) it is virtually undetectable to modern drug testing; and (2) it may have powerful growth-inducing effects. Like steroids, high dosages of Hgh is suspected to have serious side effects, although this has not been documented with concrete medical data.

III. SOURCES OF INFORMATION REGARDING ANABOLIC STEROID USE

Very little concrete information exists regarding the nature of steroid use or the medical and psychological effects of steroid use. Due to health risks, accurate medical or psychological studies cannot ethically be performed using the level of steroids athletes consume.⁴⁶ Athletes take steroids in far higher doses than those considered safe by legitimate therapeutic standards.⁴⁷ Furthermore, because of their criminal and athletic proscription, steroid use is generally very secretive.⁴⁸ As a result, much of the information relied on to prepare this Article is anecdotal or has been generated as a result of informal surveys or investigative newspaper reporting. The opinions cited herein, which may be among the most reliable authorities that exist, include those of physicians familiar with

39. *Id.*

40. *Id.*

41. VOY, *supra* note 17, at 62.

42. *Id.* at 58.

43. *Id.*

44. *Id.* at 57.

45. *Id.* at 57-58.

46. Virginia S. Cowart, *Support Lags for Research on Steroid Effects*, 262 JAMA 2500, 2502 (1989).

47. VOY, *supra* note 17, at 21.

48. *Hearing on H.R. 3216, supra* note 21, at 41 (testimony of Dr. Charles Yesalis, Professor of Health Policy and Administration, Pennsylvania State University).

steroids, federal agency officials, prosecutors and investigators associated with steroid investigations.

For the steroid user, underground steroid texts or manuals may be the most widely used source of information. Perhaps the most popular is a crude eighteen page, uncopyrighted manual entitled the *Underground Steroid Handbook*.⁴⁹ According to its author, over 40,000 copies have been sold, and it has been photocopied extensively.⁵⁰ This book "has been quoted on CBS's 60 Minutes," in *Sports Illustrated*, the *Los Angeles Times*, the *New York Times*, "and in just about every major (and minor) bodybuilding magazine."⁵¹ An updated and expanded version of this text, the *Underground Steroid Handbook II*, was released in 1989.⁵²

Another popular source of information is the *Anabolic Reference Guide* ("Guide"). The *Guide* is a comprehensive 245-page text, now in its sixth edition, published by a bodybuilding-affiliated publisher.⁵³ The author of the *Guide* claims it has been read by over 30,000 athletes and is now being translated into several languages for distribution in over two dozen countries.⁵⁴ Both the *Underground Steroid Handbook* and the *Guide* discuss in detail what steroid users need to know, including the attributes of the various forms of anabolic steroids available. While informal and based on anecdotal information, these sources should not be regarded as unreliable. Some of the medical experts on steroid use maintain copies of the *Underground Steroid Handbook* in their files and have praised both the knowledge of the author and the depth of its contents.⁵⁵

Due to the illegality of steroid use, no legitimate medical publisher produces a manual on how to take steroids. However, the fact that these underground pharmacological texts exist and are widely distributed is evidence that the mainstream medical community is largely detached from this type of steroid use. As a result, these underground sources may be the best medical guidance available to the average steroid user. These books are advertised in the backs of bodybuilding magazines and are readily available by mail order.⁵⁶

49. Peter Alfano & Michael Janofsky, *A Guru Who Spreads the Gospel of Steroids*, N.Y. TIMES, Nov. 19, 1988, at A1.

50. DANIEL DUCHAINE, UNDERGROUND STEROID HANDBOOK II 4 (1989).

51. *Id.*

52. *Id.* at 2.

53. W. NATHANIEL PHILLIPS, ANABOLIC REFERENCE GUIDE (6th ed. 1991).

54. *Id.*

55. Alfano & Janofsky, *supra* note 49, at A1.

56. See the latter pages of FLEX and MUSCULAR DEVELOPMENT magazines.

IV. HOW THE CURRENT GOVERNMENT APPROACH OF
CRIMINALIZATION TO STEROID ABUSE IS
EXACERBATING THE PROBLEM RATHER THAN SOLVING IT

The current government approach to steroid abuse is to impose harsh criminal penalties in an effort to stamp out use.⁵⁷ Congress, by scheduling steroids as a controlled substance, is utilizing the same strategy it uses to combat narcotic abuse. However, steroids are not like other controlled substances. Substances such as cocaine or amphetamines are taken in a recreational manner to induce temporary feelings of euphoria. Steroids, on the other hand, are not taken for euphoric effect. Instead, they are taken for distinctly different purposes: to gain physical strength or to achieve permanent changes in physique. Their use is inherently goal-oriented because they have little or no effect unless their use is accompanied by serious weight training.

A. *Development and Application of Early Steroid Legislation Prior to the Addition of Steroids to the Controlled Substances Act*

The use of prescription drugs for non-FDA approved reasons is termed a "diversion" problem.⁵⁸ Initial federal efforts to curb steroid use focused on the growing diversion of steroids from legitimate pharmaceutical manufacturers.⁵⁹

Prior to 1962, pharmaceutical regulations primarily dealt with drug safety⁶⁰ and labeling.⁶¹ In 1962, a change in federal pharmaceutical law required drug manufacturers to demonstrate the effectiveness of the drugs they wished to market.⁶² At that time, several anabolic steroids were already on the market.⁶³ The manufacturers of these steroids claimed that treatment of osteoporosis and growth hormone deficiency were valid

57. See *supra* notes 8-12 and accompanying text.

58. *Hearings on H.R. 3216, supra* note 21, at 61 (testimony of Gene R. Haislip, Deputy Assistant Administrator, Drug Enforcement Agency).

59. *Id.* at 77 (testimony of Dr. Charles Yesalis).

60. WILLIAM N. TAYLOR, M.D., *MACHO MEDICINE: A HISTORY OF THE ANABOLIC STEROID EPIDEMIC* 41 (1991).

61. *Id.* at 40.

62. *Hearings on H.R. 3216, supra* note 21, at 73-74 (testimony of Dr. Gloria Troendle); see also WILLIAM N. TAYLOR, M.D., *MACHO MEDICINE: A HISTORY OF THE ANABOLIC STEROID EPIDEMIC* 41 (1991).

63. *Hearings on H.R. 3216, supra* note 21, at 73 (testimony of Dr. Gloria Troendle).

medical uses.⁶⁴ The FDA rejected both of these claims.⁶⁵ Many of these companies, determined to keep their steroid products on the market, performed further studies and found other valid uses.⁶⁶ By the late 1980s, many of these companies were suspected of producing anabolic steroids far in excess of the legitimate medical demand.⁶⁷ They were accused of ignoring that the majority of their products were finding their way into the hands of individuals who were using them to build muscle.⁶⁸

At the same time that this diversion problem was evolving, federal prosecutors were actively pursuing steroid distributors under the Federal Food, Drug, and Cosmetic Act.⁶⁹ By May of 1986, a "steroid trafficking" task force, comprised of personnel from the Department of Justice ("DOJ"), the Food and Drug Administration, and the Federal Bureau of Investigation had been established.⁷⁰ By 1988, more than 60 steroid traffickers had been successfully prosecuted and 120 more were facing charges.⁷¹ However, these enforcement efforts were not enough. In a series of congressional hearings which commenced in 1988, it was reported that steroid abuse was increasing.⁷² Congress felt that further criminal controls were needed and eventually included steroids in the Controlled Substances Act.⁷³ However, most of the evidence presented at the hearings counseled against further criminal controls.

*B. Based on Scant Evidence, and Against the Opinions of the Experts,
Congress Distorted the Meaning of the Controlled
Substances Act by Adding Anabolic Steroids*

The Controlled Substances Act ("CSA") is the primary legislation that controls substance abuse.⁷⁴ Ordinarily, when new substances of abuse are discovered, the Attorney General schedules them pursuant to power delegated by Congress.⁷⁵ In the case of anabolic steroids, the Department

64. *Id.* at 73 (testimony of Dr. Gloria Troendle).

65. *Id.*

66. *Id.*

67. *Id.* at 77 (testimony of Dr. Charles Yesalis).

68. *Hearings on H.R. 3216, supra* note 21, at 77 (testimony of Dr. Charles Yesalis).

69. *Hearings on H.R. 4658, supra* note 14, at 39-40 (statement of Ronald A. Chesemore).

70. WRIGHT & COWART, *supra* note 19, at 117.

71. Goldstein, *supra* note 3, at 83.

72. *See, e.g., Hearings on H.R. 3216, supra* note 21; *Hearings on the Abuse of Steroids in Athletics, supra* note 2.

73. *Hearings on H.R. 4658, supra* note 14.

74. 21 U.S.C. § 801 (1988).

75. *Hearings on H.R. 4658, supra* note 14, at 19 (statement of Leslie Southwick, Deputy Assistant Attorney General, Civil Division of the Department of Justice).

of Justice requested that the Department of Health and Human Services perform a scientific and medical evaluation of whether steroids should be scheduled.⁷⁶ Both the Food and Drug Administration and the National Institute on Drug Abuse evaluated anabolic steroids and concluded that they did not "possess psychoactive effects comparable to those substances currently scheduled . . . [and] did not recommend any administrative action to control steroids under the CSA."⁷⁷ Despite these recommendations, Congress added steroids to the CSA by legislation. A review of the evidence submitted at the Congressional hearings, however, indicates that this decision was contrary to the purpose and spirit of the Controlled Substances Act. The hearing testimony also reinforces why criminalization is not solving a problem but rather creating one.

In July 1988, the first Congressional hearing on steroid abuse was held. At issue was proposed legislation to amend the Controlled Substances Act to list methandrostenolone ("Dianabol," the most popular anabolic steroid), as a Schedule I controlled substance.⁷⁸ Much of the testimony was directed at the steroid diversion problem. Dr. Charles Yesalis testified that pharmaceutical companies refused to cooperate with investigations to determine the level of diversion:

We couldn't get the drug companies to give us the information we needed to compare their level of production of anabolic steroids to the known incidence and prevalence of diseases for which they are medically indicated. My gut instinct, along with that of my colleagues, is the production far exceeds the disease states for which they are indicated.⁷⁹

Notwithstanding this diversion problem, it was the position of the majority of the witnesses who testified, including those from the American Medical Association ("AMA"),⁸⁰ that scheduling of anabolic steroids would not reduce their widespread use. Furthermore, although there was some evidence that steroids have psychological effects,⁸¹ steroids were a poor fit for regulation under the Controlled Substances Act. This position was consistent with that of the Drug Enforcement Agency ("DEA"), the federal agency responsible for enforcement of the Act:

76. *Id.* at 46 (statement of Ronald G. Chesemore).

77. *Id.*

78. *Hearings on H.R. 3216, supra* note 21.

79. *Id.* at 77 (testimony of Dr. Charles Yesalis).

80. *Id.* at 91 (statement of the American Medical Association).

81. *Id.* at 60 (statement of Gene R. Haislip, Deputy Assistant Administrator, Drug Enforcement Administration).

[I]t appears that the primary motivation for taking these drugs is the belief that they will increase body mass and strength and will improve appearance. This raises a more fundamental question of whether the CSA was intended to be a means for controlling substances that are taken primarily for their effects on the physique rather than for their effects on the mind.

The CSA was designed to encompass drugs that are abused exclusively for psychoactive effects and are characterized either as narcotics, stimulants, depressants, or hallucinogens. In this respect, the law is poorly suited to the steroid drugs. It is clear, based on the legislative history, that the Congress did not intend to encompass them within it. An amendment to the CSA to control the steroids to provide for both criminal and regulatory controls would significantly alter DEA's mandate and purpose and would further strain the agency's resources.⁸²

The AMA also predicted that scheduling of anabolic steroids would not reduce their widespread use.⁸³ Congress temporarily followed these recommendations pending development of another alternative.

In 1989, a hearing was held before the Senate Judiciary Committee.⁸⁴ This time the Senate sought to introduce legislation to schedule steroids within the Controlled Substances Act. Again, a statement submitted by the AMA vehemently opposed the scheduling of anabolic steroids:

The medical facts do not support scheduling anabolic steroids under the CSA. Anabolic steroids have an accepted use in the treatment of several medical conditions, including certain anemias, hereditary angioedema, and breast cancer. Moreover, anabolic steroids can be used safely under medical supervision. . . . Moreover, anabolic steroids should not be scheduled under *any* other schedule of the CSA since abuse of the drugs does *not* lead to physical or psychological dependence as is required for scheduling under the Act.

In addition, scheduling of anabolic steroids would not adequately address the problem of abuse of these drugs because it would not affect the major illicit sources of the drug — shipments from foreign countries and from veterinary supply

82. *Id.* at 69.

83. Cowart, *supra* note 46, at 2501.

84. *Steroids in Amateur and Professional Sports — The Medical and Social Costs of Steroid Abuse: Hearing Before the Senate Comm. on the Judiciary*, 101st Cong., 1st Sess. 736, at 78 (1989) [hereinafter *Senate Hearings on Steroid Abuse*].

houses. Scheduling would curtail only the relatively small amount of abuse that results from diversion from licit sources.⁸⁵

In March of 1990 another hearing was held by the Subcommittee on Crime of the House Judiciary Committee which focused primarily on the use of steroids in professional and college football. At the inception of the hearing, Chairman William J. Hughes indicated his intent to introduce legislation placing steroids on Schedule III of the CSA and providing felony penalties for coaches, managers, and trainers who encouraged athletes to use steroids.⁸⁶ However, the only evidence in the 1990 hearing record which could support a finding that steroids were "psychologically addictive" within the meaning of the CSA, was an equivocal statement submitted by Kenneth B. Kashkin, M.D., an assistant professor of psychiatry at Yale.⁸⁷ The statement indicated that withdrawal symptoms similar to those of opiate and alcohol withdrawal had been observed.⁸⁸ However, to the extent that this statement suggested that steroids are "psychologically addictive" in the manner of other controlled substances, it is contradicted by his article, published in the *Journal of the American Medical Association* four months prior to the hearing, which was also made part of the record. That article concluded:

[O]ur review supports the conclusion that anabolic steroid abuse can develop into a psychoactive substance-dependence disorder with cognitive, behavioral, and physiological symptoms indicative of uncontrollable use of a psychoactive substance despite adverse consequences. The anabolic steroid-addiction hypothesis is speculative and needs to be confirmed by scientific investigation. . . . [W]e also conclude that anabolic steroid abusers need to be treated rather than tested and penalized.⁸⁹

Even assuming that this earlier hypothesis is correct, Dr. Kashkin's position, that treatment is the proper solution, counsels against the scheduling of steroids.

85. *Id.*

86. *Hearings on the Abuse of Steroids in Athletics*, *supra* note 2, at 1 (statement of Chairman William J. Hughes).

87. *Id.* at 101 (statement of Kenneth B. Kashkin, M.D., Assistant Professor of Psychiatry, Yale University).

88. *Id.*

89. Kenneth B. Kashkin, M.D. & Herbert D. Kleber, M.D., *Hooked on Hormones? An Anabolic Steroid Addiction Hypothesis*, 262 JAMA 3166, 3170 (1989).

In 1990, the final hearing took place on this legislation, termed the "Anabolic Steroids Control Act of 1990."⁹⁰ Unlike the previous hearings where the AMA was consulted, no letters from the AMA were incorporated into the record.⁹¹ On November 29, 1990, the act became law when President Bush signed the Omnibus Crime Control Bill.⁹²

The focus of the hearings suggests that any "psychologically addictive" properties of anabolic steroids were secondary considerations to Congress. The majority of witnesses who testified at the hearings leading to the legislation were representatives from either amateur or professional athletics.⁹³ The testimony, and apparently Congress' main concern, focused on legislative action in an effort to solve an athletic "cheating" problem. Congress had a solution in mind — amending the Controlled Substances Act — and planned to proceed with or without the blessing of the DEA or the medical community. As a result, steroids stand out as an anomaly among the codeine derivatives, central nervous system depressants, and stimulants that form the rest of the Schedule III substances.⁹⁴ This congressional action will not be effective in reducing steroid use, and only magnifies the health problems posed by steroid abuse.

*C. The Criminalization Approach has Caused an
"Enforcement Resistant" Supply to Arise and Has
Failed to Reduce Steroid Demand*

According to the FDA, steroids are increasingly obtained from a "black market," whereas previously they were obtained predominantly from legitimate pharmaceutical companies.⁹⁵ Now they are mainly smuggled in from Mexico or obtained from clandestine laboratories:

While in 1985, we estimated that 70 percent of "black market" anabolic steroids was [sic] diverted from legitimate manufacturers, we now estimate that less than 30 percent comes from that source. We estimate that over two-thirds of the "black market" steroids are smuggled into the United States or are manufactured by clandestine laboratories.

90. *Hearings on H.R. 4658, supra* note 14.

91. *Hearings on H.R. 4658, supra* note 14, at III (table of contents).

92. Pub. L. No. 101-647; 104 Stat. 4789 (codified as amended at 18 U.S.C. § 1 (1990)).

93. *See Hearings on the Abuse of Steroids in Athletics, supra* note 2, at III (table of contents); *see also Senate Hearings on Steroid Abuse, supra* note 84, at III (table of contents).

94. 21 U.S.C. § 812(b)(3) (1988).

95. *Hearings on H.R. 4658, supra* note 14, at 41 (statement of Ronald G. Chesemore).

. . . The cooperation of the legitimate drug industry, along with the success of . . . continuous regulatory activity, has very likely resulted in the increase of "black market" steroids from the other sources, i.e., smuggling and clandestine laboratories. To date, 17 clandestine anabolic steroid manufacturing operations have been identified and 13 have been located and closed.⁹⁶

According to the Department of Justice, federal enforcement efforts have caused the market to shift. This market shift has also been accompanied by another problem — the increasing involvement of hardened criminals:

Our prosecutions have led many dealers to operate in a clandestine atmosphere that makes law enforcement difficult. Dealers have gone "underground," suspicious that their customers or dealers might be government agents or informants. We have seen illegal trafficking in steroids evolving from the diversion of legitimately manufactured domestic drug products by persons who had not been involved in prior criminal activity. Now, we are seeing the involvement of more hardened criminals in the wholesale smuggling of foreign manufactured products into the United States and the domestic clandestine manufacturing of counterfeit steroid products that pose other health risks.⁹⁷

The DOJ specifically informed Congress that prosecution efforts had not affected the steroid supply. In a statement made part of the 1990 hearing record, Leslie Southwick reported on behalf of the Justice Department, "[i]n sum, in spite of what has already been accomplished, we all recognize that our efforts have not discouraged many individuals from continuing or initiating this very lucrative illegal activity."⁹⁸

Additionally, existing surveys confirmed that the demand for steroids remained unaffected by federal efforts. A National Institute on Drug Abuse survey concluded that anabolic steroid use increased between 1989 and 1990.⁹⁹ In another survey, 93% of steroid users and 67% of experts and scientists agreed that steroid use was increasing, notwithstanding the fact that steroids were becoming harder to obtain.¹⁰⁰ If usage rates had dropped, as originally anticipated, then prosecution efforts might have been considered a success and further criminal controls may have been

96. *Id.*

97. *Id.* at 34 (statement of Leslie Southwick).

98. *Id.* at 37.

99. Wright, *supra* note 1, at C.

100. *Id.*

appropriate. However, usage rates have not dropped and will not likely drop in the future.

V. THE THREAT OF CRIMINAL PENALTIES CANNOT OVERCOME THE STEROID DEMAND, WHICH IS A NATURAL REACTION TO POWERFUL SOCIAL PRESSURE TO "WIN" AND "LOOK GOOD"

A. *Athletes Take Steroids Because They Must Do So to Win in Modern Athletics*

1. Athletic "Doping" in General

Athletes have historically used drugs to enhance their performance. This practice is known as "doping."¹⁰¹ Some of the substances used have been extreme, including heroin and strychnine.¹⁰² Occasionally, this practice has produced tragic results. For example, during the 1960 Olympiad in Rome, Danish cyclist Knud Enemar Jensen suddenly died.¹⁰³ Afterward, it was discovered that he had been taking a combination of nicotynal alcohol and amphetamine — now commonly referred to as the "Knud Jensen diet."¹⁰⁴ More recently, in 1987, heptathlete Brigit Dressel likewise suffered a sudden death.¹⁰⁵ According to Dr. Voy of the United States Olympic Committee ("USOC"), her drug use included "standardized macromolecules of fresh cells from animal brain and placenta."¹⁰⁶ In order to curb this dangerous practice, the International Olympic Committee ("IOC") maintains an extensive list of banned substances for which athletes may be tested.

2. The Rise of Anabolic Steroid Doping

In 1954, it was first suspected that Soviet athletes began to use testosterone as a doping agent.¹⁰⁷ One Olympic gold medalist testified before a Senate committee in 1973 that steroid use was common as early as 1968:

101. VOY, *supra* note 17, at 4.

102. *Id.* at 5-6.

103. *Id.* at 6.

104. *Id.*

105. *Id.* at 101.

106. VOY, *supra* note 17, at 4.

107. DR. BOB GOLDMAN, DEATH IN THE LOCKER ROOM 13 (The Body Press 1987) (1984).

It was not unusual in 1968 to see athletes with their own medical kits, practically a doctor's, in which they would have syringes and all their various drugs . . . I know any number of athletes on the '68 Olympic team who had so much scar tissue and so many puncture holes on their backsides that it was difficult to find a fresh spot to give them a new shot.¹⁰⁸

The anabolic and anti-catabolic effects of testosterone were found to greatly assist athletes in increasing muscle mass and strength through training, while reducing the muscle breakdown that often resulted.¹⁰⁹

Recognizing the serious side effects that resulted from testosterone use, CIBA-Geigy, a large pharmaceutical manufacturer, attempted to develop a synthetic version without the side effects.¹¹⁰ The byproduct of their failure was Dianabol, one of today's most popular anabolic steroids.¹¹¹ This invention marked the beginning of the manufacture of anabolic steroids. In 1976, the IOC and the USOC, realizing the dangerous side effects of these drugs and their powerful ability to enhance performance, banned the use of anabolic steroids by all Olympic competitors.¹¹²

3. The Failure of Modern Drug Testing to Effectively Deter Steroid Use

At the time steroids were first banned by the IOC, testing technology was not very effective in detecting steroid use.¹¹³ Laboratory equipment was inaccurate, and urine samples were often poured down the drain out of frustration.¹¹⁴ This situation changed with invention of the Gas Chromatograph/Mass Spectrometer ("GC/MS").

The GC/MS is a highly effective piece of laboratory equipment in detecting the presence of almost all IOC banned substances in urine.¹¹⁵ It was first put in use at the 1983 Pan American Games.¹¹⁶ There, the GC/MS detected steroid use in twenty-one medal winners (eleven gold),¹¹⁷ all of whom promptly had their medals stripped from

108. Goldstein, *supra* note 3, at 92.

109. *Id.*

110. VOY, *supra* note 17, at 9. "To this date, no anabolic-androgenic steroid has been developed that causes only muscle growth." *Id.*

111. *Id.*

112. *Id.* at 16.

113. *Id.* at 77.

114. VOY, *supra* note 17 at 79.

115. *Id.* at 80.

116. *Id.* at 85.

117. *Id.* at 86.

them.¹¹⁸ As early as its introduction, however, athletes and their supporting organizations were devising ways to avoid positive test results from the GC/MS.¹¹⁹

a. "Advance Notice" Testing Is Not an Effective Solution

The greatest problem with athletic drug testing today is that, in most sporting organizations, athletes know ahead of time when they will be tested. Both are either tested just prior to competition, or shortly afterwards. This is known as "advance notice" testing.¹²⁰ Because steroids are a training drug, their benefits take place during strength training, where they increase the rate at which muscle strength and mass can be gained. Their presence in an athlete's system on the day of competition has little or no effect on the athlete's performance. Because steroids may leave an athlete's system within a couple of weeks, only uneducated athletes fail this type of drug test.¹²¹

For example, prior to the 1983 Pan American Games, the United States team attempted to cease steroid use (termed "cycling-off") in sufficient time before the competition to flush the steroids from their system.¹²² Ten United States athletes dropped out after their screening tests registered positive.¹²³ Nine out of eleven members of the weightlifting squad tested positive, but nonetheless competed knowing that only medal winners would be tested.¹²⁴ One American, Jeff Michaels, won three gold medals — all of which were revoked after he tested positive.¹²⁵ Like the United States, most nations performed urine screening on their athletes before sending them to the games.¹²⁶ Since the 1983 Pan American Games, athletes have refined the art of cycling-off. The *Underground Steroid Handbook II* gives specific instructions on how to cycle-off various types of steroids to pass a urine test.¹²⁷ Today, advance notice drug testing is not considered to be an effective deterrent to steroid use.¹²⁸

118. VOY, *supra* note 17, at 86.

119. *Id.* at 78.

120. *Id.* at 91.

121. DUCHAINE, *supra* note 50, at 81.

122. VOY, *supra* note 17, at 86.

123. *Id.* at 85.

124. *Id.*

125. *Id.*

126. *Id.*

127. DUCHAINE, *supra* note 50, at 81.

128. *Id.*

b. Random Off-Season Drug Testing Is Effective,
but Rarely Implemented

In random drug testing programs, athletes do not know when they will be tested. As a result, athletes do not have the opportunity to cycle-off steroids and must remain steroid-free at all times to pass their drug tests. Very few sporting organizations, however, have implemented random programs. Professional football,¹²⁹ college football,¹³⁰ and women's professional bodybuilding¹³¹ are among the few that have established random drug testing. One reason more random programs have not been adopted is because drug testing, particularly for anabolic steroids, is expensive. A GC/MS costs approximately \$200,000 per machine,¹³² and one test for all IOC banned substances runs approximately \$200. As a practical matter, steroid testing is only used for elite level athletics, where it is financially feasible.

Another reason more random programs do not exist is that many sporting organizations do not want them. For sporting organizations that compete internationally, like the United States Olympic Committee, the incentive is to *not* have restrictive drug testing programs. According to Dr. Charles Yesalis, if the United States Olympic team ceased all steroid use, they would not be competitive with the rest of the world:

MR. HUGHES: What would happen to our position vis-a-vis the international community, if the international community continued to use steroids? Would we be able to compete in the Olympics?

DR. YESALIS: If you think we looked bad in Calgary — it would be a joke.

MR. HUGHES: We just wouldn't be in the same league.

DR. YESALIS: That's correct. Especially in any strength sport.¹³³

129. NATIONAL FOOTBALL LEAGUE, 1990 POLICIES ON STEROID AND DRUGS OF ABUSE, July 8, 1990.

130. *Hearings on the Abuse of Steroids in Athletics*, *supra* note 2, at 17 (statement of Frank D. Uryasz, Director of Sports Sciences, National Collegiate Athletic Association).

131. DUCHAINE, *supra* note 50, at 80.

132. *Hearings on H.R. 3216*, *supra* note 21, at 89 (statement of Dr. Charles Yesalis).

133. *Id.* at 75 (Exchange between Dr. Charles Yesalis and Representative William J. Hughes, chairman of the Subcommittee on Crime, House of Representative Committee on the Judiciary).

Dr. Robert Voy, former Chief Medical Officer to the United States Olympic Committee, agrees that sporting organizations often tolerate widespread anabolic steroid use. He writes:

There is simply too much money involved in international sports today. . . . [P]eople don't pay to watch losers, and corporations don't sponsor teams that can't bring home the gold. The athletes and officials realize this, so they're willing to do whatever it takes to win. And sometimes that means turning their backs on the drug problem.¹³⁴

Much of Dr. Voy's book, *Drugs, Sport, and Politics*, accuses the United States Olympic Committee of turning its back to the widespread use of steroids by its athletes.¹³⁵

In any case, even organizations that have random programs are not likely to be entirely steroid free. Random tests can also be circumvented. One method athletes use is to take other drugs which act to "mask" the presence of steroids from the GC/MS.¹³⁶ The *Underground Steroid Handbook II* recommends several compounds which block steroids from being excreted in the urine.¹³⁷ The ever growing number of "masking agents" have been added to the IOC list of substances as they are discovered.¹³⁸ However, athletes generally tend to be a step ahead of the drug testing.¹³⁹

Another method was recently discussed in the *New York Times*.¹⁴⁰ An inquiry into drug test cheating in the National Football League ("NFL") revealed that, even though NFL drug tests are random and unannounced, players had an idea of when they might be tested.¹⁴¹ The NFL learned that players cheated on drug tests by hiding pouches of other people's urine in their athletic supporters or by taping them to their back.¹⁴² It has been reported that this method was also used by several football players from

134. VOY, *supra* note 17, at 101.

135. *Id.* at 131-50.

136. DUCHAINE, *supra* note 50, at 81.

137. *Id.* at 80.

138. *The Battle Against Steroids Goes On: Anabolic Androgenic Steroids, Ergogenics & Drug Use in Sports Competition* at 18 (1993) (International Federation of Bodybuilders Position Paper).

139. DUCHAINE, *supra* note 50, at 81.

140. Mike Freeman, *N.F.L. Is Told How Players Cheat on Drug Tests*, N.Y. TIMES, Aug. 5, 1993, at B9.

141. *Id.*

142. *Id.*

Michigan State's 1987 Rose Bowl Team.¹⁴³ Additionally, the *Underground Steroid Handbook II* documents similar methods used by female Olympians to pass Olympic drug screening by using a "squeeze bulb/catheter device that is inserted into the vagina before testing."¹⁴⁴

B. Non-Athletes Take Steroids to "Look Good"

The bulk of today's steroid users do not compete in elite level athletics. Rather, they seek to improve the way they look. "These 'look-gooders' do not have a single competitive event or finite athletic career as their goal, but aim to overcome physical, psychological, emotional and social limitations — especially low self-esteem."¹⁴⁵ It should not be a surprise that young steroid users take serious health risks to improve their appearance. Individuals constantly take extraordinary measures, risking their health, to improve their appearances. For example, approximately 200,000 women have their breasts surgically augmented each year,¹⁴⁶ ten million are affected by eating disorders,¹⁴⁷ and nearly three quarters of today's Miss America competitors undergo cosmetic surgery in their quests for the crown.¹⁴⁸ One well known pageant surgeon, Dr. James Billie, has performed cosmetic surgery on nearly 1500 Miss America contenders since 1981.¹⁴⁹ Such procedures are not forbidden by pageant rules.¹⁵⁰ One of his clients, Kelli McCarty, won the 1990 Miss U.S.A. pageant with the help of facial liposuction and collagen injections.¹⁵¹

This pressure to "look good" is not limited to Miss America contestants, but is pervasive in the everyday lives of many individuals. In a study of social reactions to patients after undergoing plastic surgery, post surgery patients (when compared to pictures of their former selves) were judged to be "more poised, interesting, enthusiastic, sexually warm,

143. *Hearings on H.R. 3216, supra* note 21, at 36 (statement of Chairman William J. Hughes).

144. DUCHAINE, *supra* note 50, at 81.

145. JOHN A. LOMBARDO, *Anabolic-Androgenic Steroids*, in 102 ANABOLIC STEROID ABUSE 60, 61 (National Institute on Drug Abuse Research Monograph Series, 1990).

146. Curtis Pesmen, *What She Wants: A Man's Guide to Women*, MEN'S HEALTH, Dec. 1992, at 73.

147. *Id.*

148. *Is Miss America Born Beautiful? Not Necessarily, Says a Cosmetic Surgeon in Longevity Magazine*, BUSINESS WIRE, Aug. 21, 1992.

149. *Id.*

150. *Id.*

151. *Id.*

sociable, friendly, kind, warm and exciting.”¹⁵² Furthermore, studies of the willingness of individuals to do favors for strangers (termed “helping behavior”) found that helping behavior varied directly with the stranger’s physical attractiveness.¹⁵³

In the employment context, interview manuals tend to place “appearance” first on the list of hiring factors.¹⁵⁴ A survey of 2804 employment interviewers listed “[i]s markedly overweight” and “physique appears feminine” among the most frequent criticisms of male employees.¹⁵⁵ These attitudes suggest that anabolic steroid use, likely the most effective solution available to remedy these “problems,” is the male analog to breast implants, diet pills, and liposuction. According to Dr. Charles Yesalis, the motivation of the non-athletic steroid user is not surprising:

[O]ne of the reasons we have this problem, the principal reason in my opinion is that we take athletics and personal appearance too seriously. Look at the money that is spent on liposuction, on tanning booths, on face-lifts, tummy tucks, breast augmentation and so on. If you don’t think anabolic steroid use is a natural outcrop of that, I think you are mistaken. I think when we see kids using these drugs, we should be alarmed, but certainly not surprised given the way we as adults behave.¹⁵⁶

Adolescents are most likely to be influenced by these pressures. For example, Dr. Jack Freinhar, a psychiatrist at Del Amo Hospital in Torrance, California, who treats adolescent steroid abusers, has found that steroid use can become an addiction he terms “reverse anorexia.”¹⁵⁷

With anorexia, one is never thin enough. In our culture, there’s this push to be muscular. Most of the youngsters I treat have had a deprived childhood and they have holes in the self. They need acceptance. One way is to look good, and steroids provide a fast method. But they can never get enough because each

152. S. Michael Kalick, *Aesthetic Surgery: How It Affects the Way Patients Are Perceived by Others*, 2 ANNALS OF PLASTIC SURGERY 128, 131 (1979).

153. David W. Wilson, *Helping Behavior and Physical Attractiveness*, 104 J. SOC. PSYCH. 313 (1978).

154. A. PELL, BE A BETTER EMPLOYMENT INTERVIEWER: A GUIDE FOR THE SCREENING INTERVIEW 15-S (1976); R. JENKINS, RACISM AND RECRUITMENT: MANAGERS, ORGANIZATIONS AND EQUAL OPPORTUNITY IN THE MARKET 52 (1986).

155. M. HAKEL & M. DUNNETTE, CHECKLISTS FOR DESCRIBING JOB APPLICANTS 35, 35 (1970).

156. *Hearings on H.R. 3216*, *supra* note 21, at 42 (testimony of Dr. Charles Yesalis).

157. Diego Ribadeneira, *The Growing Threat of Steroids: Second in a Three Part Series Examining the Spread and Abuse of Steroids*, BOSTON GLOBE, Oct. 31, 1988, (Sports), at 39.

time they look in the mirror they still see themselves as too thin.¹⁵⁸

The fact that these pressures are so powerful and widespread should not be surprising. Society is constantly bombarded by strong signals that physiological perfection is the key to success:

An entire generation of young men aspired to the physique of Charles Atlas, followed by yet another generation who marveled at the muscles of Mr. Universe, Steve Reeves, who played Hercules in several movies in the 1950's. Today's children look with envy at the builds of Rocky, Rambo, Hulk Hogan, and the Terminator. Anabolic steroid use by professional wrestlers, including Hulk Hogan, was given national attention during a steroid trafficking trial in 1991 Such messages of material reward and fame as a result of drug-assisted muscularity and winning grossly overshadow posters on gym walls and videos that implore "Just Say No to Steroids."¹⁵⁹

The *Anabolic Reference Guide* notes how early in life this type of influence begins; this trend even exists in children's cartoons and movies. Many cartoon characters are drawn with inordinately muscular "bodybuilder-type" physiques. As one expert noted, "[e]ven those damn Ninja Turtles were created to resemble bodybuilders."¹⁶⁰ As a result of these messages, deep-rooted societal pressures have been created that encourage steroid use. The message sent by the Controlled Substances Act — that steroids are bad — is dwarfed in comparison.

VI. CONTINUED ENFORCEMENT OF EXISTING LEGISLATION IS NOT LIKELY TO REDUCE STEROID SUPPLY, AND WILL ONLY FURTHER EXACERBATE THE HEALTH PROBLEMS CREATED BY ANABOLIC STEROID USE

A. *The Steroid Market that Is Being Created Is Unlikely to be Affected by Enforcement Efforts*

In the face of a demand unaffected by the threat of criminal penalties, continued enforcement of steroid legislation will worsen the health risks

158. *Id.*

159. CHARLES E. YESALIS & JAMES E. WRIGHT, ANABOLIC STEROIDS 314 (1993) (citations omitted).

160. PHILLIPS, *supra* note 53, at 2.

associated with steroid use. A recent investigation by *The Atlanta Journal and Constitution* concluded that "tougher laws and heightened enforcement . . . have fueled thriving counterfeit operations that pose even more severe health risks."¹⁶¹ Federal efforts are not likely to be successful in curbing this type of supply. Most steroids are now smuggled into the United States from Mexico.¹⁶² According to Phillip Halpern, an Assistant United States Attorney in San Diego, considered the most experienced steroid prosecutor in the United States, steroids pour across the Mexican border past overwhelmed border patrols at the rate of "hundreds of millions of dollars a year."¹⁶³ The enforcement efforts are further hampered by the fact that dogs that have been trained to detect cocaine and other drugs cannot detect odorless steroids.¹⁶⁴ A recent investigative report in *The Atlanta Journal and Constitution* documented how easy it is to obtain steroids in Tijuana and Ensenada, Mexico.¹⁶⁵ Similar reports have also been broadcast by several local Los Angeles news shows. Pursuant to international law, the United States is largely powerless to prohibit the manufacture of steroids by foreign companies; the United States can only exert its jurisdiction over operations in foreign countries when it is not an unreasonable encroachment on the other countries' sovereignty.¹⁶⁶ Regulation of the pharmaceutical industry is primarily viewed as a local health and welfare issue,¹⁶⁷ and therefore exclusively left to national laws.¹⁶⁸ This means not only that the United States cannot exert control over the supply of anabolic steroids in other countries, but also that the United States' stringent FDA regulations regarding quality control, labeling, etc., are not in effect when the drugs are produced. This situation poses a serious health problem, particularly for the unwary adolescent, considering that the bulk of steroids now used in the United States are imported.

161. Mike Fish, *Steroids Riskier Than Ever Part One*, ATLANTA J. & CONST., Sept. 26, 1993, at A1.

162. Goldstein, *supra* note 3, at 83.

163. Fish, *supra* note 161, at A1.

164. *Id.*

165. Mike Fish, *Steroids Riskier Than Ever, Drugs Easy to Buy South of the Border*, ATLANTA J. & CONST., Sept. 28, 1993, at D1.

166. RESTATEMENT (THIRD) OF FOREIGN RELATIONS LAW § 403 (1987).

167. U.S. CONGRESS OFFICE OF TECHNOLOGY ASSESSMENT, DRUG LABELING IN DEVELOPING COUNTRIES 14 (U.S. Government Printing Office, Feb. 1993).

168. *Id.*

B. For Most Steroid Users, the Combination of Unsafe Products and a Lack of Medical Monitoring Has Turned Steroid Use into a Game of Russian Roulette

Imported or clandestinely manufactured steroids which characterize the bulk of the current supply may be far more dangerous than those produced by United States pharmaceutical manufacturers pursuant to FDA standards. Many of these illegal products are counterfeit and contain no steroids at all.¹⁶⁹ Many are not sterile.¹⁷⁰ They are often labeled incorrectly, and are of a different potency or contain ingredients that do not match the label.¹⁷¹ According to Dr. James E. Wright, use of such products creates additional dangers including local infections, hepatitis and even anaphylactic shock.¹⁷² In one documented instance, an individual injected a vial of penicillin which had been labeled "Winstrol V" (an anabolic steroid).¹⁷³ Dr. Forest Tennant, former drug adviser to the NFL, warns that he has seen individuals "develop severe complications — everything from gangrene of the arm to an abscess on the hip" as a result of using these black market steroids.¹⁷⁴ Based on these concerns, the need for competent medical advice is greater now than ever before. However, the possibility of obtaining such advice is increasingly remote.

The criminal aspects of steroid use and vigorous federal enforcement efforts have further distanced the medical community from the widespread self-administration of steroids. Today, it is unlikely that the average steroid user will be able to obtain medical supervision. Both the *Steroid Handbook* and the *Steroid Guide* acknowledge that very few steroid users have blood testing performed.¹⁷⁵ In a recent interview with professional bodybuilder David Dearth, conducted by *The Atlanta Journal and Constitution*, Mr. Dearth acknowledged that his steroid use was supervised by a physician.¹⁷⁶ The physician would compare his blood to blood samples taken prior to his steroid use, as well as monitor his liver enzymes,

169. Fish, *supra* note 161, at A1.

170. *Id.*

171. *Id.*

172. James E. Wright, Ph.D., *Black Market Rip-Off*, *MUSCLE & FITNESS*, Oct. 1992, at 52.

173. *Id.*

174. Fish, *supra* note 161, at A1.

175. DUCHAINE, *supra* note 50, at 24; PHILLIPS, *supra* note 53, at 145.

176. Mike Fish, *Steroids: Riskier Than Ever, Bodybuilder Who Took Drugs Warns Unmonitored Use Like Russian Roulette*, *ATLANTA J. & CONST.*, Sept. 26, 1993, at A15.

cholesterol levels and the amount of protein in his urine.¹⁷⁷ Regarding medical monitoring, Mr. Dearth stated:

I'm not saying doctors should condone it, but at least monitor it and give the athletes some guidance

Then it would be a lot safer and you'd have far fewer accidents. Now we're forced to trial-and-error with things. We don't know the correct dosages . . . or where it's made. Or what kind of regulations the product was manufactured under. It's Russian roulette.¹⁷⁸

Dearth's frustrations over the difficulty of obtaining medical monitoring echo those expressed by Steve Courson, former All-Pro football player for the Pittsburgh Steelers and Tampa Bay Buccaneers. In a prepared statement submitted to the Senate hearing on steroid use in sports, Courson took the position that, until testing technology is capable of being an effective deterrent, monitoring should be offered to athletes instead of mandatory testing: "[Athletes] should have the opportunity to be monitored instead of facing penalties from an archaic system of testing that serves more as a public relations ploy than a problem solver or deterrent."¹⁷⁹ Mr. Courson advocated a system where athletes would not be penalized for steroid use, but would (1) undergo careful medical supervision and (2) be required to disclose their choice to other athletes.¹⁸⁰

Both the *Underground Steroid Handbook II* and the *Anabolic Reference Guide* strongly recommend that users get regular blood testing.¹⁸¹ In fact, the *Underground Steroid Handbook II* recommends that baseline blood testing be done prior to starting steroid use, and that:

If you are fortunate enough and find a doctor willing to prescribe anabolic steroids, I assume that he will be responsible enough to recommend some blood tests. Many of you will have chosen black market sources, and will be self-administering steroids, but it is still just good common sense to see where your health is by getting some blood tests done.¹⁸²

Based on the strong sentiment among professionals, medical monitoring would be critical for adolescents. Phillip Halpern, explains that

177. *Id.*

178. *Id.*

179. *Senate Hearings on Steroid Abuse*, *supra* note 84, at 191-92 (statement of Steve Courson, former NFL Player, Pittsburgh Steelers and Tampa Bay Buccaneers).

180. *Id.* at 92.

181. DUCHAINE, *supra* note 50, at 22; *see also* PHILLIPS, *supra* note 53, at 145.

182. DUCHAINE, *supra* note 50, at 22.

“[t]he elite athletes have physicians to help them out. It’s the kids who are more likely to get the junk. They’re also the ones most likely to misuse the drugs.”¹⁸³ However, federal enforcement efforts which have targeted physicians may only serve to further reduce the chance that physicians will be willing to supervise steroid users.

Many of the federal investigations have been directed at physicians who have prescribed steroids to athletes or other individuals desiring to increase muscle growth — a practice this Article advocates should be the norm. One of these physicians, Dr. George Zahorian, claimed he sold steroids to World Wrestling Federation owner Vince McMahon and various professional wrestlers including Hulk Hogan and Rowdy Roddy Piper.¹⁸⁴ Dr. Zahorian was investigated and prosecuted by the DOJ.¹⁸⁵ This case signaled that the DOJ would aggressively pursue physicians who distributed steroids for muscle building purposes. Eugene M. Thirhof, Senior Litigation Counsel in the DOJ’s Office of Consumer Litigation, commented: “[T]he Zahorian Case was important. It made it clear that those who were going to distribute these products in violation of that law were going to be prosecuted even if they are physicians.”¹⁸⁶

In the most recent prosecution of a physician, United States District Judge John G. Davies sentenced Walter F. Jekot to five years in prison for “conspiracy to receive and distribute steroids and other performance enhancing drugs, such as human growth hormone, to body builders and athletes.”¹⁸⁷ Jekot was the third physician successfully prosecuted by the federal government for distributing anabolic steroids for the purpose of muscle development.¹⁸⁸ United States Attorney Terree A. Bowers stated the intention of the Justice Department to continue pursuing physicians who engaged in this practice:

The distribution of dangerous drugs to athletes seeking to increase their performance through artificial means simply will not be tolerated. As seen by this prosecution, the federal government is committed in its efforts to identify and prosecute

183. Fish, *supra* note 161, at A1.

184. Sherman, *supra* note 11, at 42.

185. *Id.*

186. *Id.*

187. Mark A. Byrne, Doctor Sentenced After Pleading Guilty to Distributing Steroids and Steroid Substitutes to Body Builders and Athletes 1 (Sept. 30, 1993) (full text news release from United States Attorney’s Office, Central District of California).

188. *Id.* at 1 (statement of Assistant Attorney General Frank W. Hunger).

any physician using his or her medical practice as a conduit to distribute steroids and other drugs illegally.¹⁸⁹

These prosecutions only serve to further distance the medical community from the health problems caused by steroid use, and to force the individuals who once obtained steroids from these physicians to seek a more dangerous supply. Now that steroids are scheduled substances, the threat posed by CSA civil¹⁹⁰ and criminal¹⁹¹ forfeiture provisions is likely to further deter physicians from monitoring and treating steroid users.

VII. AN ALTERNATIVE "HEALTH-ORIENTED" SOLUTION — LEGALIZATION AND REGULATION AS PRESCRIPTION DRUGS

Criminalization is not the solution to America's steroid problem. Unlike many controlled substance abusers, the average steroid user is not a person we commonly think of as a felon:

[S]teroids abusers . . . tend to be more health conscious; their steroids intake is often coupled with vitamin use and a body sensitivity that may weaken a long-term attachment to the drugs.

Steroids users also more closely resemble defendants found in white-collar fraud cases: They are more educated, more shaken by clashes with the law¹⁹²

In sum, steroid users are everyday individuals who choose to use biotechnology to assist themselves in physically improving their bodies.

If the proposed solution advocated by this Article is adopted, the "problem" of steroid use — adverse health effects — will be addressed directly. These adverse health effects could be substantially reduced as a result of: (1) a shifting steroid supply favoring legitimately produced, FDA regulated products; and (2) continuous health monitoring of individual users. An additional benefit of this solution would be the generation of critical data. Under the current system, such information can only be obtained by surveying illegal steroid users.

VIII. CONCLUSION

The steroid demand cannot be eliminated by the threat of criminal penalties. Only fundamental changes in societal attitudes towards winning

189. *Id.* at 2.

190. 21 U.S.C. § 881 (1994).

191. 21 U.S.C. § 851 (1994).

192. Sherman, *supra* note 11, at 40 (quoting statement of George B. Newhouse, Jr., Assistant United States Attorney in Los Angeles).

and physical appearance can reduce or eliminate the demand for steroids. Until society's attitudes do change, however, we cannot ignore that millions will continue to respond to these pressures by taking steroids without medical supervision:

If we maintain our current course in the face of continued (or increased) high levels of anabolic steroid use (or use of other performance-enhancing drugs), then we as medical professionals, parents, teachers, and coaches are guilty of duplicity — acting for the sake of acting. We plan to attend workshops, distribute educational materials, lobby for the passage of laws, and seek the assistance of the police. All these activities merely soothe our consciences in the face of our inability — or unwillingness — to deal with our addiction to sport and our fixations on winning and appearance.¹⁹³

There are obvious political hurdles standing in the way of this proposed solution. In the abstract, it would seem unconscionable for a physician to prescribe steroids in an amount that could adversely affect the health of the patient. However, the status quo — unsupervised self-administration of largely unregulated black market products — may be far worse.

193. YESALIS & WRIGHT, *supra* note 159, at 314.