

# Anabolic Steroids

## Introduction

Unlike users of common illegal street drugs, users of anabolic steroids are commonly famously idolized and even looked up to despite their drug use. The issue of anabolic steroid use has been overlooked the past but there has recently been an increase in awareness on the subject. I chose this issue because users of anabolic steroids do not think their use can be a problem. Instead, they assume they'll reap the benefits of the short-term results being the increase in performance, thus overlooking the dangerous effects of the drug. This topic is also of personal interest to me because I know people who use these substances to increase performance in their sports. If I could make them aware of the potential dangers of using them, I feel I can help deter them from continuing their use and help them body-build the healthy way without enhancement drugs.

## Section 1: Background and Problem Statement

Web site #1: "NIDA Info Facts: Steroids (anabolic)" (Score: 28)

- Web address: [www.nida.nih.gov/infofacts/steroids.html](http://www.nida.nih.gov/infofacts/steroids.html)
- Information: This Web site gives an accurate definition on exactly what anabolic steroids are. "Anabolic" means muscle building and "steroids" is the classification of the drug. The Web site also states how this reaction of the drug gives increases the amount of testosterone levels required to build muscles. The site provides information regarding the conditions in which these drugs are used medicinally as in the case of A.I.D.S. patients, individuals with hormone deficiency, and adolescents with delayed puberty. The site also provides information on the various ways in which the substances are ingested into the body (through injections or orally) to artificially enhance ones physical appearance. Usage of anabolic steroids can in fact be very addictive, as proven by NIDA. NIDA further explains that with a popular desire to enhance one's physical strength and appearance, anabolic steroids can provide an individual with the desired results in a short period of time and achieved without a lot of effort. The Web site further explains that due to the addictive nature of the drug, even those aware of the negative side effects continue to use despite the physical and mental problems they may experience.

In this Web site I found the history of anabolic steroid abuse to be very useful in reaching a better understanding of the issue. It had scientific phrases,

which the average reader may not understand; however, the article did provide a synopsis of key points to help the average person understand the scientific jargon. It also provided details of the problems and dangers of the drug by giving scenarios for the various reasons as to why individuals would take this substance. Overall, I believe it was a very helpful scientific source regarding the medical benefits and dangers.

- **Web site #2:** “Are Steroids Worth The Risk?” (Score: 25)
- **Web address:** [www.kidshealth.org/teen/food\\_fitness/sporth/steroids.html](http://www.kidshealth.org/teen/food_fitness/sporth/steroids.html)
- **Information:** On this web page it provided more background on why people who use steroids and how they're looked up as better and more competitive, and athletic. It also states why young children would start to use the drug, because the pressures to excel at a faster rate than their peers. It says how unfair the advantage of the drug is on the competition of the sport, and takes away the healthy competition of the sport. It also provides a descriptive account of what exactly steroids are and gives some street names for the drug, and describes if they're “Worth the Risk?” It discusses the pros and cons of usage and all of the advantages are only mental confidence and the disadvantages are dangerous physical gains and mental problems to come for teens taking them.

This a very good reference to include because it is directed to teens while providing very strong scientific information expressed in a way where teens can understand it. It is also an excellent source for the audience because it gives descriptive healthy alternatives to adolescents. It was also good background for me to understand why adolescents are taking them and the effects to the younger generation that is taking them.

- **Web site #3:** “Espn: Anabolic Steroids”(Score: 25)
- **Web address:** [www.espn.go.com/special/s/drugsandsports/steroids.html](http://www.espn.go.com/special/s/drugsandsports/steroids.html)
- **Information:** This Web site provided descriptive background information on the usage of steroids on a professional level. There is no tolerance what so ever for illegal performance enhancing drugs. But shows that popularity is still high among the idolized stars of today's large sports franchises in America. This article also provides what anabolic steroids are, why they are taken, the background of the dangers of usage in men and women, why they are addictive, and side effects of the popular drug.

This site provided a lot of information that was useful but presented it in an awkward choppy way, the language was hard to understand and the concepts

were not the easiest to follow. This article did bring in another outside credible source of a respectable doctor to establish the credibility of the information at hand. Overall, I think it was an all right source I did gain some good knowledge about the background.

- **Web site #4:**“Congress Bulks up Against Precursors”(Score: 24)
- **Web address:** [www.ncaa.org/wps/ncaa?ContentID=8228](http://www.ncaa.org/wps/ncaa?ContentID=8228)
- **Information:** Background information I gained from this Web site included information on stars that have been caught taking illegal physical enhancement drugs. Before in the regulation NCAA rule book if on the pre participation examination, if you were on drugs and on the PPE admitted to taking the substances you were abstained due to the honesty pack, if you stayed sober, but if you said you didn't do drugs and were drug tested and found positive you were persecuted to the extent of the law which happened to a number of athletes recently. I find this a shame because the holder of the home-run record admitted to be on steroids. This article also shows why adolescents start taking the steroids and shows that it is not just athletes taking them anymore. It also talks about what Congress plans to do about this spreading epidemic and how they plan on cracking down on offenders.

This Web site was not the best of articles but did provide great information, it was just presented in an unorganized manner, the subtitles didn't help the reader, and the language was very technical and hard to understand.

## Section 2: Research

- **Web site #1:**“Journal of American Medical Association”(Score: 26)
- **Web address:** [www.jama.ama-assn.org/cgi/content/abstract/260/23/3441](http://www.jama.ama-assn.org/cgi/content/abstract/260/23/3441)
- **Summary of the research:** The summary of this webpage is that the epidemic of anabolic drug use has grown so much it has become an epidemic. In the US the usage is poorly documented but this Web site provides information about the usage of male adolescent usage. The rate of school-wide 12<sup>th</sup> graders was 68.7% participation out of the schools they researched. Out of that 6.6% were users of this drug. Out of that statistic, 2/3s of them used initially before they were 16. This a good article because it has been cited in a lot of other well known articles, but the information can come off as confusing and may take a few times of re-reading to fully understand the research.
- **Web site #2:**“Metabolism of anabolic steroids in men” (Score: 24)

- **Web address:**  
[www.md1.csa.com/partners/viewrecord.php?requester=gs&collection=ENV&recid=3054051&q=anabolic+steroids&uid=1019895&setcookie=yes](http://www.md1.csa.com/partners/viewrecord.php?requester=gs&collection=ENV&recid=3054051&q=anabolic+steroids&uid=1019895&setcookie=yes)
- **Summary of the research:** This article talks about the first ban of steroids in the Olympics in 1976. It states how these drugs are tested and how frequently they can stay in your system. It states you have to get a urine baseline and then take a second sample and see if the electron count differed. This article was very hard to follow and didn't provide a lot of useful information and was mostly filled with buffer information that didn't necessarily make sense to the common reader.
- **Web site #3: "A Growing Concern" (Score: 25)**
- **Web address:**  
[www.ncbi.nlm.gov/pubmed/19226006?ordinalpos=1&itool=em.pubmed\\_reasultspanel.pubmed\\_defaultreportpanel.pubmed\\_RVDocSum](http://www.ncbi.nlm.gov/pubmed/19226006?ordinalpos=1&itool=em.pubmed_reasultspanel.pubmed_defaultreportpanel.pubmed_RVDocSum)
- **Summary of the research:** This article talks about the new and upcoming wave of designer steroids and how they are being designed to beat traditional steroid drug tests. It estimates that between 1 to 3 million people have used steroids at some point in their lives, usually during their adolescence. It also includes the dangers of these new fashion steroids and the toll they take on the brain and body, especially in adolescence. This web page was very good because it was clear cohesive and it got down to the point. It was also easy to find and talked about the need for help on the subject.
- **Web site #4: "Multisubstance Use as a Feature of Addiction to Anabolic steroids." (Score: 24)**
- **Web address:**  
[www.ncbi.nlm.gov/pubmed/19182484?ordinalpos=3&itool=En...ed.pubmed\\_reasultspanel.pubmed\\_defaultreportpanel.pubmed\\_RVDocSum](http://www.ncbi.nlm.gov/pubmed/19182484?ordinalpos=3&itool=En...ed.pubmed_reasultspanel.pubmed_defaultreportpanel.pubmed_RVDocSum)
- **Summary of the research:** This site was set up to figure out why people use anabolic steroids and the total amount of people that do use. A total of 32 patients were asked why they used and there was an abundant history of poly-substance use. Almost half were also taking some sort of other growth hormones and the other half were heavy drinkers. The reason for taking the drugs was to mostly increase size and strength but on occasion people said they used them to lose weight. Other drugs, such as heroin, pot and amphetamine to get rid of some of the sleep, pain and slow metabolism out of the side effects of the steroids. This webpage was very informational and important because it shows exactly why people take the drugs based on an actual study, and showed another side of the underlying drug abuse in all the users that were in the study.

## Section 3: Statistics

- **Web site #1:**“Journal of Athletic Training” (Score: 27)
- **Web address:** [www.journalofathletictrainig.org](http://www.journalofathletictrainig.org)
- **Summary of the statistics:** The most important statistics in this article were the statistics about the entrance and chemical reactions of the steroids after usage. Other stats were the original research findings that were of men and woman 40-70 years old that were administered the drug DHEA, after 3 months there was no apparent change in their health or physical appearance. This Web site also studied and produced stats on the side effects of use of certain drugs that are found in anabolic steroids.
- **Web site #2:** (Score: 25)
- **Web address:** [www.ncaa.org/wps/ncaa?contentID=8255](http://www.ncaa.org/wps/ncaa?contentID=8255)
- **Summary of the statistics:** This article provides statistics drawn directly from research and surveys. The stats shown are the specific side effects of use, the rate of increase of use over the recent years, and how new designer steroids are beating the drug testing system.
- **Web site #3:** (Score: 24)
- **Web address:** [www.medicinenet.com/anabolic\\_steroid\\_abuse/article.html](http://www.medicinenet.com/anabolic_steroid_abuse/article.html)
- **Summary of the statistics:** This Web site has statistics of the diseases related to the use of the drug, and how they're getting into the country where they are illegal. It also has helpful stats about the perceived harmfulness of use, and what the active ingredients that could be used to produce the drug. This article also has stats about use and annual use among males in early grades as in 8<sup>th</sup> grade. There are also stats on the side effects and damages caused by the drug.
- **Web site #4:**(Score: 28)
- **Web address:** [www.nida.nih.gov/infofacts/steroids.html](http://www.nida.nih.gov/infofacts/steroids.html)
- **Summary of the statistics:** This Web site has good stats about why there is usage and the effects it has on the brain and mental health, there are also stats on the amount of use among students in high school and stats on the side effects the drug has on the body.

## Section 4: Consumer Information

- **Web site #1:(Score: 27)**
- **Web address:** [www.journalofathletictraining.org](http://www.journalofathletictraining.org)
- **Summary of the information:** This is a good Web site because it explains what the drug is and describes the way the drugs work and produce results that state that the risks do not overshadow the means. It gives a good description of what the drug is using sometimes-confusing language but overall the concept is understood and the reader can understand the topic.
- **Web site #2: (Score: 26)**
- **Web address:** [www.mayoclinic.com/print/performance-enhancing-drugs/sm00045/method=print](http://www.mayoclinic.com/print/performance-enhancing-drugs/sm00045/method=print)
- **Summary of the information:** The information on this Web site creates a good understanding of what anabolic steroids are and what they do to the body, while using reader friendly language to target clarity. It is good for parents who suspect their teens of using the drug and tells parents what the signs and symptoms of this drug are.
- **Web site #3:(Score: 26)**
- **Web address:** [sportsanddrugs.procon.org/viewanswers.asp?questionID=1240](http://sportsanddrugs.procon.org/viewanswers.asp?questionID=1240)
- **Summary of the information:** The information stated is good for a reader who has a lack of knowledge on anabolic steroids. It has background, why teens use the drug, affects on the body, and side effects of the drug. This Web site has some statistics and explains how kids look up to some role models who use this drug while using clear cohesive language that isn't hard to understand.
- **Web site #4:(Score: 25)**
- **Web address:** [kidshealth.org/teen/food\\_fitness/sports/steroids.html](http://kidshealth.org/teen/food_fitness/sports/steroids.html)
- **Summary of the information:** This Web site is very good on teaching kids who may not know a lot of accurate information about anabolic steroids. This Web site shares a good background and how this drug works. It promotes not using this drug clearly by showing the dangers and side effects of use and how use can

lead to addiction. This Web site also promotes alternatives to steroids that are more healthy and safe.

## Conclusions

- **Section 1: Background and Statement**
  - **The best Web site** “NIDA info facts: steroids (anabolic)”
    - I chose this as the best article because it was very helpful for me with the background. It also contained useful stats and great links for further information. The site was user friendly and the headings made the site easy to navigate.
  - **The worst Web site** “Congress bulks up against precursors.”
    - This would be the worst Web site for the background because the functionality of the site wasn't that user friendly. Although some of the information is very useful for the background a lot of information is not useful and I put it aside.
- **Section 2: Research**
  - **New information I learned include:** Anabolic steroids are a muscle building substance that works through giving the body a boost of testosterone. I also learned that it is becoming a lot more popular in the United States. I learned about the side effects of the drug include short term strength and endurance gains, but in the long run the side effects become harmful to the body, such as reduced sperm, urination pain, HIV and Hepatitis B. I learned that all of these performance enhancing drugs are illegal in the US, but also that some designer forms of this drug can go unnoticed in athletes in drug screenings.
- **Section 3: Statistics**
  - **New statistics I learned include:** Stats I found are that 6.6% of 12<sup>th</sup> graders have used anabolic steroids, and 21% of high school students who use this drug got it through their healthcare providers. Other stats were the original research findings that were of men and woman 40-70 years old that were administered the drug DHEA, after 3 months there was no apparent change in their health or physical appearance.
- **Section 4: Consumer Information**
  - **The best Web site:** “Are steroids worth the risk”
    - I think this was the best Web site because it took the information and put it in a clear cohesive flow. With language that was understandable. The Web site also gave good information on what steroids and explained what they are so that even younger kids could understand it and realize what the dangers of the steroids are.
  - **The worst Web site:** “Journal of athletic training”

- I think this was the worst site for consumer information because the language could have been confusing making the flow of the article hard to understand. This article didn't have very useful links that had other information.

I believe that the information I received from these sites was ultimately good sources, they were easy to find and had good information. There was information on all the sub topics about anabolic steroids like all the background, research, stats, and consumer information. The average scores of the Web sites were 25 or 26 which I think is pretty good and a lot of the information gained through the Web sites I received through .org, .gov. or . edu, so I know the information is of good quality. If I needed more information about my topic the Web sites I found also have great and very helpful links to other Web sites where further information could be found.

<b>Back to Betty C. Jung's Web site</b>	<a href="http://www.bettyjung.net/">http://www.bettyjung.net/</a>
<b>Back to Web site Critique Reports Directory</b>	<a href="http://www.bettyjung.net/Pch201wsreports.htm">http://www.bettyjung.net/Pch201wsreports.htm</a>

### Presentation Outline

- Anabolic steroids are drugs people use to increase muscle mass and strength. It accomplishes this by upping the testosterone in the body by means of cycles or injections of the drug.
- I chose this topic because I thought it was interesting because of all the misconceptions about this drug, and the amount of people who do it and don't think it is harmful to your body.
- I also chose this topic because unlike users of common illegal street drugs, users of anabolic steroids are commonly famously idolized and even looked up to despite their drug use.
- The issue of anabolic steroid use has been overlooked the past but there has recently been an increase in awareness on the subject.
- Summarize conclusions about Web sites