

📖 Topic Page: [Anabolic steroids](#)

Definition: **anabolic steroid** from *Philip's Encyclopedia*

Any of a group of hormones that stimulate the growth of tissue. Synthetic versions are used in medicine to treat osteoporosis and some types of anaemia; they may also be prescribed to aid weight gain in severely ill or elderly patients. These drugs are associated with a number of side effects, including acne, fluid retention, liver damage and masculinization in women. Some athletes have been known to abuse anabolic steroids in order to increase muscle bulk.



Image from: [A high proportion of fat to muscle in the body... in Encyclopedia of Obesity](#)

Summary Article: **Anabolic Steroids**
From *Encyclopedia of Global Health*

Anabolic steroids, more appropriately called anabolic/androgenic steroids, are synthetic and naturally occurring substances related to male sex hormones including testosterone. Anabolic steroids were first discovered in the 1930s. They have been used to treat conditions such as hypogonadism, certain types of impotence, and muscle wasting associated with conditions such as cancer and AIDS. Today, however, the use of anabolic/androgenic steroids is most widely associated with their controversial use as performance enhancing substances in athletic training and competition.

Anabolic/androgenic steroids work by increasing protein synthesis and reducing recovery time via blockage of the hormone cortisol's action on muscle tissues. These effects greatly reduce catabolism of the body's muscle mass. Anabolic effects of anabolic/androgenic steroids are increased muscle mass and strength, increased bone remodeling and growth, increased appetite, and stimulation of bone marrow leading to increased production of red blood cells. These effects are maximized when the steroids are combined with proper diet and exercise. Androgenic effects include growth of the clitoris in females and the growth of the penis in male children, impaired spermatogenesis, increased libido, deepening of the voice, and increased growth in androgen-sensitive hair of the beard, chest, limbs and pubic area.

Unwanted side effects associated with the use of anabolic/androgenic steroids include possible elevation in blood pressure, acne, hepatotoxicity, gingival overgrowth, elevation in low density cholesterol levels, and lowering of high density cholesterol, which increases the long-term risk of cardiovascular disease. Specific to male users, anabolic/androgenic steroids have also been noted to cause male breast development and transient testicular atrophy. Female users may notice the development of masculine features such as hirsutism, deepening of the voice, and male pattern baldness, as well as abnormal menstrual cycles. Heavy users of anabolic/androgenic steroids are known to take the medications for several weeks or months at a time, and then stop their use for varying periods of time. This use pattern is known as "cycling." Another common usage pattern is the use of multiple anabolic/androgenic steroids simultaneously, a practice known as "stacking."

Anabolic/androgenic steroids are controlled substances in the United States, and as such can only be obtained legally via a prescription for a legitimate medical need. Most steroids used in the United States are obtained illegally via the black market or the internet. These steroids are smuggled into the United States from other countries with less stringent control of their distribution. The Anabolic

Steroid Control Act of 2004 amended the controlled substance act to place anabolic/androgenic steroids and prohormones on a list of controlled substances and made their possession without a prescription a federal crime.

The use and abuse of anabolic/androgenic steroids may date back to ancient Greece. The Greeks were believed to have consumed testicular extracts in attempts to promote androgenic and anabolic growth. There are also multiple traditional Chinese medicines that are purported to bolster virility and male performance as well as being oriented toward muscle growth and athletic ability. Modern anabolic/androgenic steroids are available in distinct delivery forms including pills, oil-dissolved or water-dissolved injections, and transdermal forms, which deliver substances through the skin via creams or transdermal patches.

Anabolic/androgenic steroids have been reported in all levels of athletic competition. Surveys have demonstrated rates of use in high school students ranging from 1 percent to over 20 percent. Surprisingly, not all surveys linked anabolic/androgenic steroid use to athletic training or competition. Some surveys showed significant use by nonathletes in attempts to “bulk up” and improve their physical appearance. Use has been shown to be higher in certain sports such as football, weightlifting, bodybuilding, and track and field. Anabolic/androgenic steroid use also varies within a specific sport. Collegiate linemen were noted to have more frequent usage of anabolic/androgenic steroids than other positions.

There has been an increasing push from individuals and organizations around the world to decriminalize the possession and use of anabolic/androgenic steroids. They cite the lack of scientific evidence of harmful side effects with controlled dosing and administration schedules. This push has made its way up to the highest levels of the United States government, as lawmakers in both the House of Representatives and the Senate have been publicly criticized on the government’s stance on anabolic/androgenic steroids. Despite this pressure, the government maintains its position that the risks of using anabolic/androgenic steroids are too great to allow them to be decriminalized and unregulated.

SEE ALSO:

Drug Abuse.

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