

# Anabolic steroids

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Anabolic steroids are artificial (synthetic) versions of the male hormone testosterone that help build muscle. They also enhance masculine characteristics.

Because they can help the body to form lean muscle, they are sometimes used to treat wasting and weight loss caused by HIV, and doctors sometimes prescribe them to people experiencing fat loss from the limbs because of lipodystrophy. Testosterone supplements are also used to treat low testosterone levels which can develop in people with HIV due to HIV infection, some other infections, anti-HIV drugs and other medicines.

Anabolic steroids are also widely used by body builders and by many people who weight-train at the gym.

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## Anabolic steroid treatment in people with HIV

The anabolic steroids have been studied as a treatment for wasting caused by HIV, and have been shown to be safe and effective, helping the formation of lean muscle mass. To be most effective, anabolic steroid treatment should be combined with an exercise programme of resistance (weight) training.

Studies have mostly been restricted to men because of concerns about the side-effects of steroid treatment for women.

Anabolic steroids can increase levels of LDL (bad) cholesterol and other side-effects, so their use should be closely monitored particularly if you are taking a protease inhibitor or have any risk factors for heart disease .

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## Testosterone replacement therapy in people with HIV

It is estimated that as many as 40% of HIV-positive men who are ill because of HIV have low levels of testosterone (hypogonadism). Low testosterone can result in decreased appetite, depression, poor metabolism of food, and sexual problems, including the inability to obtain and maintain an erection.

A blood test can show if you have low levels of testosterone and your doctor may prescribe either a short course of oral testosterone replacement therapy, testosterone patches, or testosterone gel.

Although testosterone is usually considered to be the male sexual hormone, it also occurs naturally in women. Testosterone patches have been examined as a treatment for wasting caused by HIV in women. It was found that weight and quality of life improved for some of the women, and the development of male characteristics was not reported.

Side-effects from testosterone replacement therapy are rare, but can include the shutting down of natural testosterone production, shrinking of the testicles, hair loss, increased sexual desire, and aggression. In women, male characteristics, such as the deepening of the voice, and facial hair may develop.

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## Anabolic steroid use for non-medical purposes

Anabolic steroids are often used by people who weight train to improve the effects of training and for aesthetic reasons. They are usually used in four-week cycles, followed by a period off 'treatment'.

The use of anabolic steroids in this way is rarely medically supervised, and this may involve health risks.

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## Health risks of anabolic steroid use

Anabolic steroids, and testosterone, can damage the liver, and severe liver problems including liver fibrosis, cirrhosis and cancer have been seen in long-term users of anabolic steroids. If you are being prescribed them by your doctor, your liver function will be closely monitored.

Acne, male pattern baldness, sexual dysfunction, shrinking of the testicles, and the shutting down of natural production of testosterone can also be

caused by anabolic steroids. Aggression, mood disturbances, stomach pain, an enlarged prostate and water retention can also develop as a consequence of steroid use. Breast enlargement in men, and the development of male characteristics in women have also been observed.

If you are buying steroids on the 'black' market it's unlikely that you can verify if they are genuine or be certain of their quality. Counterfeit steroids are common and may contain impurities that cause infections or abscesses.

When used in a non-medical context, anabolic steroids are often injected. Sharing needles to inject steroids involves the same health risks as sharing needles to inject recreational drugs, including HIV transmission, and infection with hepatitis C virus and hepatitis B virus.

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## Legal status of anabolic steroids

Anabolic steroids are a prescription-only medicine. Although possession of anabolic steroids is not illegal, selling them is and can involve a fine and even a prison sentence.

If you take part in any form of competitive sport, then it's likely that the use of anabolic steroids will be banned, even if you are taking them for legitimate medical reasons.