

# Vitruvian Man

## Private Testosterone Service



### Anabolic Steroid Facts

Anabolic/Androgenic Steroids (AAS) are chemical derivatives of testosterone, a naturally occurring hormone produced by the testes (also in small quantities by the adrenal cortex). They can be pharmaceutically produced (high quality) for medical purposes, produced for veterinary use or manufactured in underground laboratories. Additionally, there are counterfeits of all these categories.

Steroids differ in their molecular structure and produce varying effects.

**Anabolic** - This refers specifically to the muscle building properties of the steroid.

**Androgenic**- This refers to the promotion of masculinising effects of a steroid.

Testosterone is extremely androgenic and anabolic. So too are its chemically derived esters i.e. Sustanon 250 and Testosterone Enanthate.

Some steroids are synthetically designed to be more anabolic than androgenic, i.e. Deca-Durabolin and Stanozolol. Simply, they cause muscle gain with less androgenic side effects (acne, water retention, hair loss and, paradoxically, breast development).

As a rule, the more androgenic steroids produce greater results with a higher incidence of side effects (although this is dose related). Anabolic steroids cause less overall gains but relatively fewer side effects.

All steroids increase nitrogen retention which results in greater protein synthesis. This is essential for muscle growth. An increase in dietary protein is required.

They also increase blood volume and glycogen stores (energy within the muscle), resulting in increased strength, endurance and muscle size.

Additionally they reduce catabolism, described as muscle breakdown for energy during stress (intensive exercise, for example). Catabolism is a normal process caused by the hormone cortisol. Steroids occupy the cortisol receptors inhibiting its ability to breakdown muscle tissue. The body does try to overcome this by upregulating cortisol receptors, however.

Steroids can be made for either oral or intramuscular administration.

Oil based steroids are designed to be injected at greater intervals than water (or alcohol) based ones, which need more frequent doses up to every day.

Oral steroids need to be taken daily in divided doses and as a rule are more taxing on the liver as they undergo first pass metabolism (gut-liver-bloodstream) whereas injectable steroids don't. Additionally, most are chemically structured to reduce the liver's ability to metabolise (breakdown) them. These are C-17 Alpha-alkylated and are more toxic to the liver.

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### AAS effects

The following is an outline of the physiological changes which occur.

Negative feedback loop.

This is a mechanism that opposes or resists a change in the body's internal condition. The desired outcome within the body is to maintain homeostasis (Greek for "same state"). The body strives and continually monitors and adjusts to maintain a desired level of testosterone. Approximately 10mg of testosterone is naturally produced a day.

### [Testosterone Production Feedback Loop Diagram](#)

An increase in testosterone over and above what is normally produced by the testes from an external source, i.e. anabolic steroid, is detected in the brain (hypothalamus). Interestingly, excess testosterone is converted to oestrogen (a predominantly female hormone) by the aromatase enzyme. There is also a conversion of testosterone to the highly androgenic - and therefore side effect inducing - hormone dihydrotestosterone (DHT) by the enzyme 5 Alpha reductase. These actions result in a further unbalancing of homeostasis.

### [Testosterone Production Feedback Loop with AAS Diagram](#)

All this culminates in a significant reduction of the hormone cascade needed for testosterone production, resulting in a decrease in the natural production of testosterone by the testes.

This feedback loop is known as the hypothalamus-pituitary-testicular-axis (HPTA). Refer to the testosterone production feedback loop diagram above for further details.

As the cells in the testes which produce testosterone become increasingly redundant over the steroid cycle, the testes will reduce in mass. This is to be expected and should return to normal. The only variables are the severity and duration. A long heavy cycle of highly androgenic steroids will result in greater HPTA suppression.

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### What's being used in the West-midlands

- Deca Durabolin (injectable) 200 - 600mg per week
- Stanozolol (injectable/oral) 50 - 100mg per day (AKA Winstrol)
- Equipoise (injectable) 200 - 800mg per week
- Primobolan (injectable) 300 - 600mg per week
- Masteron (injectable) 100mg every other day
- Sustanon 250 (injectable) 250 - 750mg per week
- Testosterone esters (injectable) 200 - 750mg per week
- Testosterone propionate (injectable) 100mg every other day
- Anadrol (oral) 50 - 100mg per day
- Trenbolone Acetate (injectable) 75 - 100mg every other day
- Trenbolone Enanthate (injectable) 200 - 600mg per week
- Dianabol (oral) 15 - 50mg per day
- Clomid (oral) 50 - 100mg per day
- Tamoxifen (oral) 20 - 40mg per day
- Human Chorionic Gonadotrophin (HCG) varying doses. Legitimate products difficult to obtain.
- Insulin (subcutaneous injection) 5 - 15iu daily **HIGH POTENTIAL FOR SUDDEN DEATH!** Often used with GH (which raises blood glucose levels a little).
- Growth Hormone (GH) (subcutaneous injection) 2 - 10iu daily (usually max 4iu due to cost and risk of carpal tunnel syndrome).
- GHRP-6 - increasing in popularity and cheaper than GH. A research peptide, rather than a fully developed drug.
- Ostarine (MK2866) another research compound. This a SARM (Selective Androgen Receptor Modifier) 25mg daily oral.

See [PIEDs](#) page for further information on Performance and Image Enhancing Drugs.

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