



# Methyltestosterone

Methyltestosterone 25mg

Read all of this leaflet carefully before you start taking this medicine because it contains important information for you.

- · Keep this leaflet. You may need to read it again.
- If you have any further questions, ask your doctor, pharmacist or nurse.
- This medicine has been prescribed for you only. Do not pass it on to others. It may harm them, even if their signs of illness are the same as yours.
- If you get any side effects, talk to your doctor, pharmacist or nurse. This includes any possible side effects not listed in this leaflet.

#### **About**

Methyltestosterone is an orally available form of the primary male androgen testosterone. Looking at the structure of this steroid, we see it is basically just testosterone with an added methyl group at the c-17 alpha position (a c-17 alpha alkylated substance), which allows for oral administration. The resultant compound "methylated-testosterone" was among the first functional oral steroids to be produced. This field of research has consequently improved greatly over the years, and today methyltestosterone is quite crude in comparison to many of the other orals that were subsequently developed. The action of this steroid is moderately anabolic and androgenic, with high estrogenic activity due to its aromatization to 17-alpha methyl estradiol. This generally makes methyltestosterone too troublesome (in terms of estrogenic side effects) to use for musclebuilding purposes.

# **Side Effects (Estrogenic)**

Methyltestosterone is aromatized by the body, and is highly estrogenic due to its conversion to 17-alpha methylestradiol, a synthetic estrogen with high biological activity. 17-alpha methylation actually slows the rate of aromatization, although the potent nature of 17- methylestradiol more than compensates for this. Gynecomastia is often a concern during treatment, and may present itself quite early into a cycle (particularly when higher doses are used). At the same time water retention can become a problem, causing a notable loss of muscle definition as both subcutaneous water retention and fat levels build. To avoid strong estrogenic side effects, it may be necessary to use an anti-estrogen such as Nolvadex. One may alternately use an aromatase inhibitor like Arimidex (anastrozole), which is a more effective remedy for estrogen control. Aromatase inhibitors, however, can be quite expensive in comparison to standard estrogen maintenance therapies, and may also have negative effects on blood lipids.

#### **Side Effects (Androgenic)**

Methyltestosterone is classified as an androgen. Androgenic side effects are common with this substance, and may include bouts of oily skin, acne, and body/facial hair growth. Higher doses are more likely to cause such side effects. Anabolic/androgenic steroids may also aggravate male pattern hair loss. Those genetically prone to male pattern hair loss may wish to opt for a milder, less androgenic, anabolic steroid. As a potent androgen, this steroid may also increase aggressiveness. Women are additionally warned of the potential virilizing effects of anabolic/androgenic steroids. These may include a deepening of the voice, menstrual irregularities, changes in skin texture, facial hair growth, and clitoral enlargement. Like testosterone, methyltestosterone converts to a more potent steroid via interaction with the 5- alpha reductase enzyme, in this case 17-alpha-methyldihydrotestosterone. The relative androgenicity of methyltestosterone may be reduced, although not completely eliminated, by the concurrent use of finasteride or dutasteride.



### Side Effects (Hepatotoxicity)

Methyltestosterone is a c17-alpha alkylated compound. This alteration protects the drug from deactivation by the liver, allowing a very high percentage of the drug entry into the bloodstream following oral administration. C17-alpha alkylated anabolic/androgenic steroids can be hepatotoxic. Prolonged or high exposure may result in liver damage. In rare instances life-threatening dysfunction may develop. It is advisable to visit a physician periodically during each cycle to monitor liver function and overall health. Intake of c17-alpha alkylated steroids is commonly limited to 6-8 weeks, in an effort to avoid escalating liver strain.

Methyltestosterone was the first oral steroid linked to hepatic damage. This may be, in part, related to the early widespread use of the compound, as the drug generally displays acceptable safety when used in clinically prescribed dosages (serious liver toxicity cannot be completely excluded, however, even at clinical doses). When taken at a dose of 30 mg daily for 5 weeks, hepatotoxicity, as measured by bromosulphalein (BSP) retention, was low in one study. In a separate investigation, a majority of patients noticed significant BSP retention after only 2 weeks of therapy with 67mg daily. Severe liver complications are rare given the periodic nature in which most people use oral anabolic/androgenic steroids, although cannot be excluded with methyltestosterone, especially with high doses and/or prolonged administration periods.

The use of a liver detoxification supplement such as Liver Stabil, Liv-52, or Essentiale Forte is advised while taking any hepatotoxic anabolic/androgenic steroids.

#### Side Effects (Cardiovascular)

Anabolic/androgenic steroids can have deleterious effects on serum cholesterol. This includes a tendency to reduce HDL (good) cholesterol values and increase LDL (bad) cholesterol values, which may shift the HDL to LDL balance in a direction that favors greater risk of arteriosclerosis. The relative impact of an anabolic/androgenic steroid on serum lipids is dependant on the dose, route of administration (oral vs. injectable), type of steroid (aromatizable or non-aromatizable), and level of resistance to hepatic metabolism.

Methyltestosterone has a strong effect on the hepatic management of cholesterol due to its structural resistance to liver breakdown and route of administration. Studies have demonstrated an approximate 35% decrease in HDL cholesterol and a 30% increase in LDL cholesterol with 40 mg per day.531 These changes occurred within 2-4 weeks of the initiation of therapy, and persisted for 2 weeks after discontinuation of the drug. Anabolic/androgenic steroids may also adversely affect blood pressure and triglycerides, reduce endothelial relaxation, and support left ventricular hypertrophy, all potentially increasing the risk of cardiovascular disease and myocardial infarction.

To help reduce cardiovascular strain it is advised to maintain an active cardiovascular exercise program and minimize the intake of saturated fats, cholesterol, and simple carbohydrates at all times during active AAS administration. Supplementing with fish oils (4 grams per day) and a natural cholesterol/antioxidant formula such as Lipid Stabil or a product with comparable ingredients is also recommended.

# **Side Effects (Testosterone Suppression)**

All anabolic/androgenic steroids when taken in doses sufficient to promote muscle gain are expected to suppress endogenous testosterone production. Without the intervention of testosterone-stimulating substances, testosterone levels should return to normal within 1-4 months of drug secession. Note that prolonged hypogonadotrophic hypogonadism can develop secondary to steroid abuse, necessitating medical intervention.



# **Administration (General)**

Studies have shown that taking an oral anabolic steroid with food may decrease its bioavailability. This is caused by the fat-soluble nature of steroid hormones, which can allow some of the drug to dissolve with undigested dietary fat, reducing its absorption from the gastrointestinal tract. For maximum utilization, this steroid should be taken on an empty stomach.

# Administration (Men)

To treat androgen insufficiency, prescribing guidelines call for a daily dosage of 10-40 mg. The dose is reduced by 50% when administered in sublingual or buccal form. The drug would be used for extended periods so long as the patent's laboratory results (hepatotoxicity, serum lipids, etc.) do not necessitate its discontinuance.

When used for physique- or performance-enhancing purposes, a daily dosage of 10-50 mg is most commonly used, taken in cycles lasting no more than 6-8 weeks in length. Methyltestosterone is most commonly used not as an anabolic, but to stimulate aggression in the user. Powerlifters, bodybuilders, and competitive athletes often attempt to harness this effect, looking for extra intensity in a training session or competition.

Aside from this, Methyltestosterone offers little except side effects. It is quite toxic, elevating liver enzymes and causing acne, gynecomastia, aggression, and water retention quite easily. Were one to tolerate these side effects, methyltestosterone will offer only poor quality (bulky) gains. One should also be prepared for a substantial loss of size and bodyweight at the conclusion of each cycle with methyltestosterone, due to the high level of water excretion once the drug is discontinued (during administration water retention will account for a considerable percentage of the total weight gain).

#### Administration (Women)

Methyltestosterone is not widely used with women in clinical medicine. When applied, it is most often used as a secondary medication during inoperable breast cancer, when other therapies have failed to produce a desirable effect. The dosage used for this application can be as high as 200 mg per day.

Low doses of methyltestosterone have been used in recent years to treat the symptoms of menopause. An example is the product Estratest, which contains esterified estrogens and 2.5 mg of methyltestosterone. A dosage of 1 tablet per day may improve energy, libido, and overall wellness of the patient, as well as combat osteoporosis (while estrogen replacement may halt calcium loss in the bones, testosterone tends to increase calcium stores). Methyltestosterone is generally not recommended for women for physique- or performance-enhancing purposes due to its strong androgenic nature and tendency to produce virilizing side effects.