

ANABOLIC AGENTS

What are they?

There are two classes of anabolic agents: anabolic androgenic steroids and other anabolic agents.

Anabolic androgenic steroids are substances that have both anabolic and androgenic properties. The anabolic effects can result in an accelerated growth of muscle and bone. The androgenic properties may effect development of the male reproductive system and the secondary male sexual characteristics such as hair growth and deep voice. Anabolic androgenic steroids can be derived from both endogenous (naturally produced) or exogenous (synthetically manufactured) sources.

Other anabolic agents are substances which are pharmacologically not related to the androgenic anabolic steroids, but which might have a similar anabolic effect. Substances include clenbuterol, zeranol and zilpaterol.

How would they be used to cheat in sport?

Athletes may be tempted to use anabolic steroids as they can improve the body's capacity to train and compete at the highest level by reducing fatigue associated with training and the time required to recover after physical exertion. The anabolic effects can result in an accelerated growth of muscle and bone and increase aggression and competitiveness.

Potential harmful side effects.

The side effects associated with androgenic anabolic steroids are extremely serious. They can be divided into general, male-specific and female-specific.

General side effects:

- Greasy skin and acne
- High blood pressure (hypertension)
- Damage to the reproductive system
- Liver and kidney abnormalities
- Resulting in infertility

- Violent and aggressive behaviour towards other people
- Trembling
- Promotion of growth of tumours
- A rise in blood pressure
- Potential injuries to tendons, ligaments etc.
- Restlessness, agitation
- Feelings of anxiety
- Heart rhythm abnormalities (arrhythmias)
- Muscle cramps

Male-specific side effects:

- Breast development
- Diminished sperm production
- Infertility
- Impotence
- Testicular atrophy
- Hair loss
- Diminished male hormone production
- Prostate cancer

Female-specific side effects:

- Male pattern hair growth and boldness
- Decreased size of breasts
- Menstruation disturbances
- Deeper voice (hoarseness)

What else you should know

Anabolic Agents are prohibited in-competition and out-of-competition.

Although the use of these substances is very dangerous and has caused the death or severe health problems for many athletes, a lot of athletes misuse them to try and become stronger and/or faster. Designer steroids, such as THG, may not have been tested on humans and therefore their side effects are unknown.

This fact-sheet is deliberately concise

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