



Performance and Body Enhancing Drugs

Drug use and abuse is becoming more and more prevalent among athletes to better their performance as well as individuals wishing to enhance their appearance. The primary reason for the increased use is two-fold – the overwhelming pressure to win at all cost as well as the desire to improve one’s physical appearance in a very short period of time. These seem to be outweighing the risk factor of the negative side effects and long term health risks involved in taking drugs. In addition, most individuals who start to take drugs to improve performance or appearance are generally quite young and lack self-confidence. They are easily influenced and do not have all the facts before getting involved with drugs.

Parents, coaches and teachers need to be educated on performance and body enhancing drugs or be aware of where to obtain information. This knowledge must be passed on to their children, players, or students to solve this problem.

The following information will provide a brief overview of the facts relating to drug use in sport and body (appearance) enhancement. The emphasis will be on anabolic steroids but will also touch upon the other drugs and doping methods abused by athletes as well as individuals wishing to enhance their appearance.

The Law

It is against the law to traffic or be in possession of controlled drugs for the purpose of trafficking as defined by the Food and Drug Act, Schedule “G”. Such controlled drugs include anabolic steroids, major stimulants (amphetamines) and depressants (barbiturates). Other drugs used in sport such as cocaine and cannabis fall under the Narcotics Control Act. Simple possession of these drugs is illegal. Due to the fact that steroids are not readily available from the medical system purchasing them via the Black Market is becoming a huge problem with many risks. Individuals are buying what they believe to be steroids when in fact they are getting other substances such as sugar water.

Types of Drugs

Drugs that athletes or body enhancers may use are divided into the following categories:

1. Anabolic Steroids. These are synthetic hormones that simulate the effects on the naturally occurring steroid, the male hormone testosterone.

Do steroids work? Yes, they do. Generally, with a combination of intense training and an enhanced diet, anabolic steroids shorten the time required to achieve maximum effect. The correct approach is to educate them on the numerous potential harmful side effects as well as the cheating factor (character check).

Side effects in adult males are liver dysfunction, increased risk of heart disease and stroke, high blood pressure, decreased sexual performance, extreme and disfiguring acne, kidney dysfunction, weakened immune system, severe mood swings and other psychological effects (roid rage), as well as the following often irreversible side effects: breast enlargement, testicle shrinkage, and reduction in sperm production (potential infertility).

Side effects in adult females include deepening of the voice, developing an Adam's apple, male pattern baldness, facial and body hair, enlarged clitoris, redistribution of fat, and irregular or absence of menstrual cycle.

In addition to the above, adolescents also may have early closure of the growth centers of long bones which can result in stunted growth.

The injection of anabolic steroids has also been linked to the transmission of Hepatitis B as well as HIV, the virus that causes AIDS.

2. Stimulants. These drugs affect the central nervous system by increasing alertness and reducing fatigue. Side effects may include anxiety and aggression, increased heart rate and blood pressure, dehydration and decreased circulation and in some cases death. Examples of stimulants range from cocaine to cough and cold medicines containing ephedrine and caffeine.

3. Narcotics/Analgesics. These painkillers allow athletes to play and workout with an injury. The result could be further injury. Examples are codeine, demoral and morphine.

4. Diuretics. These drugs decrease body fluid by eliminating salt and water in the urine. This practice is used by athletes that have to "make weight" in addition to flushing out other substances to avoid detection of their use. Side effects include dehydration, muscle fatigue, cramping, decreased blood pressure, and heart irregularities.

5. Peptide Hormones & Analogues. Peptide hormones act as messengers from one organ to another to stimulate various body functions such as growth, sex drive and behavior. Analogues are chemically produced drugs designed to have similar effects. Examples include Human Growth Hormone, Adreno Corticotrophin and Human Chorionic Gonadotrophin. Each of these has various side effects ranging from

depression and headaches to heart disease and distorted growth.

Other Substances

Vitamins and minerals, herbal products, amino acids and proteins. Many athletes believe that these items stimulate various body functions or increase various body development. In actuality, there is no scientific evidence of any additional benefits that a well balanced diet couldn't provide. In fact, most supplements are either stored as fat or released by the body.

There are also many other substances and practices that are used today by athletes and individuals wishing to enhance their performance and body image. These include:

- Beta Blockers - Blood Doping
- Soda Loading - Alleged Ergogenics
- Drug Stacking

Recognizing A Problem

Drug abuse is often hard to detect. The discovery of unusual pills, vials or syringes should raise suspicion. There are some basic warning signs that indicate drug use. Rapid weight gain and increase in muscle size (5-10 kilograms in as little as two months), increased strength, changes in behavior (depression & aggression), acne, rounded or "moon" face, increased appetite, abnormal breast development in males, lowering of the voice and body hair in females, may indicate the use of steroids. Dilated pupils, increased sweating, increase in anxiety and nervousness, tremor and weight loss may indicate stimulant use.

Solving the Problem

What do you do if you think someone is taking drugs? Firstly, address the problem. First time users may not know exactly what they are getting into. Educate them. Secondly, seek professional assistance. Not all doctors are up-to-date on this issue so consulting a physician involved in the sport medical area may be helpful. Lastly, provide a supportive atmosphere. Constant ridicule may only cause the user to rebel and become less willing to take advice.

Teachers, coaches and parents must provide a healthy supportive environment which includes good coaching as well as availability to sport medicine and science services. Be a good role model, be knowledgeable, provide a proper training atmosphere and be sensitive to each individual's personal life. Ensure that sports and body image are placed in the proper context. Encourage "FAIR PLAY" and teach "BE THE BEST YOU CAN BE – NATURALLY."