

A brief introduction to steroids and a little friendly advice

Lately, there has been much controversy on the radio, television, newspapers, etc. concerning steroids, which all began from the Olympic Games in Seoul, Korea in 1988 where some of the athletes were on steroids to enhance athletic performance and muscular appearance.

I, myself am an athlete. I was born in Greece, not far from Olympia and I immigrated to Canada 34 years ago. I am not a professional athlete. I only participate in athletic activities to earn money to donate to charitable organizations of our country, Canada.

Mr. Maher, a native of Ottawa and a runner in the Olympic games in Seoul in 1988, initiated a campaign to promote raising funds to help children in New Brunswick suffering from asthma. I participated in this noble and Christian thought and donated the money earned to the New Brunswick Lung Association. This participation also enabled me to meet Mr. Maher and other interesting people from Fredericton.

I am also a graduate in Chemistry and I had been doing a fair amount of studies in Food and Drug Chemistry before the 1988 Olympic Games. However, the Seoul Olympic steroid scandal stimulated my interest to once again direct my studies to Drug Chemistry.

Steroids

Any class of compounds containing a cyclopentanoperhydrophenanthrene ring system, with a great variety of degree in saturation of the steroid nucleus and of keto-, hydroxyl-, and other substituents and side chains. The class includes sterols, bile acids, cardiac aglycones, plant sapogenins, carcinogenic hydrocarbons, food poisons and the steroid hormones.

Anabolic steroids

Any class of synthetic or semi-synthetic steroid hormones that process only limited virilizing potency but that promote the biosynthesis of tissue protein.

Because of their biological importance and fascinating complexity of the chemistry, the study of steroids occupies one of the most active areas of organic chemistry research.

Today, anabolic steroids are used and abused by young athletes who wish to increase lean body mass and improve muscular strength. This drug abuse involves boys not yet in their teens; high school, college and professional athletes; and body builders of both sexes. Also, some young men are interested in steroids because they hope for a more muscular physique which will make them look good to their girl-friends, or they don't want

to look like "wimps." Health care professionals who try to educate the users are confronted with the following problems:

(a) Young people tend to believe that death is for old people and,

(b) another deficiency is that the signs, symptoms and adverse effects associated with the use of anabolic steroids might not show up for a decade or two after the user begins taking them.

Anabolic steroids came to be used by athletes more than 30 years ago after the east European athletes dominated some international sports events. It was learned that their athletes had bolstered themselves with a male hormone called testosterone. East European athletes won many victories but did so at great expense. They were taking so much of the male hormone that many of the male athletes had difficulty in urinating while women athletes were so masculine in appearance that chromosome tests had to be conducted to prove that they were females.

Young athletes should know that anabolic steroids can cause numerous side effects of adverse reactions including: acne; cancer; cholesterol increase; edema (water retention in tissue); fetal damage; hirsutism (hairiness in women - irreversible); increased risk of coronary artery disease (heart attack, stroke); jaundice; liver disease; liver tumours; male baldness (irreversibly in women); oily skin (females only); polioid hepatitis (a liver disease); penis enlargement (young boys); priapism (painful, prolonged erections); prostate enlargement; sterility (reversible); stunted growth; swelling of feet or lower legs; testicular atrophy; yellowing of the eyes or skin.

Other possible side effects and adverse reactions are: abdominal or stomach pains; aggressive, combative behavior ("roid rage") anaphylactic shock (from injections); black, tarry, or light-coloured stools; bone pain; chills; dark-coloured urine; depression; diarrhea; fatigue; feeling of abdominal or stomach fullness; feeling of discomfort; fever; frequent urge to urinate (mature males); gallstones; headache; high blood pressure; hives; hypercalcemia (too much calcium); impotence; increased chance of injury to muscles, tendons and ligaments, plus longer recovery period from injuries; insomnia; kidney disease; kidney stones (from hypercalcemia) listlessness; menstrual irregularities; muscle cramps; nausea or vomiting; purple- or red-coloured spots on body, inside of mouth, or nose; rash; septic shock (blood poisoning from injections) sexual problems; sore tongue; unexplained darkening of skin; unexplained weight loss; unnatural hair growth;

unpleasant breath odour; unusual bleeding; unusual weight gain; urination problems; vomiting blood.

Cardiovascular problems can occur as follows:

Steroids cause fluid retention which in turn can lead to high blood pressure. Steroids also lower high-density lipoproteins (HDLs) in the blood. HDLs help rid the body of cholesterol. Too much cholesterol in the body leads to formation of plaque on the walls of the arteries. Eventually the arteries are clogged, possibly causing a stroke or heart-attack. Drugs will only ruin the chances of the athlete of developing a championship physique and the athletes must be convinced that the dangers are not worth whatever extra edge the drug might give them.

Here is a little friendly advice which will help you to obtain a sound mind in an athletic body.

EDUCATION - MUSIC - GYMNASTICS

a) Concentrate on hard, natural training, either you are an athlete or not. Combine a brisk walk with running for ten miles on a daily basis, as I do; five miles during lunch time on an empty stomach and an additional five miles after work, followed by a warm shower and then enjoy your evening meal.

b) Concentrate on good nutrition, particularly watch food rich in cholesterol and in carbohydrates and stay away from smoking and drinking.

A glass of milk in the morning and water as a drink all day until bedtime is the best bet.

c) Read books to broaden your education, such as books on medicine, sociology, psychology, physical education magazines, Scientific publications, etc., and if you learned something beneficial, apply it to yourself and family - Progress through education.

d) Play music, such as piano, violin, flute, guitar, etc. or listen to the type of music which is of interest to you.

If you stick to what I suggest above, you will be younger by eight years as I am, according to the Health and Welfare Canadian Health Promotion Directorate: Health Hazard Appraisal. For example, if you are 28 years old and you do what I recommend above, your health age will be 20 years old. Remember, follow the strategy: EDUCATION - MUSIC - GYMNASTICS.

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Ben Johnson:
Steroids do
ruin lives

Ben Johnson is known throughout the world as the man who lost the gold medal. Johnson was tested for the use of performance enhancing drugs in 1988. Unfortunately, he tested positive. This testing brought the use of performance enhancing drugs out in the open and no longer could a blind eye be turned on the problem.

Following the 1988 Olympics, an inquiry was held that shed the light on a major problem in the athletic world. The Dubin inquiries proved to be an enlightening experience that would send the athletic world into turmoil.

The Dubin inquiries would soon hit closer to home as the CIAU saw the Ben Johnson dilemma becoming a problem for the university athletics. One year ago, the universities across Canada began random testing of football players for the use of performance enhancing drugs. This year, all teams are subject to the test and all players must agree to be tested whenever the CIAU deems necessary.

Each year the athletes here at UNB are required to sit through a drug seminar. The education of athletes on the affect of drugs in athletics is one of the prime aims of the CIAU. The athletes are also required to submit by signed document to random testing by the CIAU. Failure to attend the seminar and refusal of drug testing can lead to the ineligibility of athletes in university competition.

The one problem faced here at UNB with the drug seminar is with the Upper classmen. Since the upperclassmen have been through the program already, dealing with the same information time after time becomes tedious. This year, however, the UNB athletic department is looking to solve this problem. The upperclassmen will undergo a less tedious program as the freshmen and ways are being researched to make this information more interesting.

The Athletic Director of UNB, Mr. James Born stated, "Education is the key to the drug policy." Many athletes who use performance enhancing drugs are unaware of the physical effects these substances have on their bodies. In the case of female athletes, "The women's side affect are very noticeable such as

overabundant facial hair," said Coach Clair Mitton of the UNB Red Bloomers basketball team.

For the athletes here at UNB, performance enhancing drugs are not a major factor. For the athletes that this reporter spoke to, performance enhancing drugs have never crossed their minds. Sean Dockrill who is better known to this campus as an AUA Championship Wrestler was quoted as saying, "Drugs are useless. Athletes should perform on a natural talent level." This sentiment was shared by Coach Phil Wright of the Red Raiders basketball team.

Lynne Wanyeki, former Beaver Swim team member, summed up the majority of the feelings shared by athletes on this campus when she stated, "I think that the taking of steroids has degenerated sports. The meaning of fair competition has been lost to the point that, for certain sports, we might as well hold two separate meets for a single sport - one for steroid users and one for non-users. Too bad this isn't any way practicable."

This idea is well worth considering. If athletes aren't willing to compete for the sheer joy of knowing they have done their best, then why compete. Anabolic steroids and other performance enhancing drugs are a form of cheating regardless of why they are used. "A sport should be man against man or team against team. Hard work pays off and if the level you are looking for is not achieved then one should work harder." Quoted fifth year soccer veteran Jamie Oakes.

Ben Johnson may have lost the gold medal in the 1988 Olympic Games but thanks must be extended to him for enlightening the athletic world and waking them from their blindness sleep. For the most part, steroids are used by inferior athletes in search of glory and fame.

The issue of steroids in 1990 is an unavoidable one. But, with the CIAU educating their athletes and the media coverage of the Ben Johnson issue and the Dublin report, hopefully, steroid users will realize that, as mom used to say, "Cheaters never Prosper."

By Kelly Craig