#### **DRUGS IN SPORT**



Today's athletes continue to push the boundaries of excellence in performance and physical fitness. Helping them are refined training methods and technologies. Never have athletes had more training aids at their disposal.

And never have athletes had more opportunities to cheat, mainly through the proliferation of performance-enhancing drugs.

## The all-embracing word "DRUGS" cover a wide range of substances



Some of these are used on a regular basis by many of us. The obvious ones are CAFFEINE which we use in tea and coffee, NICOTINE which people use in smoking and ETHANOL which is more commonly known as alcohol.

#### **Drugs in Sports** Caffeine



## **Drugs in Sports** Nicotine



## Drugs in Sports Alcohol



There are other drugs that we use on a less frequent basis.

These are referred to as MEDICINES. These could be described as "SOCIALLY ACCEPTABLE" because they are not illegal.

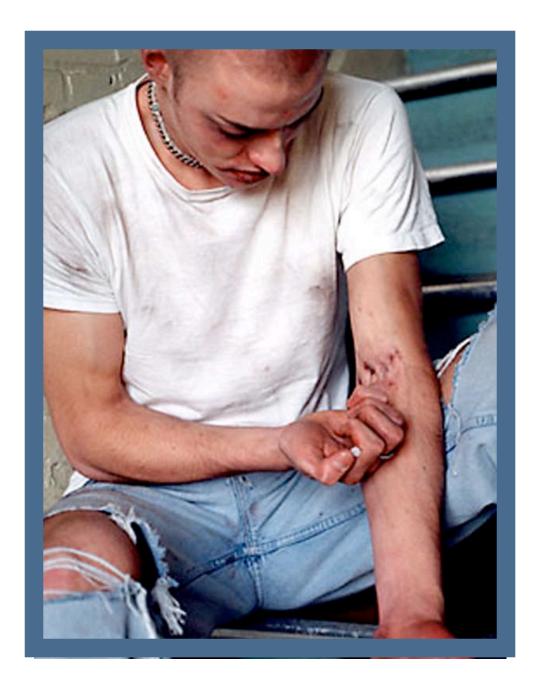
#### **Drugs in Sports** Prescription Drugs



#### There are also drugs that come under the term "SOCIALLY UNACCEPTABLE" and these are illegal.

Heroin	Amphetamines
Cocaine	Barbiturates
LSD	<b>Cannabis and ecstasy</b>

#### Heroin



#### Drugs in Sports Cocaine





#### Drugs in Sports Amphetamines



#### **Drugs in Sports** Barbiturates

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#### **Drugs in Sports** Cannabis and ecstasy



What is a Drug?

"A substance that can be taken in a variety of ways to produce physical and/or psychological effects on the person taking it."

Drugs may also cause some effects that are both unpleasant and unwanted.

• They can become addictive

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 Smoking damages the heart and oxygen carrying capability of the blood.
It is also a contributing factor to coronary heart disease.

Drugs may also cause some effects that are both unpleasant and unwanted.

• Both alcohol and caffeine cause extra urine to be disposed of, therefore add to the risks of dehydration.

Drugs may also cause some effects that are both unpleasant and unwanted.

• Long term effects of alcohol include liver damage.

#### Why a sportsperson takes drugs.

- 1. To recover from injury quicker or to mask pain.
- 2. The desire to be the best at all cost.
- 3. Their natural ability not good enough.

#### Why a sportsperson takes drugs.

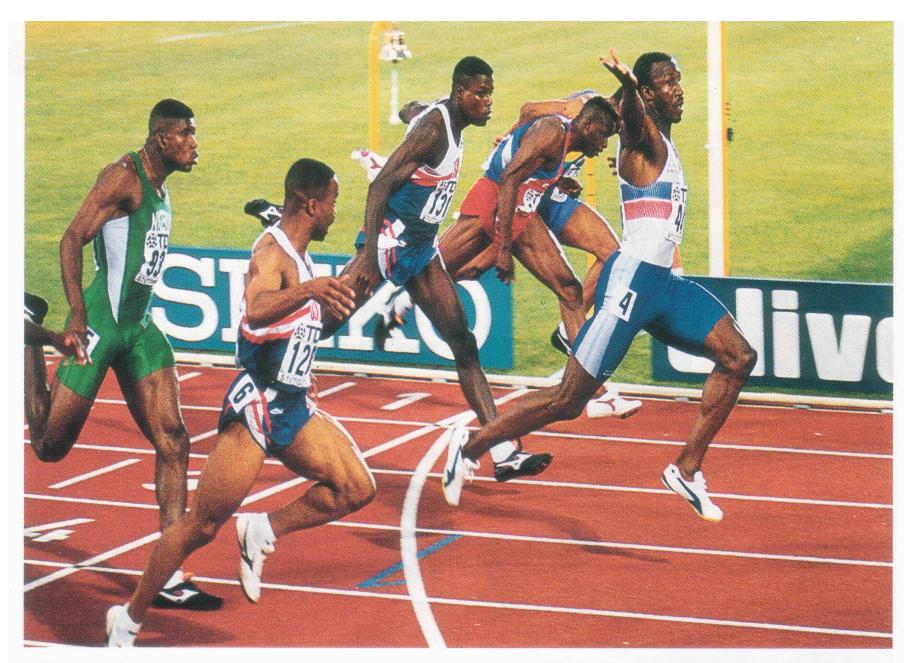
- 4. Influenced by others to improve performance
- 5. To meet the expectations of others
- 6. Winning gives financial rewards

#### Why a sportsperson takes drugs.

- 7. Make the most of a short sporting life
- 8. Will to win overrides moral conscience
- 9. Willing to risk cheating for public acclaim

#### Why a sportsperson takes drugs.

#### 10. Better results lead to better sponsors and endorsement contracts



Drug-taking can be tempting in sports where the margin between winning and losing is a fraction of a second

Why a sportsperson takes drugs.

Sports people decide to take drugs to enhance or improve their performance, or are encouraged to do so by their coach.

The temptation is great with such high stakes. Winning a gold medal at the Olympics in some sports may be worth more than a million dollars in sponsorships.

#### Why a sportsperson takes drugs.

Even on a day to day basis, sportspeople make a lot of money by simply competing at the highest level.

Even if they do not win, drugs may allow a lesser athlete to take part in their sport at a level they could not have otherwise reached.



## The 1998 Tour de France was brought to a halt by protests following drug testing

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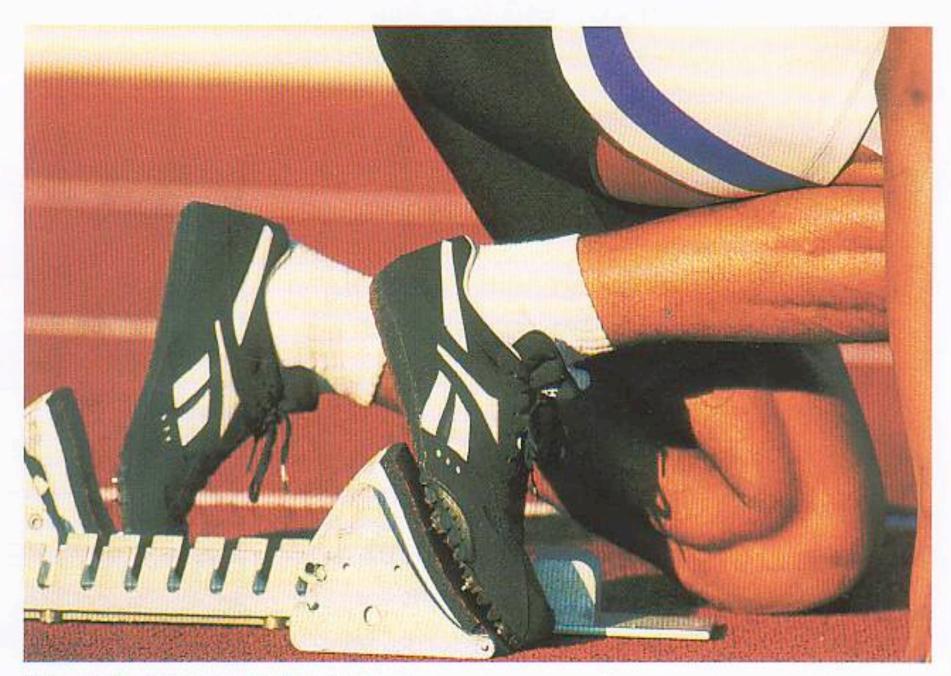
#### Performance Enhancing Drugs fall into two categories

#### 1. Prohibited classes of substances

#### 2. Prohibited methods

#### **Prohibited classes of substances**

1. STIMULANTS – these help people to be more alert, enabling them to think more quickly. Using these drugs helps to overcome tiredness. Stimulants may produce side effects such as Insomnia and increased heart rate.



#### Stimulants improve reaction time.

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#### **Prohibited classes of substances**

2. NARCOTICS/ANALGESICS – This enables athletes to get back into action quickly after an injury. They act as painkillers.



#### **Prohibited classes of substances**

3. ANABOLIC STEROIDS – They increase muscle mass and develop bone growth, therefore increasing strength, while at the same time allowing the athlete to train harder. It can also increase aggression.

#### **Prohibited classes of substances**

3. ANABOLIC STEROIDS – This is the most common drug used to enhance performance. The drug mimics the male hormone Testosterone. Side affects include deepening of voice, facial hair, mood swings and anxiety. Infertility in women are also common effects.





#### **Prohibited classes of substances**

4. DIURETICS – Used to increase the amount of urine produced and to increase kidney function, thereby speeding up the elimination of fluid from the body.

This will cause rapid weight loss in sports where performers are required to compete within strict weight boundaries.





#### **Prohibited classes of substances**

5. PEPTIDE, CHEMICAL and PHYSICAL MANIPULATION – These types of drugs increase muscle growth, assist in recovery from injury and increase the number of red blood cells to carry oxygen.



**Prohibited Methods** 

Blood doping is a banned process NOT a banned drug. If an athlete trains at height altitude, the oxygen carrying capacity of their blood increases. Athletes train at high altitude for a period of time and then have as much as two pints of blood taken from the body, and the red blood cells frozen.

**Prohibited Methods** 

The body's system quickly recovers and the normal 8 pints of blood is restored. Near a competition day, the red blood cells are put back into the athlete's bloodstream and this process is though to increase their performance by as much as 20%.

Taking performance enhancing drugs is regarded as cheating and athletes found guilty pay the ultimate penalty within their sport.

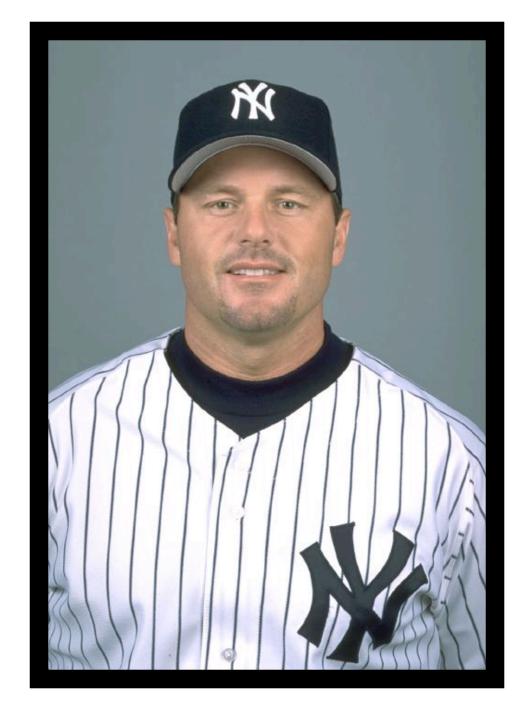
#### **Floyd Landis**

Stripped of his title as winner of the 2006 Tour de France after testing revealed an abnormally high testosterone/epitestos terone ratio.



#### **Roger Clemens**

Clemens' name was listed in the Mitchell Report, which alleged that he had used steroids during the 1998–2001 seasons



#### **Barry Bond**

Alleged that Bonds had used performanceenhancing drugs. He was indicted by a federal grand on perjury and obstruction of justice charges. The indictment alleges that **Bonds lied while under** oath about his alleged use of steroids.

