

## CHAPTER 12: *Drugs in sport, sport and the law, and commercialisation*

### Practice questions - text book pages 170 - 171

- 1) Deciding which drugs are true performance aids and which drugs should be banned is often difficult because:
- medical researchers lack the technology to study the drugs that athletes use.
  - athletes often use new substances before scientists have studied them.
  - drug companies outlaw research on performance-enhancing substances.
  - NGBs have abandoned all efforts to control drug use in sports.

**Answer:** b.

**Explanation:**

*Drug-using athletes are often ahead of the game because they have access to specialised medical advice from sports physicians who develop new and undetectable drugs.*

- 2) The physiological effect of anabolic steroids within the human body is to:
- extend endurance in aerobic activities.
  - increase blood volume and red cell mass.
  - increase muscle size.
  - act as a buffer within the human body.

**Answer:** c.

- 3) Which one of the following statements does not describe how sports governing bodies perceive violence?
- it elicits strong feelings among fans.
  - sports are conducive to violent behaviour and aggressive conduct.
  - practically every sport that features contact or collision either tolerates or promotes violence.
  - being a fan is a relatively safe experience.

**Answer:** d.

- 4) Which one of the following is not a key component of the contract to compete?
- give 100% effort.
  - abide by the unwritten rules.
  - respect officials.
  - use gamesmanship during play.

**Answer:** d.

**Explanation:**

*Conforming to the rules, spirit and etiquette of the sport are all values that are in choices a, b, and c. Gamesmanship is the intention to compete to the limit of the rules.*

- 5) Which one of the following strategies could be employed by officials to help reduce the likelihood of on-field aggression and violence amongst players?
- players could be made more aware of the concept of fair play.
  - violent incidents could be ignored.
  - use on-field aggression to increase the thrill and hostility amongst fans.
  - avoid taking action due to the pressures of the media.

**Answer:** a.

- 6) rEPO is an illegal drug taken by endurance athletes such as marathon runners and long distance cyclists. 2 marks  
a) What is EPO?

**Answer:**

- EPO stands for **erythropoietin**.
- A body hormone that stimulates **red blood cell production**.

- b) How does rEPO benefit an endurance athlete? 3 marks

**Answer:**

- rEPO stands for **recombinant** erythropoietin.
- Taking rEPO is a form of blood doping.
- A human form of EPO, cloned through **genetic engineering**.
- The goal of its use is to increase red blood cell volume.
- Thus increasing the blood's oxygen carrying capacity.
- Thereby increasing **aerobic capacity** or  $\dot{V}O_{2max}$ .
- And increased time to exhaustion.
- Also **reduces recovery time** during sessions.
- Thereby benefiting endurance athletes such as long-distance cyclists.

- c) What health dangers might there be in making use of rEPO to improve endurance performance? 2 marks

**Answer:**

- Major risk of **thrombosis** (blood clot).
- And **heart failure** due to an increase in blood viscosity.
- **Reduces resting heart rate** to dangerously low levels during sleep.
- **Reduces production** of naturally occurring hormone **EPO**.

- 7) Under what circumstances might beta blockers be used as ergogenic aids? 3 marks

**Answer:**

- **Beta-blockers** have the effect of decreasing sympathetic nervous system activity, for example, heart rate, blood pressure.
- They **reduce anxiety** or tension to enable the performer to relax and concentrate whilst under competitive pressures.
- They produce improved performances in sports such as shooting, darts, and snooker.

- 8) Certain sports people have been banned from sport for using illegal substances. 2 marks  
a) What advantage does the use of anabolic steroids give to the performer?

**Answer:**

2 marks for two of:

- Enhances the body's ability to **develop protein or muscle** and increases lean body weight.
- Increases the performer's **capacity** for training.
- Increases **aggression** and **competitiveness** during activity.
- **Decreases the recovery time** from exhaustive training.
- And noticeably **increases fat-free body mass** in **females**.
- Hence, potentially increases performer's **strength**.

- b) What is a 'masking' agent and why is it significant? 3 marks

**Answer:**

- A chemical agent used to **mask the presence** of an **illegal** substance.
- Could be used by competitors to try to delay (or **speed up**) the excretion of banned drugs.
- And thereby **avoid detection**.

- 9) Discuss why sports people might wish to use banned substances.  
In your answer identify the hazards of taking such substances.

5 marks

**Answer:**

- *Performance enhancement.*
- *Can decrease or increase alertness, competitiveness and aggression.*
- *Reduction in pain sensitivity and so able to train or compete for longer.*
- *Achieve recognition and extrinsic rewards and associated lifestyle.*
- *Obtain increases in physical performance sooner than normal progression without the use of banned substances.*

**Hazards:**

- *An increase in an athlete's aggression towards other competitors could be dangerous.*
- *Banned substances can be fatal, for example, amphetamines elevate blood pressure, cause peripheral vasoconstriction.*
- *Hence make it difficult for the body to cool down.*
- *Problem of using drugs for legitimate therapeutic purposes, for example, athlete suffering from asthma.*

10) Discuss the problem of illegal drug-taking in sport. Focus your answer on one performance-enhancing drug. 15 marks

**Answer:**

2 marks for:

- Problem of performance enhancement and the unfairness of this.
- And the fact that it is illegal.
- And it can encourage copying.
- And it might involve self-risk.

3 marks for need to identify one of the main drugs in this context:

(Stimulant or narcotic or analgesic or steroid or diuretics or HGH or EPO etc.)

- For example, **erythropoietin (EPO)** is a naturally occurring hormone produced by the kidneys.
- EPO **stimulates** red blood cell production.
- And therefore  $\dot{V}O_{2max}$  and **oxygen recovery**.
- Human EPO can be **cloned** through genetic engineering known as **rEPO**.
- And injected into blood stream.
- Taking rEPO is a form of blood doping.

3 marks for explain how it would help to improve performance:

- **Elevates** red blood cell production and therefore haemoglobin concentration by 10%.
- Increases  $\dot{V}O_{2max}$  between 6% and 8%.
- **Time to exhaustion** on a treadmill **increased** by 13% to 17%.
- Therefore **enhancement** of aerobic capacity and the performance of aerobic sports.

3 marks for what would be the risks you would be taking:

- **Inhibits** the body's natural production of EPO.
- Substantial **increase** in blood viscosity.
- Known **risks** include blood clots, stroke or coronary thrombosis, hypertension, very low resting heart rate (heart failure) and pulmonary embolism.
- Up to **18 deaths** among competitive cyclists reported between 1987 and 1990.
- Were alleged to be linked to rEPO use.

4 marks for possible solutions explained in context:

**Education:**

- For athletes and coaches, such as the health risks associated with illegal drug taking.
- **Ethical** or social **considerations** such as unfair, cheating, unnatural, loss of earnings or sponsorship.
- Use of **role models** - both positive and negative aspects.
- Better liaisons between Governing Bodies to share information.

**Regulation:**

- **Random testing** and out-of-season testing on the global stage.
- More money or investment into testing programme.
- More money or investment to provide improved technology for testing to keep up-to-date.

**Legislation:**

- Stricter punishments and life bans.
- Unified governing body policies.
- Legal requirements to be generated by Governing Bodies.

11) In 1998, the head of the IOC (Juan Antonio Samaranch) told a newspaper that 'substances that do not harm to an athlete's health should not be banned and should not be considered as a case of doping'. Discuss this statement.

15 marks

**Answer:**

- Although most top performers would say that performance enhancing drugs (PEDs) should **not be allowed** in sport, it is almost certain that many such performers are actually using such drugs.
- Some people feel that it would be better to **avoid the costs** of testing, of developing new tests for new drugs, and of defending the subsequent court battles, and that therefore we should allow drugs to be used in a controlled manner.
- The fact that **detection of drugs** depends on the efficiency of the **testing procedure**, and that some countries and sports have little or no such procedure, means that the playing field is relatively bumpy for top performers.
- This would allow people to take drugs in a **controlled** manner.
- Would allow everyone to compete on a **level playing field**.
- Would create the possibility that more **records** would be broken by greater amounts, and therefore create more spectacular sport for spectators.

**Unfortunately:**

- Some people would not be prepared to take PEDs - so there would not be a level playing field after all.
- The **dangerous side effects** of many performance enhancing products are known and inevitable.
- It would be assumed by some coaches and athletes that success would **not be possible without drugs**, and peer pressure would force people to participate in illegal programmes against their better instincts.
- The **cost** of taking some substances would be substantial, since the costs of developing new and effective drugs would have to be borne by someone.

**For argument:**

- Drug testing is not always 100% effective.
- Anti-doping rules lead to complicated and **costly administrative** and medical follow-up.
- The invention of **new methods to detect drugs** is time-consuming and expensive.
- **Cost of drugs** means that they might not be available for all athletes.
- Improved performances could **boost spectator** rates and entertainment.
- Everyone knows the **risk of taking drugs** should be performer's responsibility.
- There would be no need for athletes to apply for **therapeutic use exemption certificates**.
- Athletes would have more of a **level playing field**.
- And be able to share **extrinsic rewards** such as prize money and sponsorship.
- The **win-at-all costs** attitude that involved PEDs would be welcomed by some.
- Some PEDs **improve recovery** between sessions,
  - For example, steroids, in addition to enabling athletes to train harder, promote recovery quicker from strenuous work outs.
  - It has become harder to view excellent performances without suspicion. This belief would be eliminated.
  - It would eliminate many false positive results and the stress/anxiety associated with false positive results.

**Against argument:**

- **Drug cheats** tarnish the sport and public respect.
- Drugs are **not natural**.
- Any form of drug taking is **against sportsmanship** values such as fair play.
  - It would be very difficult to establish which PEDs do not **harm to an athlete's health**.
  - Since there are few longitudinal studies that have considered the long-term effects of taking PEDs – which PEDs are safe PEDs to take?
    - But, there are many examples of **unexplained deaths** of elite global sports man and women, who were suspected drug users.
    - For example, Florence Griffith Joyner (Flo Joe) died in her sleep at the age of 38.
- Testing **protects** athletes' reputations.
- And produces **positive role models**.
- Drug taking is seen as negative deviance, a form of cheating, is unethical and immoral.
- Discredits negative role models and reinforces the message to stay clean.
- There are alternative legal methods that can enhance athletic performance.
- For example, altitude training and nutritional supplements.
- Commercial organisations do not wish to be associated with drug cheats.

12) What social issues can encourage a performer to take drugs?

4 marks

**Answer:**

4 marks for four of:

- *Everyone else* is doing it.
- The *win-at-all-costs* attitude that success cannot be achieved without drugs and that the benefits of winning are greater than the risk of being found out.
- Drugs change the conditions of winning, contravene the *spirit of fair play*, but indicate the willingness to *cheat*.
- Athletes are vulnerable and *socially influenced* by media coverage, peers, coaches and family to improve performance by any means available.
- It has been suggested that governing bodies 'turn a blind eye' to some drug takers in order to benefit from the *commercial benefits* that result from success.
- There are *few deterrents* that discourage an athlete from taking illegal drugs as drugs are readily available in gyms, over the counter and on the internet.
- *Fame*, salaries and sponsorship deals also tempt athletes to cheat.

13) What are anabolic steroids, how do they help sport performance and what are their associated health risks?

5 marks

**Answer:**

1 mark for definition

- *Anabolic steroids* are steroidal androgens (male sex hormones) that are related to naturally occurring hormones, such as testosterone.

2 marks for two of how do they help sport?

- Increase synthesis of protein within cells.
- Increase fat free mass, strength and power for aggressive sports such as weightlifting.
- Reduce recovery time between sessions.
- Promote aggressiveness.

2 marks for two of associated health risks:

- Excessive aggressive behaviour outside the activity.
- Testicular atrophy in men.
- Masculinisation in women.
- Liver damage.
- Cardiovascular diseases.
- Cause acne.
- Cause pituitary failure.

14) Suggest three ways in which national governing bodies are attempting to discover, punish and prevent the use of performance enhancing drugs.

3 marks

**Answer:**

3 marks for three of:

- Frequent *random* drug testing.
- *Retesting programmes* to catch drug cheats who escaped detection at the time.
- Stricter and lengthier *bans*.
- Increased awareness of the *dangers* posed by taking drugs.
- Increased *media campaigns* and initiatives such as 100% Me.

15) Explain the difference between sport law and national law and discuss how it has changed.

6 marks

**Answer:**

3 marks for three from explanations of sport law:

- And the **written** rules of play.
- And the **unwritten** code of conduct.
- And **behaviour** on sporting premises.
- And **drug** abuse.

3 marks for three from explanations of conflict with national law:

- **Violent** behaviour breaking the legal laws.
- **Bribery** allegations in sport.
- **Drug** offences involving the national laws and regulations.
- Professional players' employment **legislation**.

2 marks for two from discussing changes:

- Arising from **professional** involvement.
- **Violence** in stadiums, but also in public places.
- **Injury** or damage warranting public prosecution.
- Comments on the Bosman ruling.
- Comments made by Peter Taylor.

16) Explain what is meant by 'a contract to compete'.

Describe ways in which gamesmanship breaks this code.

7 marks

**Answer:**

4 marks for four from the meaning of 'contract to compete':

- **Unwritten code** where performers agree to compete against each other to win.
- To play to the **rules**.
- To try their best.
- Respect for the ethics of play or sportsmanship or **fair play** motive.
- **Participation** more important than **winning**.
- Involves positive values as character building features.
- Display the etiquette specific to the activity.
- Respect and respond positively to the officials.

3 marks for three from description of gamesmanship:

- Putting winning first or **win-at-all-costs** ethic.
- **Over-aggressive** play or fouling deliberately.
- **Failing to accept** the judgement of officials.
- Putting **prize money first** priority.
- Taking drugs to **improve performance**.
- Losing control or **verbal abuse** or showing frustration.

17) Explain using one example, how each of the following people interact with the law in sport.

a) Performers.

2 marks

**Answer:**

- Failed drug test: athlete can use the *Court of Arbitration for Sport*, involved in resolving legal disputes in sport.
- Match fixing: it is unlawful to bet on an individual's *own sport*.
- Contracts are *legally binding*.

b) Officials.

2 marks

**Answer:**

- Officials/referees can be prosecuted for *match fixing*.
- Officials have a duty to protect players and can be *prosecuted* by an injured player if they fail to do so.

c) Spectators

2 marks

**Answer:**

- *Hooliganism* and related disorders are dealt with by the *Crown Prosecution Service (CPS)*.

18) How might a performer break the contract to compete during a sporting contest?

3 marks

**Answer:**

- Display *gamesmanship* behaviour such as intentional fouls.
- Break the rules of the sport by using *aggressive behaviour*.
- Not to try their best to win. For example, *match fixing*.
- *Disrespect officials* and their decisions.

19) Discuss the continued relevance of the contract to compete for elite performers in today's society.

6 marks

**Answer:**

*Still relevant:*

*3 marks for three of:*

- Without rules sport would be dysfunctional (not operating normally or properly).
- Sport is a contest based on operating within a rule structure.
- *Fair play* is an important ideal and one of the values of Olympism.
  - If players do not give 100% effort there is no satisfaction gained from taking part and spectating.
  - Organisations should have systems in place to ensure rules are enforced.
- For example, match bans for violent on-field behaviour and compulsory drug testing.

*Not relevant:*

*3 marks for three of:*

- Athletes should try and win at any cost (Lombardian ethic).
  - *Gamesmanship* is acceptable because there is a lot at stake within global sport. For example, media exposure high salaries and commercial sponsorships.
  - The contract to compete is outdated, belonging to the 19th century middle classes.
  - Different cultures have different interpretations, based on different values.
  - Athletic schedules are physically and mentally demanding and so it is not always possible to give 100% effort.
  - More performers are taking PEDs that violate the values of the contract to compete.

- 20) Many elite sports are now commercialised and seen as a form of entertainment. Discuss the suggestion that an increase in commercialisation of sport has been beneficial for performers and sport.

8 marks

**Answer:**

4 marks of four of:

**Argument for:**

- Players and teams gain **revenue** from sponsorship.
- **Commercial** sponsorship can provide teams with facilities and equipment.
- And can **raise the profile** of performer and sport.
- **Positive role models** encourage mass participation.
- Some of this sponsorship reaches **grass roots sport** and so can actively increase participation rates.
- Performers can **concentrate on training and competing** without financial worries.

4 marks of four of:

**Argument against:**

- But sponsorship often goes to high profile and fully professional individuals/teams/clubs.
- Commercial sponsors can control **event timings** to suit peak-viewing times.
- NGBs can be forced to **alter rules** to make the sport arena more **exciting**.
- More exciting events are given priority over other sports.
- This could lead to a **squeeze on amateur sport**.
- Sponsors can be over-demanding, such as player interview at inconvenient times.
- Elite performers are often treated as **commodities**.
- Performers are under pressure to **perform when injured**.