CHAPTER TWO

## GENERAL ISSUES

### PROBLEMS IN DEFINING DOPING

#### Introduction

2.1 The use of performance enhancing drugs in sport (doping) goes back many years, even in Australia. Mrs Gael Martin told the Committee of a weightlifter who first started taking steroids in 1956 and a high jumper, from Melbourne, who first took anabolic steroids in the early 1960s.[1]

2.2 Doping has been perceived as a problem for over 30 years. Some attempts have been made, with varying degrees of success, to curb the use of drugs in sport by government and non-government authorities, and at the national and international level, over this period. However, if doping is to be treated as an offence it must be clearly and carefully defined in a precise and unambiguous way. The 1988 World Conference on Antidoping, for example, concluded that:

> A clear unequivocal definition of doping should be developed which reflects an appreciation of medical/clinical, scientific/ analytical and ethical considerations.[2]

2.3 The Australian Weightlifting Federation has pointed to the problems of defining doping, which it described as a 'multifacetted problem'. The Federation suggested that many of the definitions used by sporting authorities can be criticised for being 'too general, confusing, limited and open to various

interpretations'.[3] One problem is that many substances are taken to improve performance, but the use of only some of these substances is considered doping.

## Policy Issues

2.4 The National Program on Drugs in Sport told the Committee that the policy of the International Olympic Federation is:

> to prevent the use of those drugs which constitute dangers when used as doping agents and to ban only those drugs which can be unequivocally detected in urine samples by suitable analytical techniques.[4]

2.5 There appear to be problems with both of the principles raised in this policy. Preventing the use only of those drugs 'which constitute dangers' when used to enhance performance would seem to leave considerable scope for legal argument as to whether a particular drug does pose a danger. The policy would also seem to allow, or at least 'not prevent', the taking of performance enhancing drugs known to be safe.

2.6 The question of whether only dangerous drugs should be banned is an important one. Mr Merv Kemp, Throwing Coach at the Australian Institute of Sport, informed the Committee, for example that:

> There are ergogenic aids alternative to the dangerous hormonal substances used by some athletes. While these aids may not be as efficacious in the short run as steroids they could provide longer term benefits without the health risks. Some exploratory work in the area has been undertaken at the Australian Institute of Sport where the throwing squad has worked with the sports scientists in looking at the role of amino acids and inosene as agents which aid recovery from hard training. Such substances can be legally used

> and have no harmful side effects. Further experimentation in this area is required and should be backed with the resources needed to continue this work.[5]

2.7 The Australian Institute of Sport itself informed the Committee that its Sports Science and Medicine Centre is investigating 'legitimate means to enhance performance', including the effect of food supplements, vitamins and minerals.[6]

2.8 Banning only those drugs whose presence can be detected may seem reasonable, given that evidence is required that an offence has occurred. It does raise questions, however, as to whether all dangerous, performance enhancing drugs can be detected, and as to whether those that cannot be detected can be legally taken.

2.9 Methods that cannot be detected by urine tests are covered by some definitions of doping. Dr A P Millar said that doping is best defined as the use of any of the following to improve performance:

- any substance not normally present in the body;
- any substance normally present in the body but taken in abnormal amounts or by an abnormal route; and/or
- any abnormal mechanism which can be used to improve the athlete's physical and psychological capabilities.[7]

'Abnormal' mechanisms could include, for example, blood doping, or even hypnosis. It might also include extreme dietary practices, such as the use of near starvation to delay the onset of puberty in gymnasts.

2.10 There should be no problem, apart from technical difficulty, in detecting the presence of substances not normally present in the body, but the second and third categories of

Dr Millar's definition would appear, in at least some cases, to present difficulties of detection. It is interesting that the working definition of doping adopted on 21 April 1986 by the International Olympic Federation and which was valid for the 1988 Olympic Games says that:

> Doping is the use made of substances belonging to the groups of prohibited agents, but also the taking of illicit measures such as blood doping.[8]

2.11 This definition was accompanied by a list of groups of agents and prohibited methods (see Appendix 5) but it also explicitly mentions blood doping, a form of doping which involves the transfusion of blood into an athlete to enhance oxygen carrying capacity and which is, as yet, impossible to detect by the presence of a banned substance in an athlete's system.[9] Ms Lisa Martin, for example, told the Committee that:

> Anyone who is blood doping now in the marathon has no fear of being caught because there is no test, that I am aware of.[10]

Research directed towards developing methods for detecting blood doping is discussed later.

2.12 Dr Millar mentioned blood doping in discussing 'abnormal mechanisms' but he also pointed to the difficulty of defining what is abnormal by discussing weight training. He said that:

> There is no relationship between weight-training, that is the lifting of weight up and down from the ground and above the head, and the running mechanism which is a series of forward jumps without carrying any weight and yet we have ... come to accept weight-training as a normal part of the athletic development. The mechanism itself is totally foreign to all sports except weight- lifting. If we are to accept weight-training as a form of activity which leads to increased muscle development, should we not then accept preparations such as

> anabolic steroid where the same results are achieved.[11]

The Committee rejects this view as extreme. All sports involve a combination of skill and strength. To the extent that weightlifting can improve strength (or power) without providing any loss of skill, it is a legitimate form of training. Nevertheless, the Committee accepts Dr Millar's point that there is no hard and fast rule between what is normal (or appropriate) and what is not.

2.13 The concept of doping as including mechanisms used to increase psychological capabilities was also embodied in the definition of doping put forward by the Council of Europe in 1973. This suggested that:

> a number of psychological means aimed at improving performance should also be considered doping.[12]

Psychological means would include the use of hypnosis.[13] Such mechanisms are not banned now and it is not clear how the past use of psychological means could be detected.

**Doping As Substances Which Have Been Banned**

2.14 In 1985 the Council of Europe admitted that it is difficult to produce a definition of doping that covers all aspects of the problem and concluded that:

> Doping in sport is the illicit use made of substances or categories of substances which have been banned by the sports bodies concerned.[14]

2.15 This has the advantage of being clear and unambiguous. If a banned substance is detected it is clear that doping must be considered a possibility. It is important that this definition mentions the illicit use of substances. Dr Millar has stated, for

example, that 'as far as the International Athletic Unions are concerned it is not the taking of the drug that is the crime, it is being detected that constitutes the offence'.[15] He used the example of an athlete not being allowed to take alcohol before an event 'even if it is part of his normal food' whereas it is permissible:

> to have a scotch or two the night before to enable them to sleep better in the belief that will enhance their performance the following day.[16]

2.16 This argument is more serious in the case of anabolic steroids where athletes may take drug combinations according to a specific regimen designed to minimise the risk of detection.[17] If the offence is to be the use, rather than the detection of drugs, random testing, including testing outside of the competition period, is essential.

2.17 One problem with a definition based on a list of banned substances or classes of substances is that different sporting bodies may take different approaches. What is considered doping in one sport may be acceptable in another. An example of this situation was provided in the 1988 Tour de France. The Spanish cyclist Pedro Delgado tested positive for a substance banned by the International Olympic Committee. Because this substance was not banned by the International Cycling Union, no penalty was imposed.[18]

2.18 A further problem with defining doping in terms of a number of prohibited substances is that the list of banned substances will inevitably be incomplete and out of date. A fairly common view is that:

> the pharmaceutical industry will continue to manufacture new drugs and remain one step ahead of technological advances in drug testing. Sophisticated methods will be

> developed to counteract or prevent a positive result.[19]

2.19 Ms Sue Howland pointed to a problem facing athletes as a result of these pharmacological developments in saying that:

> When you are on the normal (sic) tablets, everyone knows you take such and such, but now with new things being made ... they have no idea what the side effects are and very small amounts are needed.[20]

2.20 The situation is made more difficult by the fact that many of the new and more sophisticated drugs may be genetically engineered versions of naturally occurring substances which will always be present to a greater or lesser amount in the system of all athletes. Among those drugs which 'will constitute the greatest future challenge in the area of sports drug testing'[21] are human growth hormone, endorphins (to control and manipulate the pain barrier), prostaglandins and various growth hormone stimulators.[22]

2.21 This problem of technological developments outdating doping definitions and procedures is familiar to sporting bodies. The reason that the doping definition of the International Olympic Federation is based on the banning of pharmacological classes of agents is that it:

> has the advantage that also new drugs, some of which may be especially designed for doping purposes, are banned.[23]

2.22 The International Weightlifting Federation Medical Committee and Special Doping Commission, which also recognises this problem, is:

> constantly looking beyond the horizon for problems and situations that may arise in relation to the use of doping agents and attempting to deal with the situations in the embryonic stages before they become more difficult problems to control.[24]

## State Of Mind

2.23 Defining doping as an offence relating to the use of certain named substances or procedures suffers from the further difficulty that it ignores the circumstances under which the substance detected came to be in the athlete's system. Allegations made during the 1988 Olympic Games demonstrate that this is not a trivial matter. The situation in which an athlete has taken a substance with the intention of improving performance is clear cut but:

> if the presence is the result of a prescription or dispensing error, ignorance or inadvertence on the part of the athlete, or even the deliberate doping of the athlete by someone wishing to have the athlete apprehended, should the verdict be the same?[25]

The question of intent is discussed more fully in the next chapter, describing appeal mechanisms.

## Discussion

2.24 The issues involved in defining doping are clearly complex. Nevertheless, in the interest of fairness and of athletes knowing where they stand, clear statements are required of what constitutes an offence.

2.25 There are inevitably grey areas, particularly when the practices involved are not strictly pharmacological. The Australian Rowing Council, for example, expressed concern over:

> Unphysiological and unnatural practices such as inappropriate nutrition, overuse of vitamins and 'energy foods' and fluid restriction.[26]

2.26 Moreover, there is the question as to whether the direct injection or ingestion of a substance is different from the use of a drug to increase the body's own production of the same substance. A submission from the Royal Brisbane Hospital Foundation, for example, noted that:

> the Australian Institute of Sport is investigating safe, legal pharmacological ways to enhance endogenous growth hormone production and thus performance, whereas the potentially hazardous administration of growth hormone is not allowed by ethical sports organisations.[27]

2.27 Mr Merv Kemp, in talking about these experiments, particularly the use of amino acids, which he pointed out are 'just part of food products', said that:

> It does not seem to me to be terribly much different, really, from taking steroids or vitamins. The question is where do they draw the line.[28]

2.28 While this attempt to find substances to increase performance is seen by the AIS as ethical, it is interesting that Dr Webb, Chairman of the Drugs in Sport Committee, Australian Sports Medicine Federation, is of the opinion that:

> the use of amino acids falls squarely in the doping category now because by definition you are using an artificial method, you are using artificial substances, with the pure intent of increasing performance and the whole core of the definition is intent.[29]

2.29 Dr Webb's views appear to be in line with those of the International Olympic Committee 1987 List of Doping Classes and Methods which states, in relation to steroids, that:

> It is well known that the administration to males of Human Chorionic Gonadotrophin (HCG) and other compounds with related activity leads to an increased rate of production of

androgenic steroids. The use of these substances is therefore banned.[30]

2.30 The question of why certain substances, such as amino acids, should be permitted, but others, such as anabolic steroids are banned, is an important one. The Committee takes the view that substances which can damage the health of those taking them should be banned. Substances such as amino acids do not pose any health risk and, even if they were capable of improving sporting performance (which the Committee does not believe), there is no reason for preventing their use. Difficulties may arise with newly-developed substances, whose health risk has not been properly assessed. When a substance has any major physiological or ergogenic role as distinct from a purely nutritional effect, the Committee believes that it would be appropriate for sporting authorities to ban it from being used until longer-term tests had been conducted to demonstrate the lack of harmful consequences. This is because side effects may not manifest themselves until years after the drugs have been taken.

2.31 For the purposes of the report, doping will be taken to be the use of any substance covered by the International Olympic Committee's 'List of Doping Classes and Methods'. This document, which is reproduced as Appendix 5, defines the classes of banned drugs and gives an indication of why the different classes are used. However, as discussed in the next chapter, this Committee believes that actions taken as a result of the athlete being detected using these substances should be subject to an appeal mechanism which considers matters such as inadvertent use and intent.

2.32 Defining doping as the use of prohibited substances places great emphasis on the role of a drug testing program to detect banned substances. This is discussed in detail in the next chapter, along with the complications caused by the fact that not all banned substances are detectable.

2.33 Five doping classes are recognised by the International Olympic Committee.

1. Stimulants, which are used at the time of competition, increase alertness, reduce fatigue and may increase competitiveness and hostility. Amphetamines are the most notorious of the stimulants, but also included in this category are substances such as pseudoephedrine which are present in cold or hayfever preparations. Caffeine is another stimulant, which is discussed further below.

2. Narcotic analgesics such as morphine and its derivatives are used to manage pain. They have been used in sports such as boxing and cycling.

3. Anabolic steroids are related in structure to the male hormone testosterone. They are used to increase muscle bulk, strength and power. They promote muscle development (the anabolic action) but cause associated androgenic changes (the development of secondary sex characteristics). Anabolic steroids are not taken at the time of a competition, because their major benefits relate to the pre-competition, training phase. For this reason drug taking at competitions is unlikely to provide an accurate estimate of the extent to which they are being used. Anabolic steroids are now the most commonly used sporting drugs and they are used, to a varying extent, in most sports.

4. Beta-blockers are used clinically to control high blood pressure, cardiac arrythmias and migraine. They are used by sportspeople to reduce the heart rate and to reduce pre-competition tension. The sports in which they are used include the target sports (shooting, archery, darts, golf), some combat sports (e.g. fencing) and sports with a danger element, (e.g. show jumping) as

these all require relaxation and the attention to be focused on the skill required.

5. Diuretics are used by sportspeople to reduce weight quickly in sports where weight categories are employed. They are also used to help minimise the detection of anabolic steroid use because by producing more urine they reduce the concentration of the drug in the urine.

The health risks involved in using these kinds of drugs are discussed later in this chapter.

2.34 While in general the use of any of the substances included under these classes is banned, in the case of caffeine (listed under stimulants) the definition of a positive depends upon the concentration in urine exceeding 12 micrograms/ml. At present the main problem with these doping classes appears to be with anabolic steroids. An estimated 70 per cent of positive tests from the 18 accredited IOC laboratories throughout the world are for anabolic steroids. The use of stimulants is seen to have been virtually eliminated because testing is simple, cheap and accurate.[31]

2.35 In addition to the drug classes which are banned, there are three classes of drugs subject to certain restrictions:

- alcohol;
- local anaesthetics; and
- cortico-steroids.

Alcohol is not prohibited by the IOC but alcohol levels may be determined at the request of an International Federation. Some local anaesthetics are permitted, but only when they are medically justified. In this case the details of the diagnosis, dose and route of administration must be submitted immediately in writing to the IOC Medical Commission. The use of cortico-

steroids are similarly subject to a team doctor giving written notification to the IOC Medical Commission. They are used as anti-inflammatory drugs which also relieve pain.

2.36 The methods which are banned fall into two classes. First is blood doping, the administration of blood or related products to an athlete. The blood may be taken from the athlete or from someone else and is intended to improve performance by increasing the oxygen carrying capacity of the blood. Second is the use of substances and methods which alter the integrity and validity of urine samples used in doping controls. These would include, for example, urine substitution and/or tampering, catheterisation and the inhibition of renal excretion e.g. by probenecid and related compounds. Probenecid, for example, can decrease the concentration of anabolic steroids in urine by up to 99 per cent by slowing down its excretion from the kidneys.

2.37 In the interest of fairness and in order that all sports people know what they may and may not take, it is desirable that a single definition of doping be agreed to by all sporting organisations. Without this uniformity it will be possible for rules to be manipulated to the advantage or disadvantage of particular sportspeople or organisations. As a first step in achieving this uniformity it should be possible to ensure that all sporting organisations receiving government funding be required to adopt a standard definition. The need for co-ordination of policies and practices is apparent in relation to many of the matters considered in this report. A meeting of Commonwealth and State Ministers responsible for sport and health matters would be the appropriate mechanism for developing this co-ordinated approach in the first instance.

**Recommendation One**

**The Committee recommends:**

**(i) that a meeting of Commonwealth and State Ministers responsible for sports and health matters be held to consider matters raised in this report;**

**(ii) the meeting adopt a definition of doping which relates to the use of any of the substances covered by the International Olympic Committee's 'List of Doping Classes and Methods' and the use of any of the methods identified in that list;**

**(iii) that the meeting agree that it be a precondition of any sporting organisation receiving public funding that it adopt this definition and be subject to the drug testing arrangements described later in this report; and**

**(iv) that professional sporting bodies be encouraged to adopt the same definition of doping and to subject themselves to the drug testing arrangements described later in this report.**

## REASONS FOR TAKING PERFORMANCE ENHANCING DRUGS

### Introduction

2.38 If the use of performance enhancing drugs in sport is to be effectively prevented, it is necessary to understand why athletes take them. Some drugs which potentially enhance performance may have a legitimate use under the supervision of a physician for a clinically justified purpose.[32] However, it should be noted that the IOC List of Doping Classes and methods states quite explicitly that:

> Unless indicated all substances belonging to the banned classes may not be used for medical treatment, even if they are not listed as examples.[33]

Legitimate use is discussed further in Chapters Four and Five.

## Inadvertent Use

2.39 Quite apart from deliberate use there is always the possibility of inadvertent self-administration through the use of over-the-counter preparations containing banned drugs.[34] Inadvertent use may relate especially to decongestants and painkillers purchased from chemists and supermarkets for simple, common, conditions. The Australian Rowing Council suggested that the pharmaceutical industry should develop a code (such as a colour patch on the packaging) to warn users that a preparation contains listed doping substances.[35]

2.40 While inadvertent use certainly occurs, there is no doubt that the main reasons for doping are 'to improve physical condition, to reduce tiredness, or improve performance ...' [36] The question is really one of why sports people feel the need to take drugs to enhance their performance given that 'the consequence of drug abuse is often very serious and sometimes even lethal'.[37] Nevertheless, given that inadvertent use does occur and can be used as a defence when positive test results are found, the Committee believes that the possibility of developing mechanisms to reduce the inadvertent use of banned substances should be explored.

**Recommendation Two**

**The Committee recommends that the meeting of Commonwealth and State Ministers proposed in Recommendation One examine the possibility of developing procedures that would help prevent the inadvertent use of substances identified in the IOC List of Doping Classes and Methods.**

## Research Required

2.41 The Australian Sports Medicine Federation suggested that research directed to understanding the complexity of motivation of those using drugs in sport should be given a high priority.[38] The Federation identified a number of questions requiring investigation:

- why do sports people continue to believe that drugs are necessary to sustain or improve the standard of competition, given the universal availability of information, facilities and equipment for scientific training?

- why do those involved in non-elite, low profile, recreational or social sport (e.g. strength training; body building) continue to use drugs in the face of mounting evidence of their harmful effects?

- is the attitude of administrators, health professionals and politicians that drug abuse in sport is 'dreadfully sinful' counterproductive? and

- do Australian sports people really care about the image of the Australian athlete? Are they more concerned with their own physical image or achieving their own 'personal best' result.[39]

## Community Attitude

2.42 One reason for taking performance enhancing drugs may be that society is thought to condone their use. Indeed, community expectations about the international competitiveness of Australian athletes may be used as justification by athletes,

coaches and administrators to use them. A weightlifter from the AIS, alleging that he had been required to take steroids by his coach, told the Committee that:

> They have got a lot of peer pressure put on them too, - the coaches, the [AIS] - pressure in general from the public and from the Government. It is all right for everyone to say, 'Do not take steroids. They are banned', but if we do not perform overseas a lot of people will be saying, 'You are wasting taxpayers' money'.[40]

2.43 Mr Don Talbot, former Chief Executive of the AIS, recalled how in the period up to the early 1980s:

> the prevailing attitude in Australia - not only in Australia but it was worse here probably, or more sympathetic and understanding, although in retrospect I do not know why - was that if you took drugs you were a naughty boy or you were wrong to do that. It was not perceived as being serious ... the suspensions that went on for athletes in that period ... were for two or three weeks.[41]

2.44 Dr Ken Donald told the Committee that one of his problems in knowing what might be appropriate penalties for athletes taking drugs is that he is still not sure what community attitudes are to the use of performance enhancing drugs.[42] He said:

> I sometimes wonder what the community's real stance on the issue is ... I sometimes get a bit concerned ... that communities are not making informed decisions about it ... In many cases I am not sure that there is a great deal of caring about whether there is [drug use] or is not.[43]

## Community Pressure

2.45 Athletes are under considerable pressure to win and this results in part from the role played by sport in Australian

society and on what Mr Kelvin Giles called the 'gold, gold, gold' syndrome. He commented that the first news you see in the morning of an Olympic Games is the medal tally.[44] Doing one's best is not always seen as good enough, if it is not associated with winning. This attitude was illustrated by the Australian response to Mr Stephen Holland winning a bronze medal at the 1976 Montreal Olympics. Ms Raelene Boyle described how:

> He was considered a failure ... [b]y the general public, because that is the way our media brought it home. But, in fact, he swam some unbelievable number of seconds under the old world record, which was his world record, to come that third.[45]

2.46 This attitude towards athletes was in the past often promulgated by the media. When coupled with the belief that international performance standards are drug-enhanced it can lead sportspeople to believe that drugs are necessary. Mr Merv Kemp, for example, described how he was 'sure athletes would prefer not to use drugs but, because the public demand for success is so great, some feel they have no other choice'.[46] The media can put individual athletes under tremendous pressure, raising expectations which are not warranted and turning success into failure. Mr Kelvin Giles remarked, for example, how:

> Twenty-four hours before the women's long jump final in Seoul, there was a little paragraph in the press about our athlete there, Nicole Boegman, that said, 'Nicole is jumping for gold tomorrow'. Nicole had no hope for jumping for a gold medal, with all respect to Nicole. But suddenly reading that and knowing that her parents and her peers have read it, in her environment that is additional pressure. She thinks, 'I am jumping for a gold medal tomorrow. I am not ready'. That causes anxiety, et cetera, and it just shakes the athlete's foundations. It is unnecessary.[47]

2.47 Fortunately, reporting standards and the attitude of the media do seem to be improving. Ms Jane Flemming commented that:

> I think the media are learning a lot. I certainly think they did a very good job at the [Seoul] Olympics in that they did not really go on about the medal count so much but rather about personal bests, Australian records, Commonwealth records and that sort of thing, so that is a step in the right direction.[48]

2.48 The pressure on athletes to win at all costs is not just a function of the media coverage of sporting events. It comes also from the coaches, administrators and sporting officials who believe that their own reputation depends upon the performance of their athletes and who enjoy basking in the reflected glory of their athletes. Ms Raelene Boyle suggested that the attitude of these people to an athlete not winning was often one of 'How dare you do that!', although she said that, 'There is the odd official or administrator who is very supportive'.[49]

2.49 Just as serious as the pressure on elite athletes is the pressure put on other sportspeople to win. The extreme enthusiasm shown by parents at junior sports is certainly one of the factors that leads to young people, even school children, trying anabolic steroids. As discussed later in this report, it is very often the parents of these children who take them to doctors with a request for performance enhancing drugs. The Committee believes that this attitude, shown by many parents, is a cause for deep concern. Children should be encouraged to participate in sport because it is enjoyable and healthy. Parents who put children under pressure to win and who measure their children's success only by whether or not they win are developing wrong and potentially dangerous attitudes. Organisers of children's sporting events should be sensitive to this and emphasise participation and self achievement in addition to personal success.

## Competitive Pressure

2.50 There is no doubt that drugs are used by athletes who know of their deleterious effects and who are well aware that their use is banned by a sport's governing bodies. They do so because of the 'prevalent attitude that doping practices are necessary "to be competitive."'[50] This is especially the case when they wish to compete in international events,[51] but this pressure is by no means confined to elite athletes. The Health Department of Western Australia, after noting that anabolic steroids are 'taken by strength sportsmen at all levels' commented that these people 'genuinely believe that these drugs are a necessary adjunct to their performance work-up'.[52]

2.51 According to Mr J Sheedy, a sports psychologist, there is a perception among many athletes that the only way to be successful is via drug use.[53] Mr Merv Kemp has pointed out that when this is coupled with the public demand for them to succeed, many athletes, who would prefer not to use drugs, feel they have no other choice.[54] The National Program on Drugs in Sports also noted the intense pressure on athletes to win, 'sometimes at all costs' which results from social, economic and national pressures and said that 'inevitably some athletes use drugs to attempt to improve performance, to reduce stress, to increase muscle strength, to reduce fatigue.'[55] Dr Gavin Dawson noted that:

> The pressure on today's athlete is tremendous, due to media expectations, National Pride, personal gains and the necessity to compete on equal terms with Eastern Bloc counterparts.[56]

2.52 Mr Darren Clark described to the Committee how the thought that he should use steroids 'went through his mind' after he did not make the final of the 1987 world championships. He said:

> In 1984 I was in the top four and then I went down to the top 16. I might have a bit of a chip on my shoulder but I just thought everyone in the world was on [anabolic steroids].[57]

2.53 Ms Maree Holland told the Committee that she would never take drugs because she 'would not want to look like a man'.[58] She went on to describe how she had raced in Budapest in 1988 and said:

> the race that I ran in I would swear was a man's race. I actually saw one of the girls in the morning and I thought she was a man ... She was as hard as nails. Her face was a man's face with a square jaw and thick neck.[59]

2.54 It should be remembered also that competitive pressure is not restricted to international competition, but can occur at the national or even local levels as well. Dr Millar described how he would be prescribing steroids to:

> two or three people playing in the Rugby League competition of Sydney ... Most of them would be in the junior league, trying to get from the junior league for a trial with the major teams.[60]

Personal And Financial Rewards

2.55 Ms Raelene Boyle, when asked why she thought the use of performance enhancing drugs was so prevalent replied:

> I think a lot of it is greed. There is so much money in track and field now that the better you are the more you make.[61]

2.56 Dr Webb commented in a similar vein that:

> the areas where drug taking would appear to be at its height are those where there is either obviously greater financial rewards in sport, track and field being one, where the rewards,

> at least internationally, are high ... In body building there is a lot of money available. It may not be in big dollops, but it is there, frequently.[62]

2.57 There is no doubt that as the rewards open to the top competitors have escalated, the temptation to use every possible means to achieve a top performance and gain the sponsorship and other tangible benefits will also have increased.

## Overseas Practice

2.58 The belief that drugs are necessary if Australian sports people are to compete internationally is a recurring theme through much of the evidence received by the Committee. The Eastern Bloc nations and the USA received special mention in the evidence presented to the Committee. For example, a competitive body builder informed the Committee that he was:

> told last year that a visiting Bulgarian weightlifting team had specialised doctors who kept a close eye on the athletes and advised them as to what and when to take steroids, and that their advice was from Laboratories specialising in developing the drugs, thus cutting the side effects to a minimum. How is any sporting person expected to compete on a fair basis if you are up against these sorts of technology?[63]

2.59 Mr Mike Hurst, a coach, told the Committee that:

> Darren Clark and Maree Holland would ... be able to give [the Committee] a real sense of what it is like 'out there' competing against fully supported Soviet and American athletes ... of the temptation to take drugs 'just to start on equal terms' with their opponents.[64]

2.60 Mr Sheedy, a sports psychologist, noted that the use of performance enhancing drugs is probably more common and widespread overseas than in Australia and that athletes feel, 'not without reason' that:

> a high proportion of internationally ranked athletes have had recourse to drugs, in some instances administered in a systematic and supervised way so that any health risks are minimised as are the chances of detection by drug control tests.[65]

2.61 Mr J Irwin, a former weightlifter, has:

> witnessed a senior coach comment that introduction of steroid testing would not be fair, as many of the national champions relied on steroid use to be internationally competitive.[66]

2.62 The Australian Sports Commission recognises that doping control practices and procedures will vary between countries. Its 'Plan of Action' states that:

> It is imperative that Australian athletes are not unduly disadvantaged by inferior drug abuse prevention programs in other countries. Where this is shown to occur appropriate international lobbying must occur on behalf of Australian athletes. Notwithstanding this, Australian sport should be prepared to be a leader in the field of eradicating drug abuse.[67]

**International Qualifying Standards**

2.63 A belief by athletes that overseas competitors may be gaining an advantage through the controlled use of ergogenic substances may be one reason for the use of such drugs by Australian sports people. Another, related reason may be the high performance standards Australian athletes are required to meet if they are to take part in international competitions. This matter was raised, among others, by Mr Merv Kemp, throwing coach at the Australian Institute of Sport, and it is worth quoting at some length from his submission:

> The minimum qualifying standards set for selection in Olympic Games and World Championships by the International Amateur Athletic Federation are very high and in some instances are higher than the current Australian record. These standards are related to performances achieved by athletes all round the world and undoubtedly these performances in many instances are influenced by drugs. But these minimum levels are not acceptable for Olympic selection in Australia and even higher standards are required. This creates a situation where many Australian athletes feel that the only way they can win Olympic selection is to emulate their overseas counterparts and also use performance enhancing drugs.
>
> This begs the question of why Australian selection standards are set at a higher level than those of the IAAF. My feeling is that the Australian Olympic Federation has resorted to very high standards in response to the severe press criticism of performances turned in by some Australians during the Olympics in the 1970s. Herein lies one of the fundamental problems confronting Australian sport, that is, the extremely critical attitude of the Australian press and the non-acceptance of achievements other than those which result in Olympic medals.
>
> Athletes then are placed in a position where they are damned if they do use drugs but then damned if they don't. Consequently, some athletes resort to secretive drug usage.
>
> If we genuinely want our athletes to believe that Olympic selection is worth striving for without resorting to drugs we must keep faith with the athlete and set selection standards which are realistically attainable. Those set by the IAAF are surely high enough.[68]

2.64 The same point was made by Mr Kelvin Giles[69] and the Australian Weightlifting Federation also emphasised the role of standards, pointing to the need to be aware that 'the exceedingly high level of performance required in international sports events could lead to the encouragement of athletes to engage in the use of performance enhancing drugs'.[70]

2.65 Mr Giles pointed out that:

> it is very difficult to say athletes are cheating when their entire environment of international sport is rife with drugs, and the world standards are based on drugs-related performance - the world rankings are.[71]

2.66 Mr Nigel Martin also claimed that some of the Olympic performance standards could not be achieved using 'natural methods'. He said that the men's shot-put standard for Seoul was 20 metres and that this:

> has never been done by an Australian. I would put money on it that no man in the world has ever thrown 20 metres without the use of anabolic steroids.[72]

2.67 Mr Mike Hurst, coach of Mr Darren Clark and Ms Maree Holland, also noted the use of drug enhanced performances in setting standards.[73] Mr Hurst also pointed out that the standards being set by the Australian Olympic Federation were in any case extremely high, and he said:

> The top 16 in the world at a fully attended Olympics is an incredible thing, it is frightening to grasp that concept.[74]

2.68 In responding to criticisms that the qualifying standards were pushing athletes (and their coaches) towards the use of drugs, Mr John Coates, Vice-President of the Australian Olympic Federation, identified three categories of sport:[75]

- sports in which the international federations set the qualifying standards;
- sports in which Australia has traditionally done well and in which the Australian Olympic Federation has:

> endeavoured to set a criterion that is fair as between the sports in relation to the number of nations that participate in those sports and the number of entries that each nation can have in each event. So, by example, with track and field in athletics, most nations compete in that and you can have three entrants per nation. Our standard is that they are likely to be in the first 16 places, that is, in the semifinals.[76]

sports in which 'if we set a standard that equated to category 2, we should have no representation at all'.[77] In these sports a maximum number of representatives is set.

2.69 In the second category typical performance requirements would be:

> boxing, first eight; canoeing, first nine; cycling first eight; equestrian events were the first six. Among the team events swimming was 12; diving 12; weightlifting, 10; and yachting, the first six.[78]

2.70 When the requirement is higher than the top 16 this is in order to keep the team to a reasonable size.[79] If a full Olympic team was selected the Australian Olympic Federation:

> would be making it more difficult for those who have real chances of succeeding, by spreading the money across more widely.[80]

2.71 The Committee accepts that international performances are often drug enhanced, particularly in the strength events. It also believes that the Olympic qualifying standards set for Australian athletes are extremely high. Athletes and their coaches often believe that they are being excluded from international competition because of performances achieved by people who are not subject to pre-competition random testing or who are competing at meets which do not have an effective testing program in place. This puts them under considerable pressure to

take drugs, if only to compete on an equal basis with those athletes whose performances have been used to set the standards. This will particularly be the case in strength sports, in which the use of anabolic steroids gives the greatest advantage. As discussed in Chapter Three, the testing regime introduced on 1 January 1988 by the Australian Olympic Federation for the Seoul Olympics would have enabled Australian athletes to use drugs during their major training phase in 1987, to help meet qualifying standards, but would have prevented drugs being used in 1988 prior to the Olympic competition itself. It should be stressed, however, that the move by the AOF for its 1988 testing program should be viewed favourably in the world context and that the proposed testing program leading up to the 1992 Games, if conducted under a independent Commission, provides a desirable drug-free route for other countries to follow. The onus is now on Australian authorities to encourage the rest of the world to follow this Australian lead in order to ensure that our athletes are not penalised in international competition.

## Commitment And Dedication

2.72 All competitive sport involves a striving after improved performance and this involves a considerable commitment on the part of sports people. This commitment leads to a rather unbalanced social life and the belief that any sacrifice is worthwhile to achieve high standards. One submission described ambitious sports people in their late teens or early twenties who have:

> committed a considerable effort to achieve a high level of performance. Sometimes they have no outside interests and social contacts are limited to their fellow sportsmen ... In the context of their age and dedication to their sport, it is difficult to project their future prospects of maybe 50 years existence after their sport's careers are complete.[81]

2.73 In a Four Corners program broadcast on 30 November 1987, Ms Sue Howland, one of Australia's top javelin throwers who had been banned because of her use of performance enhancing drugs, was asked what lengths she was prepared to go to to win. She replied:

> Probably as much as I have to do, simple as that. You train for probably ten years, four or five hours a day, you go through all the injury problems, all the other hassles associated with, particularly in the Western world, trying to pursue something, as I'm doing ... if you're good at something, yes, you'll do anything, almost.

2.74 The tremendous commitment required by athletes was illustrated by information on training regimens provided by the Australian Institute of sport. Female gymnasts at the Institute for example, are required to train some 32 to 34 hours per week, in addition to attending school, college or university for full time studies, and having to do the necessary homework. An AIS athlete in race walking would generally start every day at 6.30am and, in the course of one week, walk 150kms, cycle 130kms, jog 20 kms and spend time in weight training, hydrotherapy and physiotherapy. Given the level of dedication required to carry out these levels of training day after day, and the sacrifice involved, it is not surprising that some athletes are prepared to go to extreme lengths to ensure that their efforts lead to success.

2.75 Dr Roberts and Mr Hemphill of the Department of Physical Education and Recreation at the Footscray Institute of Technology suggest that from their earliest involvement in high-performance sport athletes begin to internalise two messages:

> first, that success is equivalent to high performance, and second, that the achievement of high performance is at least in part a function of reliance on forces (i.e. persons, processes, objects) outside of oneself ...

> [these] messages may not only produce an impenetrable shield against the condemnation of using drugs, they may well predispose an athlete to employ them as merely one among the many external forces deemed necessary to success.[82]

2.76 They suggest that elite athletes, completely dedicated to their sports, have inevitably developed a dependence 'on a whole list of external scientific and technological authorities, processes and devices'[83] without which it is unlikely they could compete at an elite level. The athlete comes to learn:

> that the body is precisely the sort of thing that can be effectively manipulated. The scientific sporting community promotes this view by applying to performance increasingly sophisticated technological strategies which treat the body as if it is a machine to be tinkered and tampered with - as if it is somehow separate from the self of the athlete.[84]

2.77 If athletes are considered, and treat themselves, largely as machines, dedicated to the achievement of a certain performance, it may not be surprising that they are prepared to take drugs in order to reach that desired end.

## ARGUMENTS FOR AND AGAINST DOPING

### Introduction

2.78 One view said to be held by 'some senior people including competitors, administrators, and doctors' is that doping control should be abandoned.[85] Dr Gavin Dawson, for example, predicted that:

> by the year 2050 drugs will be legally used by any athlete wishing to achieve his or her inherent potential. This will become the accepted 'norm' and they will be subject to medical research, receiving continued and skilled medical care.[86]

However most of the witnesses appearing before the Committee were of the view that doping is bad and should be banned, because it can damage the health of athletes. This chapter examines some of the arguments for and against doping and explains why the Committee endorses the view that performance enhancing drugs should not be used because of their potential to damage the health of those using them and because, in the case of contact sports, persons rendered overly-aggressive through the use of anabolic steroids and stimulants can cause injury to opponents.

## Effectiveness Of Drugs

2.79 It should be noted that all of the arguments presented for banning doping assume that the drugs and methods involved do improve performance. It is worth noting here, however, that although the use of drugs in sport appears to be firmly entrenched and is based on a belief by athletes that certain drugs improve their performance, there are still those who say that conclusive evidence that this is the case is lacking. Indeed, one reason sometimes put forward to argue for the abandonment of doping control is that 'doping has no effect anyway'.[87] In the Committee's view the evidence is overwhelming that anabolic steroids work. Views to the contrary may be a result of the use of disinformation to control their use. Dr Webb mentioned that the reason it used to be suggested 'probably up until the middle of the 1970s' that anabolic steroids did not work was:

> largely to cover the inadequacies of being able to test for them. But since 1976 sophisticated tests have been developed, and so I think there was no need to hide behind the comments that they do not help anyway.[88]

2.80 One reason for the uncertainty still existing about the effectiveness of drugs in improving performance is that ethical barriers prevent the use of normal scientific experiments to study the effects of drugs on the health and performance of athletes. There is also the problem of separating the pharmacological effects of a drug from both the psychological effects resulting from a belief in its effectiveness and from the increased commitment to training and nutrition that may accompany drug usage.[89] However, when athletes are convinced that a drug works there may be enormous pressure to use it, irrespective of whether it actually works.

2.81 Many of athletes who gave evidence to the Committee thought that anabolic steroids were capable of improving performance to such an extent that drug-free athletes would not be able to compete successfully against drug-using athletes. Ms Lisa Martin suggested that if Australian sport became drug free:

> in track and field, I would say in events below 800 metres and especially for women, including throws and jumps, it would leave us far behind the rest of the world. Once you move to middle distance events we would still be competitive, but definitely not in throws, jumps or sprints.[90]

2.82 One of the most telling commentaries on the effectiveness of steroids was made by Mr Merv Kemp. He presented performance data for some of his athletes and comparisons of these performances with the top Australian performance and the world record for that same period of time. The most recent data presented by Mr Merv Kemp are shown in Table 2.1[91]

TABLE 2.1

COMPARATIVE PERFORMANCE DATA FOR TWO OF MR KEMP'S ATHLETES

| Name | Season | Athlete's Performance | Top Australian Performance | World Record |
|---|---|---|---|---|
| Phil Spivey (hammer thrower) | 1985/86 | 70.22 | 72.86 | 86.34 |
| | 1986/87 | 70.94 | 74.58 | 86.34 |
| Paul Nandapi (discuss) | 1986/87 | 61.28 | 61.34 | 74.08 |
| | 1987/88 | 62.66 | 61.28 | 74.08 |
| | 1988/89 | 61.36 | 65.62 | 74.08 |

In providing comment on these data, the following exchange took place:

> Senator Collins - It is terrible sign of the times when the coach has to produce a schedule to show in international terms how poorly his athletes are performing to prove that they did not take steroids.
> Mr Kemp - If they had top world levels I guess I would have been in worse trouble than I am in now.[92]

2.83 Dr Gavin Dawson described how anabolic steroids had given him a feeling of physically wanting to train and said:

> Take a 200 pound bench press as a standard lift. You might find a fellow for the first time on steroids could increase his strength up to 240. That sort of thing is possible.[93]

Mr Chris Turner, Secretary of the Queensland Drugs Free Powerlifting Association, submitted that:

> the male athlete weighing from the middle weight class upwards can expect 15 per cent to

> 40 per cent strength increase over and above average gains by a non-user.[94]

2.84 Blood doping is also thought to provide significant performance improvement. According to Mr Merv Kemp, international athletes have been shown to improve their oxygen carrying capacity by as much as eight per cent through blood doping.[95]

**Fairness**

2.85 It is commonly argued that drugs should be prohibited because they give the user an unfair training/performance advantage over non-users.[96] The Australian Institute of Sport, for example, said that drug use is unethical and against the principles of sportsmanship and fair play.[97] The Australian Weightlifting Federation similarly suggested that doping practices are unfair because they:

> create inequality amongst the athletes and contravene the essence of sport, both as a factor of physical and moral development and also as a factor of equality and justice among the athletes.[98]

2.86 The National Program on Drugs in Sport quoted the International Olympic Committee as stating that athletes taking drugs 'not only begin to destroy their own sense of moral values and of fair play, but their own sport and the ethics of the Olympic movement'.[99]

2.87 However, the fact that drugs may be unfair is not always seen as a valid reason for banning them. Dr T Roberts and Mr D Hemphill, of the Department of Physical Education and Recreation of the Footscray Institute of Technology, point out that there are many other inequalities that can, and do, create unfair performance advantages, but which are not banned. Quite apart from the inequality of genetic endowment these include the availability of funding and access to facilities, equipment,

technology, coaching and other services.[100] Dr A P Millar also commented on the inconsistency of using 'fairness' to ban drugs and suggested that 'There are already so many unfair areas in sport that another one would hardly be noticed'.[101] If an individual has the right to use his or her potential to the full, then, it has been argued, perhaps the use of drugs to help realise that potential should be allowed.[102]

2.88 The Committee believes that the argument that doping should be banned because the use of drugs is unfair is inconsistent. Enormous inequalities of opportunity exist for those trying to compete at both the national and international level. The advantages in terms of funding, facilities, expert advice and support in everything from diet to sports medicine and coaching, vary widely from one country to another, and within countries. It is noticeable that many athletes from poor or developing countries move to other countries to take advantage of the better facilities and support being offered, and it is not unknown for Australian athletes to move overseas because of the better opportunities they find there. The playing field has always been uneven and, with recent advances in knowledge and techniques, is getting more so. It isnoticeable hypocritical that those individuals and organisations who complain that the use of drugs is unfair do not seem concerned about these other sources of inequality.

**Health Risk**

2.89 The Australian Institute of Sport gave two reasons for its 'very strong, firm and clear stance with respect to the use of performance enhancing drugs'. The first of these was fairness, the second was that drug use can have a detrimental effect on the health of the athlete.[103] According to the National Program on Drugs in Sport, drugs are classified as doping agents in part because 'there are numerous acute and chronic harmful effects' resulting from their use.[104] The Royal Brisbane Hospital

Foundation even saw sports drugs testing as 'primarily a preventive medicine activity'[105] and informed the Committee that:

> the major concern is for the health of the competitor, not for the prevention of enhancement of performance per se.[106]

2.90 The International Olympic Committee has said that athletes who use drugs are in danger of posing health problems for themselves and that:

> The misuse of some drugs may have an immediate effect in impairing judgement and hazarding the safety of individuals and other competitors; even death in sport may result from the misuses. The misuse of some drugs, especially the anabolic steroids, can have long term effects by causing many health problems and reducing the quality of life and life span.[107]

2.91 The first Permanent World Conference on Antidoping in Sport, held in 1988, concluded, among other things, that:

> A concern for the health, safety and well-being of athletes underlies the desire to eliminate doping from sport.[108]

2.92 There is no doubt that the abuse of certain drugs may pose significant short and/or long term health hazards, even death. The Australian Rowing Council referred to one case in Australia:

> involving drug abuse (diuretics) and imprudent and Unphysiological methods - namely inappropriate nutrition and dehydration in order to maintain unnatural and therefore unhealthy lightweight status in a previously heavyweight rower. This resulted in renal damage, admission to a dialysis programme and ultimate death.[109]

In this case it appears that the harm was caused not just by the drug but by other, presumably legal, methods used in combination with the drug.

2.93 In the Committee's view there is no doubt that drugs currently used to enhance performance pose a health risk. All of the classes of drugs used have side effects which can be both immediate and longer term.

2.94 The **psychomotor stimulants** such as amphetamine produce many adverse reactions, including heart palpitations, high blood pressure, hormonal reactions, impaired judgement and addictions. Amphetamine psychoses, for example, are characterised by hallucinations and by irrational and aggressive behaviour. Indeed, one reason for taking these drugs is to increase aggression. In the past athletes have died because these drugs have made them unaware of the body's signals which serve to prevent overexertion. Some other central nervous stimulants, such as strychnine, are well known to be very poisonous.

2.95 Most of the **narcotic analgesics** have major side effects and carry a high risk of both physical and psychological dependence. However, quite apart from these effects, it needs to be remembered that pain serves an important function. It acts to prevent over-exertion or permanent injury by signalling that something is wrong, and for this reason it is dangerous to remove pain to allow an athlete to compete.

2.96 The **anabolic steroids** are the most commonly used performance enhancing drugs and a review of anabolic steroids by the Canberra College of Advanced Education Sports Studies Centre has identified many adverse effects from their use.[110] While some of these are minor, others are serious, irreversible and possibly fatal. They include cancer and tumours; strokes; high blood pressure; salt and fluid retention; abnormalities in liver function tests; psychological disturbances (especially

aggression); alterations in the menstrual cycle in women; clitoral enlargement in women; changes to the sex drive; viral illness after the cessation of the drugs; nose bleeding; changes in hair growth distribution pattern; baldness; increased oil production in sebaceous glands and acne; disturbed sleep, nightmares; increased appetite; testicular atrophy and impotence in men; breast enlargement in men; reduction of breast tissue in women; and deepening of the voice. Other identified effects include diabetes, scrotal pain, lower immunity and increased risk of cardiovascular disease. Many of these side effects can develop after relatively short courses and low doses of the drugs. For example, significant increases in blood pressure have taken place after just six weeks daily usage of between 10 and 25 mg of Dianabol.[111]

2.97 The **Beta-blockers**, by virtue of the fact that they are designed to have quite specific physiological effects on heart rate and blood pressure will be inherently risky for those who do not have a problem that requires treatment, since they will disturb a normal condition. This is quite apart from any other side effects that may be associated with their use.

2.98 **Diuretics** may produce serious side effects but the rapid reduction in weight which they is used to produce is dangerous in itself, and should not be encouraged, no matter what means are used to produce it. The Committee has received evidence that an Australian competitive rower has died as a result of diuretic abuse.

2.99 The dangers involved in blood doping are those associated with any transfusion of blood and blood products. As well as the possibility of AIDS and hepatitis there is the possibility of allergic reactions, kidney damage, overload of the circulation and metabolic shock.

2.100 All the dangers associated with drugs used to enhance performance are made much greater by the fact that athletes using these drugs are likely to be doing so without medical supervision, in uncontrolled doses. They will often be using combinations of drugs from different classes, and with no monitoring they may not receive any early warning of the development of serious symptoms.

2.101 Even those who accept that drugs may damage health sometimes argue that sports and sports training are inherently dangerous and that for this reason it would be inconsistent to ban drugs because of health risk. Dr Roberts and Mr Hemphill point out that risks and dangers exist in progressive overload training and in confronting and attempting to surmount various sport-specific obstacles. They state that risk and danger are essential and accepted elements of 'an environment predicated on maximal effort and performance' and suggest that it is inconsistent to single out drugs for special scrutiny and prohibition.[112] Dr Millar supported this view, and said that:

> Those who argue that these drugs should not be used because of their dangers are on flimsy ground. ... There are more deaths from football than there are from drugs in football in this state [NSW]. There are more deaths from motor cycling, motor racing and athletic performances in fun runs than there are from drugs in sport and if one is to be serious that danger is a reason for not using the drugs, statistics provide no support for that particular point of view.[113]

2.102 It is interesting to contrast Dr Millar's argument with the view of the Health Department of Western Australia that:

> the long-term effects of these substances are unknown but they produce profound metabolic disturbance which is likely to have adverse effects later in life. It is unlikely that these effects will ever be known as controlled trials are unethical and thorough

> epidemiological studies would be extremely difficult, if not impossible, to mount.[114]

2.103 Even if the argument on health risk is limited to the use of drugs, inconsistencies exist in the approach taken by the sports' governing bodies. Dr Millar has pointed out, for example, that although the health risks of oral contraceptives are well documented, women are still allowed to take the oral contraceptive pill to enable them to perform in athletic events at what they consider to be the best part of their cycle.[115]

2.104 In addition to the inconsistency involved in banning drugs that may involve less danger than training or the sport itself, Roberts and Hemphill also suggest that there is a problem in defending paternalistic interference with the choice of others. They argue that this could be justified only if it can be demonstrated that an athlete's choice to use drugs was uninformed and involuntary, and/or that the consequences of such drug taking caused harm to others.[116] However, in the Committee's view it is indeed the case that many athletes and coaches do not fully understand the risks, or the symptoms, resulting from the misuse of ergogenic aids. Moreover, even if athletes did understand the risks involved, the Committee believes that there would be no reason for society to condone the use of substances that can damage health. The Committee believes that the health risk is serious and that it forms a compelling reason for banning the use of these substances for performance enhancement.

**Protecting The Health Of Athletes**

2.105 The taking of performance enhancing drugs may constitute a health risk but these drugs are taken by athletes even though they are banned. Given that the protection of the athlete's health is of paramount importance, it can be argued that legalisation of doping would enable drugs to be taken under close medical supervision and lead to fewer health risks.

2.106 Drugs obtained on the black market and not from a registered medical practitioner will always be suspect. They may be nothing more than a placebo but:

> More dangerously, however, multidose vials for injection often have fake labels and there have been several reports of Human Growth Hormone containing small doses of steroids. At a cost of $1500.00 a vial, this is bad enough but even worse is the dangerous possibility of contaminated material. This may lead to AIDS or Hepatitis.[117]

2.107 Another consequence of the need to use black market supplies is that veterinary products may be used, in part because they are cheaper. Dr Dawson suggested that for this reason veterinary steroids should become a controlled substance and be elevated to Schedule Eight, in the same group as morphine.[118] Thi is discussed further in Chapter Four.

2.108 The lack of medical advice concerning the use of ergogenic substances is a matter of concern to at least some athletes. A weightlifter wrote to the Committee complaining that he knew of:

> no such person who could give accurate advice based on facts. Most, if not all medical persons when asked for the advice either refuse to co-operate or give no help at all. You will find that individuals that use drugs in sport can only rely on themselves or only too often they listen to what other people have used, and this can be dangerous.[119]

2.109 The Australian Rowing Council, although for different reasons, also expressed concern over the ignorance of doctors, chemists and health personnel regarding doping and its control.[120]

2.110 Some doctors have been prepared to assist athletes and have even publicly advocated the administering of banned drugs. However, according to the Australian Olympic Federation:

> Money, ignorance and poor ethical standards are factors as to why doctors supply athletes and subsequently monitor their usage through blood tests.[121]

2.111 An article entitled 'Use of Steroids Deplored by the AMA'[122] states that the International Olympic Committee - Medical Commission:

> has and will continue to recommend that [doctors who prescribe banned drugs to athletes] be penalised at least as severely as the Athletes. The Australian Olympic Federation has a policy that any such action by a doctor will result in a life-time ban from involvement with the Olympic movement.

2.112 Dr Brian Corrigan, Chairman of the National Program on Drugs in Sport, is reported as saying that while athletes may continue to use drugs with or without medical supervision 'this is a morally incorrect attitude that begs the whole question of drug use in sport'. There is clearly scope for argument as to how this attitude fits in with the 'ethical responsibility of every Medical Practitioner to look after the health of any individual',[123] but Dr Ken Donald noted that, as a medical practitioner, he could not endorse drugs in sport:

> not particularly on the grounds of cheating, but on the grounds that it is unethical to give those sorts of drugs to well people.[124]

Dr Donald's view is supported by the Committee.

## Coercion

2.113 The National Program on Drugs in Sport has said that permitted drug use is coercive.[125] The performance pressure on athletes is so great that it is next to impossible for them to make informed, voluntary decisions on drug use. This is particularly the case when the livelihood of athletes depends on ever increasing performance improvements. The greater the level of coercion, the greater is the perceived justification for drug prohibition.[126] Some of the pressures encouraging athletes to take ergogenic substances were discussed in Chapter Three. There is no doubt such pressures are real and Mr J Irwin, for example, commented that with senior coaches indicating the need for steroids it is not surprising that young sportspeople should form the opinion that steroid use is imperative to achievement.

2.114 Dr Roberts and Mr Hemphill suggest that the issue of coercion is difficult to determine 'so long as the athlete has an alternative to settle for less in terms of performance outcomes without the use of drugs, or has an acceptable alternative to performance at all'.[127] In other words, they see the issue as being whether it is still possible for athletes themselves to say 'no' to drugs in sport, so that the decision need not be taken for them.

## Harm To Others

2.115 To the extent that drugs have an effect on athletes' behaviour and judgement, it is possible that those taking drugs may be more likely to cause accidents than others.[128] It has already been noted that anabolic steroids and amphetamines can both produce increased aggression, which may manifest itself both on and off the playing field. The Committee believes that just as a driver has a right to expect that other people in control of vehicles are not driving under the influence of alcohol or other drugs, a sportsperson has the right to expect that opponents

competing are not going to be playing in a dangerous manner because of the drugs that they have been using. Another argument concerning harm to others is that athletes using drugs create a situation in which other athletes are 'forced' to use drugs, for fear of becoming less competitive. It can be argued that it would be inconsistent to single out drugs in this way, given that a similar argument could be made out in relation to other equally dangerous or risky training regimens,[129] but the Committee has already made clear its view that the significant and often long term health consequences of taking drugs provides more than enough reason for banning them.

Protection Of The Young

2.116 The International Olympic Committee has said that:

> the misuse of drugs by top athletes gives an adverse lead to young people in sport. Thus, there is danger that misuse of drugs will lead to the further escalation of drug misuse, which is threatening to undermine many societies.[130]

2.117 Adult athletes certainly serve as role models for young athletes, but Roberts and Hemphill suggest there is an inconsistency in banning performance enhancing drugs for this reason but not restricting other activities (e.g. arduous and risky training, smoking) where they also set bad examples.[131]

Harm To The Sport

2.118 Closely related to harm to others and the young, is the argument that drug taking can in some way damage sport. Mr J Irwin told the Committee that many talented individuals leave a sport after realising that they are competing with individuals prepared to risk their health by taking drugs. He commented that:

> the sports involved in steroid use alienate themselves from the public because of the knowledge of ill-effects. They tend to retain the individuals who are prepared to forgo a balanced perspective on life in order to achieve their sporting goals. in many cases these people are not the best sportsmen, in the classical sense.[132]

2.119 Dr K Donald similarly related how 'really very good athletes' had told him that they had retired from their events 'rather than continue to try to complete without anabolic steroids'.[133] He said that they wanted to be world champions, but knew that they could not be without the use of drugs.[134]

2.120 The Australian Weightlifting Federation noted a more direct way in which a sport could be harmed when it commented that in being dangerous for an athlete's health and contrary to sporting ethics, the use of drugs is also contrary to the reasons sport is subsidised by public authorities.[135]

Significance Of The Person

2.121 In the words of the National Program on Drugs in Sport, competition 'should involve competitors, not pharmacologists'.[136] It is about people, not technology.

2.122 After examining other arguments for the banning of performance enhancing drugs in sport and finding them logically flawed and inconsistent, Dr Roberts and Mr Hemphill conclude that such drugs should be avoided because they tend to reduce the significance of the person, or self, in sport. They argue that:

> competition is regarded as a positive encounter between persons and not merely a struggle between individuals reduced to their respective capacities to respond to external chemical additives.[137]

They recognise, however, that:

> Equally inconsistent with the ideal of 'respect for persons' may be many of the other scientific and technological practices of high performance sport which tend to progressively predispose the athlete to rely on forces outside the self.[138]

**Discussion**

2.123 The Committee recognises the complex issues involved in the arguments put forward for and against the use of performance enhancing drugs, and that grey areas exist. Why, for example, should Vitamin B12 or ATP injections be allowed, but steroids banned, even thought they all are taken with the same intent - that is, to improve performance? If an athlete is already taking 20 or 30 pills a day which are legitimate, because they are vitamins, amino acids, inosine and other non-banned substances, why stop them taking something which, if used under medical supervision, may cause them little, if any, additional harm?

2.124 One reason for banning them is that society in general disapproves of their use, but there is little evidence that this is the case. Dr Donald said that he was not sure that this issue has been addressed 'with the full understanding of the community of what is going on'. He added that he thought that 'there are knee-jerk reactions in the community about it'[139] but that there had been no proper community debate.[140] Dr Donald said that decisions in this area were made by people in the sporting industry:

> sometimes quite uninformed about the law and quite uninformed about the dope and uninformed about how to test for it and even uninformed about its effects.[141]

2.125 The Committee takes the view that performance enhancing drugs should be banned because they can potentially damage the health of those taking them, whether they are elite athletes who stand the risk of being detected using them, or the recreational sportsperson who is unlikely ever to be tested. They should be banned also because anyone using them is is trying to gain an unfair advantage over those athletes who wish to maintain normal health. They are cheating, because their use is against the rules of the sporting federations. In a practical sense there is no way that Australia could unilaterally legalise the use of these drugs because any attempt to do so would presumably result in Australians being banned from all international competitions. However, the Committee does believe that community debate should be encouraged as to what substances should be included on the banned list.

**EXTENT TO WHICH DRUGS ARE BEING USED**

Introduction

2.126 Evidence relating to the extent to which performance enhancing drugs are used by sportspeople falls into three types. Anecdotal evidence, which provides most of the information available, is often contradictory, is difficult to evaluate and may be of only limited use in assessing the extent to which drugs are being used. More reliable information comes from the analysis of the results of drug tests performed on athletes. While extremely useful, this also has limitations. It covers only sportspeople involved in competitive sport and the information it provides relates to detection, not usage rates, and these are not necessarily the same, particularly as most testing is carried out at competitions. A third source of evidence comes from surveys which attempt to identify what drugs are being taken by sportspeople. This evidence also has problems of reliability, particularly in relation to the self-selection of those who

respond. Nevertheless, taken together these three kinds of evidence may help to build up a picture of the present level of drug abuse among Australian sportspeople.

## Anecdotal Evidence

### Sports Involved

2.127 There appears to be a widespread perception that performance enhancing drugs are used extensively by both competitive and recreational sportspeople. The Australian Olympic Federation (AOF), for example, noted that the 'use of anabolic steroids is claimed to be reasonably widespread'.[142] In a minute to Executive Directors and Secretaries of National Sports Federations in June 1987, the AOF Secretary General said that 'the AOF is concerned that practices prohibited by the IOC are prevalent'.[143] Mr Glenn Jones told the Committee that sport:

> has become a joke in this country, especially the strength sports, because of the amount of drugs that are being used.[144]

One submission commented that 'drugs ... are very versatile and I cannot think of one sport that has escaped their use'.[145] Mr Don Talbot, former Chief Executive of the AIS, told the Committee that 'it would be a fatal error to exclude any sport if the inquiry is to look at the whole drug scene' while Dr Millar told the Committee that he had prescribed steroids for body-builders[146] and to athletes involved in rugby league and union, Australian rules, American football, soccer, cricket, tennis, track and field, and swimming.[147]

2.128 According to an article 'Steroids, the way it is' written by a 'prominent Australian athlete' who has 'competed successfully at an international level' and published in The Pump magazine[148]:

> Amongst bodybuilders and powerlifters it would be fair to say that 98 per cent of men use them, at ALL levels of competition, and up to 80 per cent of women at national and international levels. If this sounds a little incredible, go into any gym and ask the local drug pusher who he is selling gear to. The people he'll point out will astound you. Not just competing lifters and bodybuilders, but ordinary people who just want 'to get big', and believe me, they come in all shapes and sizes. ... Some of [the sports] involved include footballers, rugby players, cyclists, track and field athletes, swimmers, martial arts exponents, basketballers, hockey players, gymnasts, in fact almost any sport where speed, power strength and endurance are needed.

2.129 Perhaps one of the most telling indications of drug use in some sports is that in powerlifting it has become necessary to start up drug-free associations.

> Rather than put up with what is going on within the official powerlifting, people are quite happy to drop out and go form their own association.[149]

**Use by Elite Sportspeople**

2.130 Mr Kelvin Giles, providing evidence about elite track and field athletes, has estimated that 70 per cent of the athletes in Australia's international pool took, or had taken ergogenic aids and that 25 per cent of the 29 athletes in Australia's 1988 Olympic track and field squad had taken or were taking, ergogenic aids in their preparation for Seoul.[150] Ms Sue Howland said that:

> At the very elite level - I am talking about the top 10 or 20 in the world - 95 per cent of them are taking it.[151]

2.131 In at least some cases it is possible that the use of ergogenic aids at the elite level may be institutionalised. Ms Lisa Martin told the Committee how she had 'read and heard':

> about the Italian Athletic Federation, which, when it chose a national squad and offers stipends to athletes it required them to be willing to blood dope.[152]

2.132 Not everyone is so pessimistic. Australian Swimming Inc. told the Committee that:

> Swimming is Australia's most successful Olympic sport and has been free of problems related to its athletes becoming involved with performance enhancement drugs.[153]

However, Mr Talbot cautioned that even swimmers could benefit from steroids. As General Manager of Canadian swimming he was involved in suspending a swimmer 'who did get benefit'.[154]

2.133 The Australian Hockey Association adopted a similar attitude to that of Australian Swimming Inc and believes that:

> the complex nature of hockey, which calls for a broad combination of fitness, strength, agility, fine co-ordination skills and teamwork, does not offer great advantages for players to exploit by utilising drugs. Hence the only use of proscribed drugs by hockey players appears to be the inadvertent use of substances contained in over-the-counter pharmaceutical products.[155]

While this may be true, the Committee noted that Appendix A to the Australian Hockey Association submission was an article 'Drugs in Sport' from the October 1986 edition of Hockey Circle. This article stated that a 1983 Survey of 361 hockey players found that 44 per cent used no drugs proscribed by the Drugs in Sport lists, 28 per cent used drugs on the banned list and

another 18 per cent used two banned drugs. However the survey was said to:

> indicate that there is reasonably widespread 'innocent' usage of proscribed drugs rather than drug abuse ... With the use of such innocent products as eye-drops, decongestants, and headache tablets registering as drug usage in some of the categories, the overall picture of hockey players ... indicates that hockey does not have a problem.

2.134 Mr Merv Kemp, drawing on his over 30 years of experience with athletics and related areas, commented that:

> In Australia the use of performance enhancing drugs certainly occurs but ... the problem is not as widespread in athletics as has been claimed. Some senior athletes do use drugs but, to the best of my knowledge, I believe that drug abuse does not exist among juniors.[156]

2.135 The Amateur Boxing Union of Australia advised the Committee that:

> the ... Union has never had any of its members involved in drug usage of any kind, and therefore does not wish to offer a submission for your Standing Committee.[157]

2.136 In presenting this evidence from the various sporting federations, the Committee notes that many of them do not have any testing program in place, let alone a random testing program during non-competition periods as would be necessary to detect anabolic steroid usage.

**Use by Non-Elite Sportspeople**

2.137 There are statements that the use of drugs in sport has increased in recent years.[158] In part this may have resulted from the increased pressure on athletes to win and the increased

rewards of winning, but it may also reflect a tendency of non-competitive sportspeople to use drugs. Mr J Irwin commented that in the early 1970s:

> steroid use was apparently restricted to strength athletes, but with the introduction of 'health' clubs and the interest in bodybuilding I am certain that steroid use must be increasing dramatically. At least a sportsman in a ratified field might be caught by testing at competitions, whereas a private bodybuilder may take any amount for indefinite periods, with no prospect of immediate penalty.[159]

2.138 Dr Millar told the Committee that, on the basis of his own experience, there 'would be roughly in Sydney now some 2000 - 3000 athletes using anabolic steroids' and that, extrapolated over the whole of Australia, there would be 'a considerable intake of these preparations'.[160] Dr Millar also made the point that while there may be 3000 athletes using steroids in Sydney alone, in Australia there might be only 200 top athletes who would benefit from using drugs.[161]

2.139 Dr Millar himself sees between 100 and 200 different patients a year.[162] The majority of these are 'just ordinary characters out in the world who are involved in body building'[163] although they cover a lot of other sports as well.

2.140 The Health Department of Western Australia also told the Committee that it is clear that use 'is not confined to a top few athletes, but is taken by strength sportsmen at all levels'.[164]

**Use by Children**

2.141 One area of particular concern to the Committee has been the extent to which children are making use of performance enhancing drugs, sometimes apparently with the connivance of their parents. Dr Millar told the Committee how he gets 'them

sent around at the age of 14 because at that stage, the boy has great potential'.[165] Dr Millar stated that he does not prescribe steroids for children at that age and would never prescribe for anyone he considered had not completed their growth. However, other doctors, or other sources of supply, may be less concerned.

2.142 The Committee heard allegations that in the mid 1970s junior athletes (16 and 17 year old) were being given steroids in Police Boys Clubs in Sydney.[166] According to Mr Glenn Jones:

> when they were dealing with very young lifters, as in the 13 to 14 age groups [the steroids] were given to parents and the parents were told to make sure that little Freddy or Jimmy took these because they were vitamins and they were important to his lifting.[167]

2.143 An ex-weightlifter said to the Committee that

> In weightlifting over a number of years I trained my way to to being the best. I saw the drug abuse ... I saw not just 13s or 14s, I saw 10- year olds, 11- year olds and 12 year-olds who were getting juiced up for ridiculous level competitions.[168]

2.144 Dr Gavin Dawson described how:

> In the sport of bodybuilding, they see a necessity for steroids in the same way that a beauty queen sees for make up ... This sad situation has descended to junior levels where, because of peer competition, pills are being popped as if they were competing against the Communist countries.[169]

2.145 Dr Gwozdecky, drawing from his experience in Canada, said in that country a lot of the ice-hockey players in the junior ranks (16- 19- year olds) were taking steroids to increase body weight and mass.[170]

2.146 One of the most alarming accounts came from Dr Ken Donald, Deputy Director-General of Health and Medical Services, Queensland Department of Health. He said that from time to time he is contacted by physicians who have 'come across the use of anabolic steroids in quite young teenagers'.[171] He related one instance involving 'two youngsters around 13 who were in serious training' Dr Donald was:

> contacted by a physician who had himself been contacted by the children's grandparents who were surprised at the prescription that the children brought with them when they came to do a training camp ... They were anabolic steroids.[172]

2.147 Dr Webb, in his capacity as Principal Medical Officer of the Australian Rowing Council, told the Committee that a testing program he would put forward, 'given the framework to do it' would be:

> to test our schoolboy rowers or junior rowers at about the time their growth phase finishes to make sure they are not being given them to increase muscle bulk at that time, and then simply training that muscle bulk forever after, which is the way it may be used in the Eastern bloc.[173]

2.148 While steroids are a major concern, and appear to be the most commonly used performance enhancing drug at the moment, they are not the only problem. Moreover, in the case of children it is not just that the drugs may be dangerous, but that the principle of taking a chemical substance to improve performance is itself undesirable. Encouraging children to take vitamins to help them run faster may be as undesirable as giving them something more potent. But parents may well be encouraging children to rely on external aids.

2.149 Dr Webb noted that:

> from little Athletics we observe and are told of various people popping unknown pills around the athletic tracks. We are told about people using the asthma aerosols when they do not, in fact, have asthma.[174]

Dr Webb went on the describe how he, had:

> had patients actually come in to say that they had been told by other parents that [asthma] sprays are good for kids with asthma, so if you use them normally, you can get more air in and more oxygen in and therefore you can run faster or further. We all know they have no effect of normal airways.[175]

**Drug Test Results**

2.150 The results of drug tests carried out on athletes can give an indication of the extent to which performance enhancing drugs are being used. However, it would be unwise to use the proportion of positive tests as a good indicator of the proportion of participants in any sport taking drugs. Testing tends to be concentrated on competitions, and athletes may adopt drug usage regimens to ensure they are drug free by the time of a competition. Moreover substances such as blocking agents (which slow down the excretion of the drugs being used) also decrease the effectiveness of drug test results as an indicator of the level of drug usage. Corrupt practices in urine collection procedures are discussed in Chapters Three and Seven, while Chapter Eleven demonstrates the ineffective application of the necessary protocols in the Australian Institute of Sport's drug testing program. The difficulties of using drug test results to assess the level of drug usage were demonstrated by the fact that, according to his coach, Mr Ben Johnson had passed 17 post-race drug tests in 1986 and 1987, even though he was taking steroids during that period.[176] These examples show that positive tests may tend to underestimate drug usage. However, the fact

that drug taking may be more common at elite levels may tend to overstate the level of drug abuse, if the sport is taken as a whole.

2.151 Some of the difficulties in extrapolating from test results were suggested by Dr Millar who noted, for example, that:

> The argument that 9 positives were found in Los Angeles and only 8 in Seoul does not prove that there is a lessening of the use of drugs, but is more consistent with the proposition that athletes are more sophisticated now in their knowledge and are able to use drugs more efficiently than they have been done (sic) before so that the present testing procedures are no longer able to catch up with the user.[177]

2.152 Kelvin Giles told the Committee that 'the ultimate testing situation' would be to test every athlete every three weeks for anabolic steroids.[178] He said that despite:

> the very stringent controls at Seoul there are still people just cruising right through it, because all they have to do is stop taking the drugs 14 to 21 days before they get tested and they are out of their systems.[179]

2.153 Despite the difficulties that exist in interpretation, drug test results are perhaps a more reliable indicator than the purely anecdotal evidence. Moreover, the reliability of the test results can be enhanced by moving to random sampling methods of choosing athletes for testing. Even then, however, it needs to be recognised that the greatest concentration of the users of these drugs may not be in competitive sport, or not at the level at which they would ever be tested.

2.154 Surprisingly, drug test results were seldom mentioned in the submissions received by the Committee, although interesting anecdotal evidence relating to drug testing results was provided by Mr M Kemp. He noted that the introduction of rigorous random

testing programs in Britain, Canada and Scandinavia had 'led to a substantial drop in standards achieved', [180] the fall in standard being a measure of the success of the program.

2.155 The submission from the Australian Weightlifting Federation indicated that in 1986 the International Olympic Committee had tested over 36 000 athletes and had found a 1.7 per cent positive result. The International Weightlifting Federation had tested 1864 weightlifters over the same period and, even though many of its tests were performed in the preparation period prior to major competitions, had 0.9 per cent positive results.[181] The significance of testing in the preparation period is that it can detect the use of drugs which may have been used to build up muscle but which will have disappeared from the body by the time of the competition. Even the 1.7 per cent positive result meant that on these figures the International Olympic Committee had detected 612 athletes taking banned drugs.

2.156 A more detailed analysis of the testing results from IOC accredited laboratories is given in Table 2.2[182] This shows that the percentage of positive tests varied according to the group being sampled. The highest proportion of positives was found when checking competitors prior to major championships (2.76 per cent) and at major international championships themselves (2.49 per cent). The lowest proportion of positive results was found in tests carried out in competitions with national competitors only (1.71 per cent) and at competitions with international competitors which were not major championships (1.51 per cent). These results certainly suggest that the intense pressure associated with international competition is a major factor in leading to drug abuse by athletes.

TABLE 2.2
IOC-ACCREDITED LABORATORIES STATISTICS 1986

Summary of Samples Analysed by Accredited Laboratories in 1986

| | Number of samples | Number of negative samples | Number of analytically positive A-samples | Per-centage |
|---|---|---|---|---|
| Competitions with national competitors only | 15533 | 15272 | 265 | 1.71 |
| Competitions with international competitors | 5227 | 5148 | 78 | 1.51 |
| Major international championships | 4449 | 4338 | 111 | 2.49 |
| Samples collected out-of-competition (but see below) | 6505 | 6368 | 137 | 2.11 |
| Checking of competitors prior to major championships | 1268 | 1233 | 35 | 2.76 |
| Total | 32982 | 32359 | 627 | 1.90 |

Frequencies of detected substances, grouped in classes of dope agents (compare detailed list):

| Classes of Dope Agents | N |
|---|---|
| A. Stimulants | 177 |
| B. Narcotics | 23 |
| C. Anabolic Steroids | 439 |
| D. Beta-Blocker | 31 |
| E. Diuretics | 2 |
| F. Sedatives | 15 |
| Total | 687 |

**Survey**

2.157 The most detailed information on drug use by Australian sportspeople comes from a survey intended to determine what drugs athletes were taking. This survey was funded by the Federal Government in 1978 and is now inevitably out of date. Nevertheless, it does provide the only detailed evidence on this matter available to the Committee at this time.

2.158 The following summary of the survey and its results is taken largely from the submission provided by the National Program on Drugs in Sport.[183]

2.159 The survey involved a simple questionnaire of personally-reported drug use. It was distributed by the sporting organisations of 31 sports to 14 200 sportspeople, who were asked to complete the survey anonymously and return in a 'Business Reply Post' envelope to the Australian Sports Medicine Federation. The overall response rate was 28.7 per cent and the final analysis was based on a sample of 4064 sportspeople. There were respondents from a wide range of ages although about 60 per cent were between 16 and 25 years. Over 70 per cent of respondents were male. All states were represented in the survey. The survey concentrated on the highest levels of Australian sports, with a smaller sample of local level competitors for comparison. Both professional and amateur sportspeople were surveyed.

2.160 The relatively low response rate and voluntary nature of the survey probably indicates an underestimate of the drug abuse problem in sports. Even in an anonymous survey, drug-using athletes are unlikely to be completely honest, or indeed, complete the questionnaire at all.

2.161 The concentration on high level sportspeople is one of the limitations of the survey and the Australian Sports Medicine Federation has recommended that the survey should be repeated, in order to update the information, and be extended, to include 'non-elite, low profile, recreational and social sport', as well as 'gymnasia, health and fitness programs and "health food" outlets, particularly in regard to nutritional supplements'.[184]

2.162 The drugs that respondents had used directly in connection with their sporting activities were grouped into eight identifiable categories. There categories were:

- vitamins and food supplements;
- anti-inflammatory drugs for sporting injury;
- pain relieving drugs;
- drugs for asthma, nasal congestion etc.;
- drugs to reduce body weight;
- anabolic steroids;
- stimulants; and
- sedatives and tranquillisers.

2.163 This list is much wider than the list of banned substances prepared by the International Olympic Committee and many of the drugs involved have quite legitimate uses in sport as elsewhere.

2.164 The survey indicated that about 5 per cent of the survey sample had used considerable numbers of drugs in connection with competitive sport. Many of these individuals had used dangerous drugs, or drugs that are banned from sport by international convention, and a few had used drugs that were illegal in Australia. In the group of sportspeople who had used drugs extensively there was a slightly higher proportion of males than females. Professionals were on average more likely to have used many different types of drug. There was a peak in heavy drug use

among respondents aged between 16 and 30 years, but there were also individuals among the younger and older competitors who had used drugs extensively.

2.165 Although there were major differences between sports in the proportion of respondents who had not used drugs (only seven per cent of powerlifters and 15 per cent of all swimmers had not used drugs, while over 50 per cent of shooters had not used drugs), there were individuals from almost all sports who had used drugs extensively. This was a very important finding. It meant that drug use was not confined to a few competitors in a few easily identifiable sports. Although the overall problems associated with drug use may not have been as prevalent in some sports or among some age groups as others, there was no sport and no age group for which it was unheard of for individuals to have used different drugs. The one common factor appeared to be that the higher the level of competition, the more likely it was that the individual competitor had used drugs extensively, independent of the age, sex or sport of that competitor.

2.166 No simple picture, in which potential drug abuse was limited to a few competitors in a few easily identifiable sports, emerged. The situation appeared quite complex, with potential drug abuse taking many forms - from overuse of relatively harmless food supplements, through potentially damaging reliance on drugs for the treatment of sporting injury, to the use of illegal stimulants and the use of large doses of many anabolic steroids.

2.167 The survey concluded that there appeared to be a significant problem with drug use in Australian sport, with drug use affecting all ages, all sports and all levels of competition to some extent. Overall, the evidence collected in the survey showed that there were several aspects of the use of drugs by Australian sportsmen and women that gave cause for concern. Perhaps one of the more worrying findings from the survey,

however, was that more respondents said that it was their intention to use anabolic steroids in the future than had admitted to using them in the past.[185] In other words, the Survey found that the problem was going to get worse, and that this was so particularly in the case of the most serious of the drugs being examined.

## Conclusion

2.168 There is no doubt that the use of performance enhancing drugs presents a problem in Australia, as it does elsewhere. However, the nature of the problem and its extent have not received the community discussion that they deserve. As Dr Donald pointed out, it is not even clear what community attitudes are on some of the issues involved.[186] Two reasons for this may be a perception that the problem is restricted to small numbers of elite athletes, and a general lack of understanding of some of the health risks involved.

2.169 The Committee accepts that drug taking in Australian sport is widespread, and that anabolic steroids in particular are used in any sport in which power is an advantage. Moreover drugs are being used at all levels of sport and by most age groups, although the extent of use varies widely from one sport to another. The survey of drug abuse in Australian sport, for example, found that 22.4 per cent of powerlifters had used anabolic steroids, as had 15.7 per cent of weightlifters, but that only 1.2 per cent of cricketers, 1.1 per cent of cyclists and 0.8 per cent of water polo players admitted to using these drugs.[187] Given the unacceptable health risks posed by anabolic steroids, these figures demonstrate a serious problem, some solutions to which are discussed in the next two chapters.

2.170 The Committee believes that there is an immediate need to update the Survey of Drug Abuse in Australian Sport. The coverage of the survey should be extended to non-elite

sportspeople. In addition to establishing drug usage patterns it should also attempt to identify social attitudes to the problem and canvass the views of those involved in sport other than as athletes. A survey should also be carried out of suppliers of drugs used by sportspeople, including gymnasiums, doctors and health food outlets.

**Recommendation 3**

**The Committee recommends that the National Program on Drugs in Sport:**

(i) conduct a survey, based on the methodology of the 'Survey of Drug Abuse in Australian Sport', to help define the extent to which banned drugs are used by amateur and professional sportspeople at all levels, and of all ages, and to determine the attitude of these groups towards performance enhancing drugs in order to see if there has been any change since the previous survey;

(ii) carry out a survey of community attitudes to the use of drugs in sport and the attitudes and practices of non-competing sportspeople (administrators; coaches, sports scientists); and

(iii) carry out a survey of the attitudes and practices of those individuals and organisations involved in the supply of performance enhancing drugs, particularly doctors, gymnasiums and health food outlets.

1. Evidence p. 564
2. Evidence p. 315
3. Submission No. 10 p. 1
4. Evidence p. 61
5. Evidence p. 5k
6. Evidence p. 1751
7. Evidence p. 195
8. Submission No. 10 p. 2
9. Hayden Opie, Drugs in Sport, - Legal Issues, paper presented to the Drugs, Society and Leisure Conference, 1 July 1988.
10. Evidence p. 1665
11. Evidence p. 198
12. Submission No. 10 p. 1
13. Evidence pp. 198-9
14. Submission No. 10 p. 2
15. Evidence p. 195
16. Evidence p. 195
17. Submission No. 22 p. 31
18. Submission No. 12 p. 2
19. Evidence p. 1306
20. Evidence p. 566
21. Evidence p. 287
22. Evidence p. 1306
23. Evidence p. 408; See Appendix 5 of this report
24. Submission No. 10 p. 5
25. Hayden Opie, 1988, op. cit. p. 1
26. Evidence p. 405
27. Submission No. 11 p. 2
28. Evidence p. 33k
29. Evidence p. 253
30. Evidence p. 413
31. Evidence p. 287
32. Evidence p. 243
33. Appendix 5 of this report
34. Submission No. 8 p. 1; Evidence p. 405
35. Evidence p. 404
36. Submission No. 10 p. 1
37. ibid
38. Evidence p. 244
39. Evidence pp. 244-5
40. Evidence p. 668
41. Evidence p. 1566
42. Evidence p. 1689
43. Evidence pp. 1299-1300
44. Evidence p. 50
45. Evidence p. 1732
46. Evidence p. 6k
47. Evidence p. 50
48. Evidence pp. 1097-8
49. Evidence p. 1736
50. Evidence p. 405
51. Evidence p. 4k
52. Submission No. 15 p. 5
53. Evidence p. 448
54. Evidence p. 6k
55. Evidence p. 61
56. Evidence p. 1306
57. Evidence p. 472

58. Evidence p. 474
59. Evidence p. 480
60. Evidence p. 221
61. Evidence p. 1723
62. Evidence p. 268
63. Submission No. 2 p. 2
64. Evidence pp. 464-5
65. Evidence p. 4k
66. Submission No. 7 p. 1
67. Evidence p. 72
68. Evidence p. 4-5k
69. Evidence p. 16
70. Submission No. 10 p. 9
71. Evidence p. 48
72. Evidence p. 708
73. Evidence p. 483
74. Evidence p. 482
75. Evidence pp. 358-9
76. Evidence p. 359
77. Evidence p. 359
78. Evidence p. 359
79. Evidence p. 360
80. Evidence p. 360
81. Submission No. 7 p. 1
82. Submission No. 21 p. 5
83. ibid.
84. Submission No. 21 p. 6
85. Evidence p. 1306
86. Evidence p. 1307
87. Evidence p. 1306
88. Evidence p. 421
89. Evidence p. 245
90. Evidence p. 1671
91. Evidence p. 1153
92. Evidence p. 1142
93. Evidence p. 1354
94. Submission No. 54, Attachment p. 6
95. Evidence p. 19k
96. Submission No. 21 p. 1
97. Evidence p. 1751
98. Submission No. 10 p. 1
99. Evidence p. 61
100. Submission No. 21 p. 1
101. Evidence p. 201
102. Evidence p. 1306
103. Evidence p. 1751
104. Evidence p. 61
105. Submission No. 11 p. 1
106. Submission No. 11 p. 2
107. Evidence p. 61
108. Evidence p. 312
109. Submission No. 18 p. 2
110. Submission No. 22 pp. 35-6
111. Submission No. 22 p. 41
112. Submission No. 21 p. 2
113. Evidence p. 201
114. Submission No. 15 p. 5
115. Evidence p. 198

116. Submission No. 21 p. 2
117. Evidence p. 1308
118. Evidence p. 1307
119. Submission No. 2 p. 1
120. Evidence p. 405
121. Evidence p. 288
122. Medical Practice, 20 July 1987 p. 3
123. Evidence p. 1307
124. Evidence p. 1696
125. Evidence p. 62
126. Submission No. 21 p. 3
127. Submission No. 21 p. 3
128. Evidence p. 61
129. Submission No. 21 pp. 3-4
130. Evidence p. 61
131. Submission No. 21 p. 4
132. Submission No. 7 p. 2
133. Evidence p. 1694
134. Evidence p. 1615
135. Submission No. 10 p. 7
136. Evidence p. 62
137. Submission No. 21 p. 7
138. Ibid.
139. Evidence p. 1219
140. Evidence p. 1689
141. Ibid.
142. Evidence p. 287
143. Submission No. 24B, Section 3
144. Evidence p. 744
145. Submission No. 2 p. 2
146. Evidence p. 218
147. Evidence p. 230
148. December/January 1987-88, p. 68
149. Evidence p. 734
150. Evidence p. 8
151. Evidence p. 555
152. Evidence p. 1665
153. Submission No. 19 p. 1
154. Evidence p. 1603
155. Submission No. 8 p. 1
156. Evidence p. 4k
157. Letter from Arthur Tunstall, Secretary-General, The Amateur Boxing Union of Australia, to Secretary, 26 July 1988
158. Evidence p. 195
159. Submission No. 7 p. 1
160. Evidence p. 199
161. Evidence p. 205
162. Evidence p. 231
163. Evidence p. 218
164. Submission No. 15 p. 3
165. Evidence p. 222
166. Evidence p. 730
167. Evidence p. 756
168. Evidence p. 761
169. Evidence p. 1331
170. Evidence p. 441
171. Evidence p. 1297
172. Evidence p. 1297

173. Evidence p. 429
174. Evidence p. 430
175. Evidence p. 431
176. Peter Benesh, 'Drugs are the weapons in war: Francis', The Sydney Morning Herald, 9 March 1989
177. Evidence p. 198
178. Evidence p. 33
179. Evidence p. 34
180. Evidence p. 6k
181. Submission No. 10 p. 4
182. National Program on Drugs in Sport. Report into the requirements for Sports Drug Testing in Australia, 1987. p. 29
183. Evidence pp. 63-5
184. Evidence pp. 245-6
185. Survey of Drug Abuse in Australian Sport, Australian Sports Medicine Federation, December 1982, p. 159
186. Evidence pp. 1299-1300
187. Evidence p. 99