

At-Risk Health Behaviors of Collegiate Athletes

It is perhaps a common perception that collegiate athletes are automatically healthier and more attentive to their overall well being. Indeed, Nattiv and Puffer in, "Lifestyles and Health Risks of Collegiate Athletes," suggested that college athletes appear to be at a higher risk for certain lifestyle behaviors. The added emotional, physical, and mental stress from athletics may result in certain maladaptive behaviors in athletes. (8)

The Nattiv and Puffer study suggests several risky health behaviors of athletes including: a greater quantity of alcohol consumed per sitting, more frequent driving while intoxicated from alcohol or drugs, less frequent use of seatbelts, less frequent use of contraception, increased frequency of sexually transmitted diseases, and an increased number of sexual partners. There were no significant differences between athletes and non-athletes regarding frequency of alcohol consumption or use of marijuana, amphetamines, cocaine, anabolic steroids, cigarettes, or smokeless tobacco. (8) The following sections examine the incidence of at-risk behaviors among athletes in terms of: tobacco use, alcohol use, drug use, and eating behaviors.

Tobacco Use

The use of tobacco, in both a smoking and smokeless form, has been a growing concern in the past decade. (8) Research has proven the harmful side effects of tobacco use and warnings are now posted to ensure that individuals in society are forewarned of the damage that tobacco use may cause. Limited research exists on the use of cigarettes by athletes. The research that does include cigarette smoking does not indicate a significant difference between athletes and non-athletes.

However, especially for male athletes, smokeless tobacco has become a growing concern in the athletic population. The National College Athletic Association stated that, "31% of all college athletes surveyed started using smokeless tobacco during or after their freshmen year of college". (6) The prevalence of smokeless tobacco use has become an area of interest because of the extreme negative health effects associated with it. Smokeless tobacco use has been associated with oral cancer, oral leukoplakia, periodontal disease, and nicotine addiction. In a study, "Prevalence, Patterns, and Correlations of Spit Tobacco Use In a College Athletic Population," college varsity baseball athletes were found to be an extremely high-risk group for smokeless tobacco use. (10)

Using smokeless tobacco is often associated with other high-risk health behaviors. In a study by Walsh, there was a strong association between the use of smokeless tobacco and heavy alcohol consumption among college athletes. Cigarette smoking was also related to the use of smokeless tobacco and heavy alcohol consumption among college athletes. (10) Overall, smokeless tobacco use was definitely a high-risk health behavior, especially in certain male dominated sports such as baseball and football.

Alcohol Use

Alcohol use and abuse continues to be an area of concern in college students. Dimeff and Marlatt suggest that the prevalence of drinking alcohol among college students ranges from 73-98 percent of the student population. Alcohol is the most frequently used drug by college students and athletes. However, athletes tend to limit drinking to weekends and special occasions and they also thought of drinking more as celebration. (9)

Some research has been conducted specifically concerning collegiate women athletes and alcohol use. College women may experience more risky drinking situations. For example, male counterparts, despite size and weight differences, often influence the drinking patterns and pace of women. An affiliation with a social group such as an athletic team also increased the risk of drinking. The relationship between alcohol abuse and eating disorders has also been documented. For example, women who abuse alcohol have an increased risk of eating disorders and disordered eating. Patterns of alcohol use may vary for women athletes depending on the sports season. A risk of heavier use of alcohol may increase during the off-season and alcohol may be used more to relax than cope with competition. (3)

Finally, athletes are more likely to believe that drinking is a risky behavior and damaging to health. However, they do not necessarily drink less than non-athletes. Participation in athletics may exert three specific influences on drinking behavior in college students. These influences include: (a) it may influence the drink of choice, (b) structure the experiences of athletes so that drinking behaviors become more similar among the athletes, and (c) cause drinking to occur outside of the school week. (9) Thus, it is evident that alcohol use and abuse is a concern for collegiate athletes.

Drug Use

Drug use by athletes at both the collegiate and professional levels has become an area of concern. Performance-enhancing drugs have turned a spotlight on the incidence of athletes using drugs. (5) When discussing drugs and athletes, there are two major drug classifications: recreational and performance-enhancing drugs. Recreational drugs are taken for enjoyment and pleasure or to relax. According to Evans, Weinberg, and Jackson, anabolic steroids are the most popular performance enhancer, which, “increase muscle size, and strength, improve recovery time between workouts, and increase aggressive behavior.” (4)

Few differences are found between male and female athletes. However, male athletes are more prone to use anabolic steroids. (4) Marijuana was found to be the most commonly used illegal substance among college athletes. (5) A study conducted by the Big Ten Intercollegiate Conference estimated that approximately 20 percent of the student-athletes surveyed either misused or abused alcohol, 22-36 percent reported using marijuana, 6-12 percent reported using cocaine, 6-9 percent reported using amphetamines, and 2-7 percent had used anabolic steroids. (7)

The frequency of drug testing for athletes has increased during recent years as an increased number of athletes have been banned from participating in sports. Governing bodies of various professional and amateur sports have implemented policies and programs to address substance abuse. The National Collegiate Athletic Association has started mandatory drug testing at bowl games and championships. Also, many colleges

and universities have developed their own drug testing policies for their athletes.(7) The implementation of such stringent drug testing procedures has helped to control and limit the use and abuse of drugs by athletes.

Eating Disorders

Eating disorders in athletes have become an area of concern in recent years. While more prevalent in female athletes and female sports, eating disorders have long-term and permanent adverse health effects. At some point in their career, almost all athletes are concerned about their body weight. However, weight loss and weight gain can be a very crucial and beneficial part of an athletic training program. When athletes lose weight too rapidly or attempt to maintain a weight loss below the desirable level, it becomes a concern. Losing weight rapidly or maintaining very low body weight may affect both weight regulation and athletic performance. (2)

Eating disorders fall into two categories, anorexia nervosa and bulimia. Anorexia nervosa, “is a psychological disease characterized by an intense fear of becoming obese, a disturbed body image, a significant weight loss, the refusal to maintain normal body weight, and amenorrhea.” (11) Bulimia is, “an episodic eating pattern of uncontrollable food binging followed by purging and characterized by an awareness that the pattern is abnormal, fear of being unable to stop eating voluntarily, depressed mood, and self-deprecation.” (11)

Eating disorders are more prevalent among female athletes than male athletes. Also, gymnastics and wrestling are high-risk sports for disordered eating. (1) In a study conducted by Burckes-Miller and Black, it was found that approximately 1 in 33 college athletes met the criteria for anorexia nervosa. Also, the results showed that one in five college athletes could be classified as bulimic. (2)

The prevalence of eating disorders in athletes and the recent deaths of athletes as a result of trying to drop weight raise a major concern. The role of athletics in the development of an eating disorder is still unclear. However, there is a direct parallel between running and anorexia nervosa. Also, extreme exercise such as long distance running may serve as a trigger for eliciting anorexia nervosa in people who are at risk psychologically and biologically for developing an eating disorder. (2)

Prevention and Intervention Strategies

Collegiate athletes engage in risky health behaviors and the most important step in solving this health issue is to prevent the risky health behaviors from taking place. However, intervention strategies may be needed to help prevent and stop these risky health behaviors.

In a study by Walsh, it is suggested, “for nonusers, an educational component that presents the facts about smokeless tobacco is a logical first step in prevention efforts.” (10) This study also provides support for the assertion that educational programs stressing health and social outcomes might strengthen the motivation of nonusing athletes to remain nonusing. Finally, the most effective and promising preventive programs have been comprehensive psychosocial interventions designed to train adolescents in interpersonal skills thought to be effective in resisting social influences to use tobacco. (10)

Drug use is also a health behavior that is of concern. For drug use, coaches and athletic trainers need to be aware of the signs and symptoms of drug use, especially anger and fatigue among athletes. In order to combat a drug problem, athletes also need to be taught more effective coping techniques and study skills that would help them deal with the many pressures and problems unique to being both college athletes and a student. (4)

Finally, eating disorders are an area that requires intervention strategies. Along with the other risky health behaviors, eating disorders are an area that may eventually involve all members of the athletic team staff: coach, athletic trainer, team physician, nutritionist, and psychologist. Five practical implications when working with athletes who have an eating disorder include:

1. Paying attention to unusual habits related to food and weight
2. Frequent weighing of athletes
3. Not pressuring the athlete to gain or lose weight
4. Referring to an eating disorder specialist
5. Requiring attendance in health education classes concerning proper nutrition and the appropriate use of weight management techniques. (2)

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1. Smokeless tobacco use has been associated with which of the following:
 - a. Periodontal disease
 - b. Nicotine addiction
 - c. Oral cancer
 - d. Oral leukoplakia
 - e. All of the above
2. Participation in athletics may exert which of the following specific influences on drinking behavior in college students:
 - a. Cause drinking to occur outside of the school week
 - b. Structure the experiences of athletes so that drinking behaviors become more similar among the athletes
 - c. Both A and B
 - d. Only B
3. What are the two major classifications of drugs when discussing drugs and athletes?
 - a. Performance-enhancing and marijuana
 - b. Marijuana and amphetamines
 - c. Recreational drugs and performance-enhancing
 - d. Amphetamines and recreational drugs
4. The most commonly used illegal substance among college athletes is:
 - a. Cocaine
 - b. Marijuana
 - c. Amphetamines
 - d. Anabolic steroids
5. What is the eating disorder characterized by an intense fear of becoming obese, a disturbed body image, the refusal to maintain normal body weight, and a significant weight loss:
 - a. Bulimia nervosa
 - b. Anorexia nervosa
 - c. Both of the above
 - d. None of the above
6. What is the eating disorder characterized by an episodic eating pattern of uncontrollable food bingeing followed by purging?
 - a. Bulimia nervosa
 - b. Anorexia nervosa
 - c. Both of the above
 - d. None of the above

7. Which of the following are high-risk sports for eating disorders?
 - a. Gymnastics
 - b. Basketball
 - c. Wrestling
 - d. A Only
 - e. A and C

8. Cigarette smoking is related to the use of smokeless tobacco and heavy alcohol consumption among college athletes.
 - a. True
 - b. False

9. Women who abuse alcohol do not have an increased risk of eating disorders and disordered eating.
 - a. True
 - b. False

10. The most important step in solving at-risk health behaviors is:
 - a. Treating the athlete
 - b. Preventing the at-risk health behavior
 - c. Ignoring the at-risk health behavior
 - d. None of the above

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Record answers here. Clearly circle ONE answer.

1. A B C D

8. A B C D

2. A B C D

9. A B C D

3. A B C D

10. A B C D

4. A B C D

5. A B C D

6. A B C D

7. A B C D