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## Effect of alcohol on sports performance and different body systems

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### Abstract

As an athlete, you know that achieving optimal performance involves practicing hard, hitting the weight room and being on top of your game both mentally and physically. However, many athletes tend to underestimate the way in which alcohol use, even a few drinks, can nullify your hard work by erasing the effects of your workouts, reducing your endurance and compromising your mental game. The structure of the athletic season sometimes lends itself to small windows of opportunity to “party” that can contribute to nights of heavy binge drinking or over-indulgence, ending in situations of regret, blackouts, legal problems, and sometimes team and university sanctions. The purpose of this investigation was to identify the Effects of alcohol on sports performance and physical fitness.

**Keywords:** Alcohol, Sports performance, Physical fitness.

### 1. Introduction

**Alcohol:** Alcohol (ethyl alcohol, ethanol) is a drug, but technically it can also be classified as a nutrient because it provides energy, about 7 kcal per gram. One drink of alcohol is considered to be an amount typically found in 340 ml of beer, 114 ml of wine or 35 ml of 40 percent (80 proof) spirits. Alcohol affects all cells in the body but the most immediate physiological and psychological effects are on the brain. Although alcohol is classified as a depressant drug, it may elicit a transient stimulant effect, and it has been theorized by some authors to be ergogenic for both these effects. How alcohol affects a person depends on the amount consumed, the environmental context, and individual differences in capacity. Overuse of alcohol is harmful for sports performance and physical fitness so, we can securely say that Alcohol affects a lot on performance and we can't achieve our goals while using them in our life.

### 2. Objective of the study

- To find out the effect of Alcohol on sports performance and different body systems.

### 3. Sports and Alcohol

Alcohol is an ergolytic acid to sports performance. This means that alcohol will detract from, not improve, and exercise performance. Alcohol intake negatively impacts on a variety of psychomotor skills essential for successful exercise performance, including reaction time, balance and hand-eye coordination. It is important to note that alcohol is banned in some sports during competition. Although most athletes do not use alcohol immediately before exercise, consuming alcohol in bingers during the week or on weekend, is likely to affect recovery from exercise performance on subsequent days.

#### 3.1 Short – term Effects

- Alcohol is widely reported as causing dehydration.
- Binge drinking exacerbates soft tissue injury
- Alcohol increases blood flow to the area, which is likely to extend recovery time following injury.
- Slower decision making.
- Alcohol may increase your risk of serious injury from an accident or being involved in a brawl.

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### 3.2 Long- term Effects

- In the long term, regular binge drinking can add significant kilojoules. People talk a lot about the carbohydrate in beer as the reason for men putting on weight.
- The athlete being distracted from carrying out appropriate recovery strategies to help the body rehydrate and facilitate muscular repair.
- Athletes might place themselves at an increase at an increased risk of violence or being involved in a brawl, leading to serious injury and/or adverse publicity.

### 3.3 Effects of alcohol on sports performance

Alcohol has been described as a performance impairing drug. Exercise is a complex activity utilizing many of the body's organ systems; alcohol exerts an effect on most of these systems, including the central nervous system, muscle energy stores and the cardiovascular system. Overall, alcohol is detrimental to sports the body during exercise performance because of how it affects Alcohol has been described as a performance impairing drug. Exercise is a complex activity utilizing many of the body's organ systems; alcohol exerts an effect on most of these systems, including the central nervous system, muscle energy stores and the cardiovascular system.

- Greater risk of muscle cramps
- Reduced Endurance
- Slower reactions
- Dehydration
- Vitamin and Mineral Depletion
- Reduced aerobic performance
- Muscle Injury
- Alcohol and motor skills
- Alcohol and strength, power, and short-term performances

### 3.4 How alcohol affects your different systems

Alcohol affects you even after you've finished drinking. Alcohol affects the central nervous system and slows down the information processing ability of the brain. This in turn slows down your reaction time, hand-eye-coordination, accuracy and balance. Even a small number of drinks can affect performance these affects are under below:

- Alcohol affects the central nervous system and slows down the information processing ability of the brain.
- Alcohol keeps the liver too busy to produce the required sugar levels to sustain an athlete's energy and stamina to perform at their peak.
- Alcohol decreased hand tremors slowed reaction time decreased hand-eye coordination further slowed reaction time and reduces body's functional activity and playing efficiently, balance and judgment and decreased hand-eye Coordination.
- Alcohol Increase the risk of dehydration and impaired tracking, visual search, Recognition and response skills Weakness brain and its nerves, both the extension and contraction of muscles decreases and muscles do not exert maximum force.
- Alcohol decrease in overall performance levels lowed running and cycling times weakening of the pumping force of the heart impaired temperature regulation during exercise decreased grip strength, decreased jump height, and

- Alcohol decreased 200- and 400-meter run performance faster fatigue during high waster's energy, strength, power, speed, endurance and causes early tiredness and fatigue leading to poor performance in play.

### 4. Conclusion

So, no matter how much training and conditioning you have put in, drinking up to 72 hours before a match will take the edge off your fitness. If you want to be the very best you can be at your sports, you will have more of a chance of achieving that by not drinking alcohol However , if you do want to drink it's best to drink a little and not too often. As a result, your coordination, dexterity, concentration and reactions could be adversely affected too.

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