**ALCOHOL AND ATHLETIC PERFORMANCE**

Alcohol and Athletic Performance:

* Consuming 5 or more alcoholic drinks in one night can affect brain and body activities for up to 3 days
* Two consecutive nights of drinking 5 or more drinks can affect brain and body activities for up to 5 days

Muscle Development and Recovery

* Alcohol use cancels out gains from your workout. Consuming alcohol after workout, practice, or game can cancel out any physiological gains from those activities. Alcohol use diminishes protein synthesis, which impedes muscle growth
* Alcohol causes dehydration and slows down the body’s ability to heal sore muscles and injuries
* Alcohol use prevents muscle recovery by impacting the production of human growth hormone while you sleep. Human growth hormone is a necessary part of the muscle-building and repair process. Alcohol can decrease the secretion of human growth hormone by 70%
* Alcohol use disrupts the water balance in your muscle cells, which harms their ability to produce adenosine triphosphate, which is your muscles’ source of energy

Nutrition and Endurance

* Alcohol use requires increased conditioning to maintain weight. Alcohol holds very little nutritional value; its calories are not converted to glycogen – a form of stored carbohydrates – and therefore are not a good source of energy during exercise. The body treats alcohol as fat, converting alcohol sugars into fatty acids
* Alcohol use inhibits absorption of vital nutrients such as thiamin (vitamin B1), vitamin B13, folic acid, and zinc. All of these nutrients are necessary for athletic performance; for example, thiamin plays a large role in how the body metabolizes carbohydrates

Brain and Memory

* Alcohol use affects your ability to learn new information, such as plays and strategies. Alcohol compromises the hippocampus (the part of the brain vital to the formation of memories)
* Memory formation is a complex process that requires a good night’s sleep. If you drink after a day of learning new information, you may not be able to retain as much information as you could if you did not drink
* Alcohol affects your sleep cycle for up to two nights after drinking

Take an Assessment

[www.checkyourdrinking.net](http://www.checkyourdrinking.net)

**MARIJUANA AND ATHLETIC PERFORMANCE**

Heart, Lungs, and Performance

* Marijuana is known to increase heart rate while decreasing cardiac stroke volume, resulting in diminished peak performance
* Marijuana use can cause a condition called tachycardia – excessively rapid heartbeat; often defined as one above 100 beats per minute in an adult (also called tachyarrhythmia)
* Smoking any substance is harmful to your lungs and can reduce the effectiveness of the body’s ability to absorb the required amount of oxygen needed for optimum sports performance
* Marijuana use can result in reduced sport performance through slowed reaction time, problems with motor coordination, hand-eye coordination, and perceptual accuracy. These effects can last for 24-36 hours after smoking
* Marijuana reduces maximal exercise capacity resulting in increased fatigability
* Marijuana use can inhibit sweating and the body’s ability to regulate its temperature

Appetite and Nutrition

* Marijuana use can affect appetite and food cravings and potentially undermine body mass and nutrition

Brain and Memory

* Marijuana impairs concentration; time appears to move more slowly
* Marijuana causes short and long-term memory loss, affecting one’s ability to learn and retain new information such as plays or strategies
* Marijuana use increases the time needed to learn new information
* Marijuana can cause difficulty in thinking and problem-solving, skills necessary for thinking quickly during a game

Myth vs. Facts

There is a myth that smoking marijuana the night before a game will increase performance by relaxing the player and helping them sleep. In reality, marijuana use often causes increased anxiety, panic, nervousness, and restlessness. Marijuana use also negatively impacts sleep quality. The truth is that marijuana has no performance-enhancing potential. Skill impairment due to marijuana use may last up to 24-36 hours after usage, affecting one’s performance at the game the next day

Take a Self-Assessment

[www.checkyourcannabis.net](http://www.checkyourcannabis.net)

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