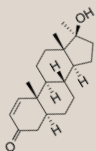


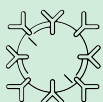
Substance Use and the Chemical Effects on Athletic Performance



Alcohol can cause severe dehydration leading to cramps, muscle pulls/strains₁



Males: Alcohol, when consumed in amounts typical with binge drinkers, can dramatically decrease serum testosterone levels. Decreases in testosterone are associated with decrease in aggression, lean muscle mass, muscle recovery, and overall athletic performance.₂



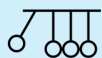
Alcohol reduces the immune system capability- Athletes who party get sick more often.₃



Females: Alcohol is stored much like fat in the body and consumption increases fat storage and adversely affects body composition (increases % body fat)₄



Alcohol reduces performance potential by up to 11.4% in elite athletes and perhaps by as much as 20-30% in high school athletes (that means if you drink on the weekends and run a 6 second 40 yard dash, you are being slowed down from running it in 4.5 seconds)₅



Alcohol impairs reaction time up to 12 hours after consumption₅



Heavy episodic drinking results in projected losses of up to 14 days of training effect₅



Alcohol negatively affects heart, lungs, and muscle performance increasing soreness.₅



Alcohol decreases vertical jump, start up speed, lateral speed, acceleration speed, explosive power, power endurance, speed endurance.₅



Alcohol has a detrimental effect on both the quality of sleep and on daytime attention₆

References: 1: Maughan, R. J., & Shirreffs, S. M. (2010). Dehydration and rehydration in competitive sport. *Scandinavian journal of medicine & science in sports*, 20, 40-47. 2: Gordon, G. G., Altman, K., Southren, A. L., Rubin, E., & Lieber, C. S. (1976). Effect of alcohol (ethanol) administration on sex-hormone metabolism in normal men. *New England Journal of Medicine*, 295(15), 793-797. 3: El-Sayed, M. S., Ali, N., & Ali, Z. E. S. (2005). Interaction between alcohol and exercise. *Sports Medicine*, 35(3), 257-269. 4: Clark, M., Reed, D. B., Crouse, S. F., & Armstrong, R. B. (2003). Pre- and post-season dietary intake, body composition, and performance indices of NCAA division I female soccer players. *International journal of sport nutrition and exercise metabolism*, 13(3), 303-319. 5: Maughan, R. J., Shirreffs, S. M., Ozgüven, K. T., Kurdak, S. S., Ersöz, G., Binnet, M. S., & Dvorak, J. I. R. I. (2010). Living, training and playing in the heat: challenges to the football player and strategies for coping with environmental extremes. *Scandinavian journal of medicine & science in sports*, 20, 117-124. 6: Singleton, R. A., & Wolfson, A. R. (2009). Alcohol consumption, sleep, and academic performance among college students. *Journal of Studies on Alcohol and Drugs*, 70(3), 355-363.

Fast facts about alcohol and marijuana dependence/effects:

40% (2 in 5) of 15 year olds who drink become alcoholics₁



7% (1 in 14) of adults who begin drinking at age 21 become alcoholics₂



17% (1 in 6) of teenagers who smoke marijuana becomes addicted₃



9% (1 in 11) of adults who begin smoking marijuana become addicted₄



Teenagers who smoke marijuana at age 15 are 4 times more likely to suffer from depression or anxiety as adults₅



Top Ten team bonding suggestions

for athletes to get together and socialize above the influence of alcohol, marijuana, and other drugs

1. Weekend pasta/pizza night
2. Game/poker night
3. Scavenger Hunt
4. Watch a sports game together on Big Screen
5. Movie night
6. Go to a sports game together
7. Go bowling together
8. Go ice skating together
9. Go to the pool together
10. Bonfire/Sleepover substance free party

References:

- 1: Grant, B. F., & Dawson, D. A. (1997). Age at onset of alcohol use and its association with DSM-IV alcohol abuse and dependence: results from the National Longitudinal Alcohol Epidemiologic Survey. *Journal of substance abuse*, 9, 103-110.
- 2: Hingson, R. W., Heeren, T., & Winter, M. R. (2006). Age at drinking onset and alcohol dependence: age at onset, duration, and severity. *Archives of pediatrics & adolescent medicine*, 160(7), 739-746.
- 3: Volkow, N. D., Baler, R. D., Compton, W. M., & Weiss, S. R. (2014). Adverse health effects of marijuana use. *New England Journal of Medicine*, 370(23), 2219-2227.
- 4: Chen, C. Y., O'Brien, M. S., & Anthony, J. C. (2005). Who becomes cannabis dependent soon after onset of use? Epidemiological evidence from the United States: 2000-2001. *Drug and alcohol dependence*, 79(1), 11-22.
- 5: Saluja, G., Iachan, R., Scheidt, P. C., Overpeck, M. D., Sun, W., & Giedd, J. N. (2004). Prevalence of and risk factors for depressive symptoms among young adolescents. *Archives of pediatrics & adolescent medicine*, 158(8), 760-765.

The mission of CLOSE Community is to collaboratively initiate, coordinate, and sustain prevention and intervention efforts that reduce and address youth substance use and the impact of substance use disorders within the Town of Longmeadow.

