

Alcohol and Athletic Performance

Muscle Development and Recovery:

- **Alcohol cancels out gains from your workout.**
 - Not only does long-term alcohol use diminish protein synthesis resulting in a decrease in muscle build-up, but even short-term alcohol use can impede muscle growth.
- **Alcohol (a toxin) causes dehydration and slows down the body's ability to heal.**
- **Alcohol use prevents muscle recovery.**
 - Because of its effect on sleep, your body is robbed of a precious chemical called “human growth hormone” or HGH. HGH is part of the normal muscle-building and repair process. Alcohol can decrease the secretion of HGH by as much as 70 percent!
- **Alcohol use depletes your source of energy.**
 - It can disrupt the water balance in your muscle cells, thus altering their ability to produce adenosine triphosphate (ATP)—your muscles' source of energy. Alcohol also reduces energy stores by inhibiting gluconeogenesis, which is the process of forming glucose from other substrates.

Ability to Learn New Plays and Strategies:

- **Alcohol use inhibits ability to learn new information.**
 - When there is alcohol in your system, your brain's ability to learn and store new information is inhibited due to compromising of the hippocampus, a brain structure vital to the formation of memories.
- **Alcohol use hampers memory and retention.**
 - Much of memory formation occurs while you sleep, and alcohol affects your sleep cycle, thus reducing your brain's ability to learn and retain information.

Nutrition and Endurance:

- **Alcohol use constricts aerobic metabolism and endurance.**
- **Alcohol use requires increased conditioning to maintain weight.**
 - The relatively high calories in alcohol are not available to your muscles. Each drink contains approx. 100-150 empty calories. The body treats alcohol as fat, converting alcohol sugars to fatty acids.
- **Alcohol use inhibits absorption of nutrients.**
 - Alcohol inhibits the absorption and usage of vital nutrients such as thiamin (vitamin B₁), vitamin B₁₂, folic acid, and zinc.

Consuming 5 or more alcoholic beverages in 1 night can affect brain and body activities for up to 3 days.

Two consecutive nights of drinking 5 or more alcoholic beverages can affect brain and body activities for up to 5 days.