



## Sport Nutrition

Tip of the Month | December 2010



# Alcohol and Athletes

Traditionally many athletes consume alcohol after games or competitions to relax and celebrate. What they may not know is that alcohol can negatively affect physical and mental performance.

Alcohol affects all major body systems. Here's how alcohol can negatively affect your body, and your ability to perform at your personal best.

### Get the Facts !

#### Alcohol can impair athletic performance\*

- Reduces performance potential by up to 11% in elite athletes and perhaps by as much as 15-30% in high school athletes.
- Impairs the athlete's reaction time for up to 12 hours after consumption.
- Delays exercise recovery. Alcohol impairs blood glucose for up to 36 hours, affecting energy production and optimum physical/mental performance.
- Decreases protein synthesis for repair of muscle tissue during post-exercise/recovery.
- Reduces HGH release up to 70% during the sleeping hours when (normal) release is at peak levels – negating the ability to efficiently build/maintain muscle mass.
- Greatly increases the release of the stress hormone *cortisol* – negating the training effect.
- Depresses the immune system. Statistics show athletes who “drink” get sick more often.
- “Drinkers” are twice as likely to become injured as non-drinkers.
- Heavy episodic drinking (i.e. binge drinking) results in projected losses of up to 14 days of training effect.



“ Contrary to popular belief alcohol is **not a stimulant** but a **central nervous system depressant** , ,

#### Did you know?

Contrary to popular belief alcohol is NOT A STIMULANT but a CENTRAL NERVOUS SYSTEM DEPRESSANT. Alcohol works against the athlete in coping with the stress of training and competition. *If you are already depressed, drinking more alcohol may be a real downer.*

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- It takes one hour to metabolize 1 regular alcoholic drink:  
**12 oz beer, 4 oz wine, 1.5 oz distilled spirits (gin, vodka, rum, whiskey) (1 oz = 30 ml)**
- Drinking “doubles” affects you sooner and lasts longer due to alcohol being metabolized at a fixed rate by the liver.
- “Holding your alcohol” is not a sign of maturity and could be a sign of dependency.
- Carbonated alcoholic drinks may speed up intoxication as they pass through the stomach to the intestine faster when alcohol is absorbed.
- Black coffee or a cold shower will not sober you up or improve your judgment skills.
- Eating special foods or taking vitamins will not reduce the severity of a hangover. The main symptoms of a hangover are due to dehydration.
- Energy drinks with caffeine (e.g. Red Bull) when combined with alcohol are potentially dangerous, increasing the athlete’s risk of injury, especially when driving.
- Excess alcohol (7 kcal per gram) can increase body weight; it will also delay the use of fat as a metabolic fuel during exercise.



### Nutrition Tips

- Athletes should always hydrate with water, sport drinks, juices and/or milk post-exercise to fully hydrate *before* consuming any alcohol.
- Assure adequate carbohydrates, a major source of B vitamins, for post-exercise recovery.
- Serious athletes in training say “**NO**” to alcohol.

### Alcohol and Weight

Want to get rid of that “Beer belly”? To lose one lb/wk (3500 Kcal) you need to decrease 500 Kcal/day. Cutting out three beers/day = 450 kcal. Alcohol has 7 calories per gram, almost as much as fat (9 calories per gram).

### Canadian Recommendations

If you consume > 7-14 drinks/week (i.e. > 2 drinks/day) then you are exceeding the *Recommendations by Canadian Physicians*:

**Men: no more than two units/day**

**Women: one unit/day or less**

1 unit = 10 oz can beer, 4 oz. wine, 1.5 oz distilled spirits (gin, rum, whiskey, vodka)

### ATHLETES AND ALCOHOL DON'T MIX!

\* American Athletic Institute - [americanathleticinstitute.org](http://americanathleticinstitute.org)

