



Does caffeine affect athletic performance?

Question

Alice,

I play on the varsity soccer team. My team's coach and captains have told us not to drink beverages with caffeine because they dehydrate you. Is this true? Are there any other harmful effects of caffeine on athletes?

Answer

Dear Reader,

To caffeinate or not, that is the question. Though caffeine is a diuretic, meaning that it causes a person to urinate more often, there's no evidence to suggest that it leads to dehydration or overall fluid loss. In fact, several studies, under various conditions, show that consuming caffeine prior to physical activity has no additional effect on sweat rates, total body water loss, or negative effects on athletic performance as compared to non-caffeinated products — and it may even provide a boost for you out on the soccer field!

Caffeine is considered an ergogenic aid — a drug that increases performance as a result of the physiological effects it has on the body. Many studies have noted findings that caffeine consumption improves performance in endurance events, such as long distance running or cycling. A review of literature on the effects of ingesting caffeine before short-term and high-intensity physical activity concludes that the substance may also aid athletes' performance in team sport activities that require repetitive sprinting (such as soccer). Others believe that the stimulant effect of caffeine may help with alertness, mental clarity, and overall mood, all of which could be helpful during a workout. Research on caffeine and athletic performance suggests that the maximum benefits may be achieved by ingesting three to six milligrams of caffeine per kilogram of body weight, which translates to about three to four cups of a caffeinated beverage per day for most people. Consuming more than this amount doesn't seem to have any added benefit to athletic performance. Additionally, those who are regular consumers of caffeine are unlikely to receive the same boost as their bodies can adapt to the caffeine consumption.

Despite the benefits, caffeine affects people in different ways. While some people might notice a performance boost, others might suffer from restlessness, headaches, muscle tremblings, nervousness, abdominal cramps, or nausea — definitely not desirable on game day. Caffeine can also interfere with sleep patterns, which can leave you feeling not well-rested when it comes time to play. Do you notice that you experience some of these issues when you add caffeine to your diet? If so, you might want to opt out and focus your efforts on proper training, rest, and nutrition for optimal performance. Not only may it have undesirable side effects on the body for some, but it's also considered a banned substance at certain levels of play (such as at the college level). Consuming too much caffeine in those situations could get a player benched, so both now and in the future, it could be wise to find out if it's a banned substance for you. If you don't have any negative reactions and it's not a banned substance, you can rest assured that caffeine doesn't seem to cause excessive dehydration (though it's good to drink plenty of water and other non-caffeinated drinks, too) and may actually be of benefit when you're on the field!

Header: 2

Category

Alcohol & Other Drugs

Caffeine, Energy Boosters, & Other Performance Enhancing Drugs

Nutrition & Physical Activity

Fitness

Source URL: *:///answered-questions/does-caffeine-affect-athletic-performance*

List of links present in page

- *:///answered-questions/does-caffeine-affect-athletic-performance*
- *:///category/alcohol-other-drugs*
- *:///category/caffeine-energy-boosters-other-performance-enhancing-drugs*
- *:///category/nutrition-physical-activity*
- *:///category/fitness*
- *:///node/19285/printable/print*