Caffeine and Athletic Performance

How does caffeine affect athletic performance?

Many people like caffeine because it makes them feel more alert, gives them more energy, improves their mood, and makes them more productive. Athletes often use caffeine to help them perform better, both in routine workouts and in competition.

Like other drugs, caffeine can provide some benefits, but too much can lead to problems. The effect of caffeine on athletic performance has been studied since the 1800s. Caffeine affects many parts of the body:

- It stimulates the brain and makes you feel wide awake, energetic, and better able to concentrate.
- It makes your heart beat faster.
- It helps muscles to work better, and improves coordination and speed.
- It aids digestion by increasing the amount of acid made by the stomach.
- It increases the burning of fat.

Many studies have shown caffeine improves aerobic performance. Caffeine has limited benefits in weight training.

What are the side effects of athletes taking caffeine?

Side effects are dose related – the higher the dose the more side effects. Side effects from caffeine include:

- Restlessness, jumpiness, anxiety, and trouble sleeping
- A fast or irregular heartbeat
- Twitching muscles
- Nausea
- Stomach pain

In the past it has been thought that caffeine can cause your body to make more urine and lose too much fluid (dehydration). However, recent research has shown that this is not true. Coffee and other caffeinated drinks like tea hydrate you just like other fluids do.

Is there a limit on how much caffeine I can have?

The current list of drugs banned by the International Olympic Committee (IOC) contains more than 40 different stimulants. Caffeine used to be on this list, but it was taken off of the list in January 2005.

Taking 100 mg to 300 mg would be enough to improve your performance. Doses higher than 300 mg also have been shown to increase performance, but side effects increase.

What are common sources of caffeine?

The table below lists items that contain caffeine.

Product	Milligrams (mg) of Caffeine per Dose
1 cup of coffee	100 (mg)
1 Red Bull Drink (8.4 oz)	80 mg
1 Monster Energy Drink (16 oz)	160 mg
1 Diet Coke (12 oz)	46 mg
1 NO DOZ	100 mg
1 Anacin	32 mg
1 Excedrin	65 mg

What should I keep in mind?

1. Be aware of the caffeine in your food, drinks, and medicine, including nonprescription drugs.
2. Know how much caffeine you consume during the course of a day.
3. Listen to your body. Know how caffeine affects you. If you have ill effects from caffeine, cut back.
4. Don't try using caffeine to give you a boost during competition if you haven't used caffeine before.
5. If you feel like coffee improves your performance, be sure you don't take so much that you have unwanted side effects.
6. Be careful when you use caffeine. It is easy to build tolerance, which means that you need to use more and more, or use it more often to get the same effects.
7. Caffeine withdrawal can cause mood shifts, headaches, nausea, tremors, and fatigue.

Use caffeine carefully. Too much caffeine may be bad for you.

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