# CAFFEINE

Dietary Supplement in Sports Performance

Caffeine is not just a cup of coffee....



Considered a drug it offers stimulant effects that come from a natural chemical. Caffeine is found in over 60 products from various food sources, beverages, energy drinks & bars, gels, pills, supplements and even medications. Pills contain natural or synthetic form of caffeine.



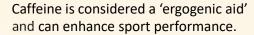
Caffeine ~ most popular drug in the United States

Positive effects for enhanced endurance exercise performance from triathlons, team sports and even for short duration sports.



Caffeine is one of the top world wide supplements available ~ Most powerful and performance enhancing legal supplement there is.

# **Improved Physical Performance**





# **Moderate Intake of Caffeine**

Can improve physical performance during endurance exercise. May enhance weight loss, cognitive function, alertness, produce energy boost and helps keep you focused.

Functions by activating the central nervous system, heart, muscles and the centers that regulate blood pressure.

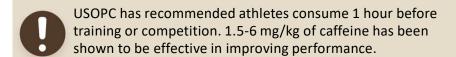
Caffeine has many positive effects to Enhanced endurance.

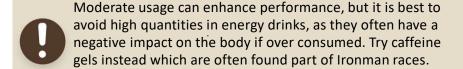












A moderate or normal amount of caffeine should be 400 mg or less, according to the Food and Drug Administration (FDA)

- 8 ounce (oz) cup of tea contains 30-50 mg of caffeine
- 8 ounce (oz) cup of coffee contains 80-100 mg of caffeine
- 8 ounce (oz) energy drink can contains 40-250 mg of caffeine

# Enhanced Performance

European Food Safety Agency (EFSA) recognizes that caffeine can increase endurance performance.



# Energy Drink A drink can equals 160 – 300 mg of caffeine Has high negative impact on body if over consumed

**Dietary Supplement in Sports Performance** 

### **BENEFITS**



Moderate dosages of Caffeine are safe and beneficial

- · Provide Boost of Energy reducing fatigue
- Provide Alternes, Focus and Concentration
- Caffeine activates hormones responsible for Fight or Flight response which can increase performance
- Increase feelings of wellness by utilizing Endorphins
- Fat Burning, Body temperature and Muscle activation

# **NEGATIVE EFFECTS**

Higer dosages of caffeine can cause unpleasant side effects and be unpleasant on the body with negative impacts.

Soccer America says carbonated soda as a caffeine source can cause bloating and stomach upset. Also best to avoid Energy drinks.

3 cups of coffee or more can cause:

- · Bladder problems, Inconsistencies
- · Upset stomach, Chronic Headaches, Irritability
- Shakiness, Disrupted sleep, Nervousness, Anxiety, Dizziness and Dehydration



# Did You Know?

A single teaspoon of pure caffeine is equivalent to 28 cups of coffee

According to NCAA 5 to 8 cups (500 mg or more) of caffeine prior to a sports competition can result in disqualification with a positive drug test. If you are going to compete, have a small or moderate dose but do so about 2-3 hours prior.

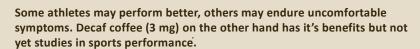
Caffeine is very popular with Athletes, but high dosage of pills or supplements can be hazardous with anxiety, rapid heartbeat, sweating, nausea and even cardiac arrest. Be sure to follow correct guidelines and take a moderate dose.

Caffeine has been banned before sports competitions

Research proves caffeine can improve sport performance if done right.

- PubMed RCT (2016) of a group of cyclists consumed either 100 and 200 mg doses of caffeine late in exercise. Did this improve Time trial (TT) performance? 15 people were part of the study (11 male, 4 female) with average age of 22.5 years. 120 minutes of cycling with 80-minute intervals proved there is no difference between heart rate, glucose, body mass or urine testing between treatments. But it did prove that both dosages of caffeine delivered late in their cycle routine/exercise in fact improved performance.
- The Journal of Strength & Conditioning proved that caffeine can improve
  cognitive aspects of performance when an athlete has not slept well. They
  suggest athletes should stop all caffeine intake one week in advance before any
  competition to ensure their performance is optimal. Caffeine when used on
  race day will have same benefits as before.

Regular caffeinated pills, supplements or even a cup of coffee may aid athletes with higher levels of endurance with quick energy boosts. Caffeine is known to improve reaction times, focus and physical performance.



Caffeine benefits are plenty if consumed correctly.



In 2014 the World Anti-Doping Agency (WADA) listed caffeine as a prohibited drug because of it's widespread use in food, drinks and supplements prior to Sports Competitions.

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