

Fisher-Titus Medical Center

SPORTS INJURY GUIDELINES

“The Winning Team for Your Athletic Health Care Needs”

Just say “No” to Energy Drinks

(Redbull, AMP, Full Throttle, etc)

Introduction

Concerns are growing among the healthcare community in regards to the alarming number of high school athletes that are guzzling highly caffeinated energy drinks to boost their sports performance. “Energy drinks are one of the fastest-growing segments of the beverage industry”, according to the Beverage Marketing Corp. The 3 billion energy drink industry is largely targeted at teenagers and young adults. Furthermore, the drink’s ergonomic – or performance enhancing – claims have been proven tempting to high school athletes seeking an edge over their competitors. Downing a few energy drinks, they believe, might give them an advantage over other athletes.

“Energy” Drinks: Help, Harm or Hype?

How much caffeine do energy drinks contain and how does this compare with other caffeine-containing beverages? The typical energy drink provides about 80mg of caffeine per can although this varies between brands. This is about twice as much as a 12 oz. soda or roughly the equivalent of an 8 oz. cup of coffee. Many, however contain even more caffeine (16oz. Full Throttle=144mg). There is no doubt that caffeine is an effective “ergogenic aid” (enhances physical performance) and an aid to cognitive performance as it stimulates cardiac output and the central nervous system. Due to this, the International Olympic Committee (IOC) has banned its use above a certain level. But as with many substances, if little is good, more is NOT better. It is safe to say that ingesting caffeine carries with it a risk of increased blood pressure, anxiety, shaking, elevated heart rate and increased urine production (increased risk of dehydration).

Other Ingredients Often Found in Energy Drinks

Sugar/Carbohydrates – In too high a concentration will slow the rate at which fluids are reabsorbed from the intestine into the blood. This will impede rehydration during exercise when rapid replacement of sweat loss is important.

Herbs – Many energy drinks contain herbal forms of caffeine. Because there is a wide variability in the processing of these herbs, it is nearly impossible to know the exact amounts of caffeine or other components contained in energy drinks.

Protein – Protein is used as a fuel for exercise, but in negligible amounts, so adding protein to a beverage containing energy from carbohydrates will provide no performance advantage for an athlete.

Source: Gatorade Sports Science Institute

Serious Stimulants:

A look at some drinks with the highest caffeine content.

COFFEE

Coffee (7 ounces)	80-135 mg
Espresso (1.5-2 ounces)	100 mg

ENERGY DRINKS, SOFT DRINKS

**(milligrams per 12-ounces)*

Power Shot	1,200 mg
Rockstar Zero Carb	180 mg
SoBe No Fear	130.5 mg
Red Bull	115 mg
AMP	112 mg
Full Throttle	100 mg
Vault	70 mg
Mountain Dew	55 mg
Pepsi	37.2 mg

Summary:

- Many products marketed as energy drinks contain high concentrations of carbohydrates and some caffeine.
- The content of some of these products may result in inefficient absorption of fluid and nutrients from the intestine, with the possibility of gastrointestinal distress.
- Many energy drinks are quite costly and, because of their composition, are not suitable for use by athletes.
- Some energy drinks contain herbs, amino acids, protein, and other substances usually in such small amounts that they are unlikely to have any noticeable effect on performance.

Bottom Line:

Athletes will always be attracted to products that claim to have performance-enhancing effects. Energy drinks are NOT adequate substitutes for the time, training, rest, recovery, and fueling requirements for sports