

Energy Drinks Can Have Damaging Effects To Athletic Performance

There is an increasing concern about the effects energy drinks (Red Bull, Monster, etc.) are having on children and athletes today. Are they safe or harmful? What do all the ingredients do?

To answer these questions and understand if these drinks are safe, I will break down the ingredients and discuss their impact on the body.

The main ingredient in energy drinks that provides the 'energy boost' is caffeine. Caffeine has both positive and negative effects:

- Caffeine is considered an ergogenic aid (enhances physical performance) as it has been found to stimulate physical and cognitive function.
- Negative effects include increased blood pressure and heart rate with possible abnormal heart rhythms, disturbed sleeping patterns, bedwetting, and anxiety.

Caffeine also acts to dehydrate the body.

The negative effects can outweigh ergogenic effects with high doses and over consumption of caffeine in developing bodies and brains. A typical energy drink contains about 80mg of caffeine which is 2 times the amount of a cup of coffee, tea, or a can of soda.

The second ingredient is sugar. This sugar is your simple, refined sugar. Energy drinks are typically between 10 to 12% sugar. This is almost double the amount put in sports drinks. Here are the negative effects of sugar in energy drinks:

- A spike in blood sugar leading to a quicker fall in energy
- Decreased water absorption leading to dehydration
- Stomach distress causing nausea or vomiting

Once the sugar energy wears off (typically 30 to 40 minutes) reflexes slow, muscle power decreases and performance falls off.

Research has now shown that using this combination of caffeine and sugar together can alter proper brain function. Caffeine decreases blood flow to the brain and sugar fuels the brain. The decreased blood flow tricks the brain into having low blood sugar triggering the hunger mechanism. But the brain is getting too much sugar and this imbalance can lead to shaking, sweating, intense hunger, difficulty thinking properly, and impaired performance.

Other ingredients in energy drinks, such as vitamins, minerals, and herb have been added to "boost marketing and appeal" which ultimately lead to more sales. In all actuality there is no rationale for these additives. There is even speculation that doses of these vitamins are too high and maybe more harmful than helpful.

Vitamins, minerals, and herbs should only be purchased in pharmaceutical grades from a reputable source.

Are energy drinks safe and helpful? NO.

If you do not allow your child to drink a cup of coffee than why do they get to drink something that has double the caffeine and sugar? These drinks produce negative affects on proper brain and body function. Drinking one can before a game leads to dehydration and impaired performance. And who knows where the source of vitamins, minerals, and herbs come from, the very elements our bodies use to grow and function.

As I have stated before, the proper diet of proteins, carbohydrates, and fats with the incorporation of a high quality multivitamin and adequate hydration will give the body exactly what it needs to work properly.

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