

## WHAT ATHLETES NEED TO KNOW ABOUT “ENERGY DRINKS”

Energy is the capacity to do work, such as athletic activity. Eating an optimal amount of calories & being well hydrated are certainly necessary for work, but energy drinks typically are not formulated to work best to improve strength, speed, stamina, etc. for sport performance when used shortly before or during exercise.

### What do these drinks contain?

- \*There is little to no control over how these products are made, so you may not know what is in these products or how much of an ingredient is present.
- \*Energy drinks may contain herbs (some potentially dangerous), amino acids, protein, and other substances such as creatine, usually in such small amounts that they are unlikely to have any effect on athletic performance.
- \*Most of these drinks get their “boost” feeling because they contain some form of caffeine combination (caffeine, guarana, green tea, kola nut) & some carbohydrate source(s).

### What are the possible side effects of these drinks?

- \*The physical effects of caffeine on young people are not clear. However, because the brain is still developing to around age 21 & caffeine stimulates the brain, overuse of caffeine may harm brain function.
- \*Caffeine increases heart rate & blood pressure. In very high doses it can cause hand tremors & changes in the heart’s rhythm. It may also cause loss of coordination & balance.
- \*Caffeine may cause nervousness, irritability, & insomnia; making it hard to concentrate & preventing needed rest.
- \*One may become psychologically addicted or tolerant to caffeine, so greater amounts may be needed to achieve the desired effect.
- \*Stimulants affect the body’s ability to maintain a regular temperature. This, combined with the dehydrating effect of caffeine, may place an athlete at greater risk of heat illness.
- \*Most of these beverages contain a concentration of carbohydrate that will slow the rate fluid is absorbed into the blood stream and will slow down rehydration during exercise.
- \*Drinks with a high concentration of fructose (carbohydrate source) can have a laxative effect.
- \*There is potential for serious side effects when used with prescribed medications.
- \*Although rare, there are possible links to collapsing/fainting and even death of young people using large doses of energy drinks and strenuously exercising.

### What’s the bottom line?

- \*Energy drinks are not adequate substitutes for the time, training, rest, recovery, and fueling/hydrating required for sports.
- \*Remember that labels on products can be inaccurate and you need to be cautious.
- \*These products may become “gateway” substances – once you adopt the “performance-enhancing with products attitude,” it becomes win at all costs, and it could push you to use other supplements that are potentially even more dangerous to your developing body.