

Does "Energy Drink" In = Energy Out?

What Kind of Consumer are you?

You find them everywhere. So-called energy drinks with names like Red Bull, Piranha, Monster and Rock Star are on the shelves of your local grocery store, in vending machines at the gym and at the convenience store in the gas station down the street. Frequently displayed next to the Gatorade and fruit juices, energy drinks are heavily marketed to young adults and athletes.

You have probably read claims like these:

- **SoBe Beverages** – “Energize the body, uplift the spirit, and enlighten the mind.”
- **Piranha** – “Bite back with high-intensity” and the 16 oz. can will give you a maximum energy burst.
- **KMX** – “Be Bold. Stay Focused. Don’t miss a beat. Be ready for what’s out there.”
- **Monster** – “Unleash the Beast within.”
- **Rock Star** – The 24 oz. can will allow you to “Party Like a Rock Star.”
- **Red Bull** – “Gives you wings and Improves performance, increases concentration and reaction speed, increases endurance and stimulates metabolism.”

But, have you ever asked yourself what so-called energy drinks really do? Should you accept the advertising claims at face value? Can energy drinks give you more energy, uplift your spirit and increase your concentration and reaction speed? And, even if these drinks could really deliver on the promises made about them, is there a hidden price to pay for drinking them?

As consumers, and particularly as athletes, we must remember that we are a target audience for the manufacturers of these drinks as they aim to sell more and make more money. Advertisements, images and slogans are created for a purpose – to convince us to buy the advertiser’s product. Ads are carefully created and test-marketed to send specific messages to a target audience. Generally, ads are designed to appeal to our emotions, fears and desires rather than to logic. Be cautious. Be a smart consumer and generally avoid products that promise to give you “Quick Energy” or “Quick Recovery.” Such claims should be viewed as red flags and spur us to further investigation.

Each drink is different, but most energy drinks contain a cocktail of fancy, high-tech-sounding ingredients which are not regulated, have little or no nutritional value, and can be potentially harmful given that many of them can enhance the potency of stimulants in the drinks. Many energy drinks contain:

- **Taurine** – a non-essential amino acid some claim boosts the effectiveness of caffeine,
- **Guarana** – a Brazilian berry with a fruity taste and one of the richest sources of caffeine, and/or
- **Ginseng** – an herb which can enhance the potency of stimulants.

Additionally, manufacturers of energy drinks can mix ingredients without scientifically verifying their safety. Recently, scientists have started to prove that some herbal energizers can be dangerous to your health, and although most of these beverages don’t have enough of any one herb to do you harm, mixing these herbs with certain medications could even be lethal, as you may not be aware of how the herbs may react with your prescription medications. The amount of caffeine and other stimulants or stimulant-like herbs in energy drinks can also be a cause for alarm as the side effects from the repeated or misused

consumption of these drinks could potentially be a health threat. Stimulant abuse has a range of possible side effects including:

- Addiction and withdrawal symptoms;
- Dehydration – For instance, the diuretic quality of caffeine can have a dehydrating effect, potentially leading to other side effects, including less blood being pumped with each heart beat, cramping and, ultimately, exhaustion;
- Anxiety;
- Tremors;
- Increased heart rate and blood pressure;
- Possible cardiac arrhythmia (an abnormality of the rhythm or rate of the heart); and
- Insomnia.

Thus, in many cases, energy drinks may actually bring on fatigue and interfere with optimal athletic performance. Any stimulant effect may be short lived or non-existent. Many people know their personal limits when it comes to ingesting caffeine. The knowledge that consumers often lack, however, consists of effects caused by other stimulants. Not only can high amounts of stimulants be harmful to your body, but there is no documented health benefit in consuming “stimulant” drinks.

Why do we, as a society, consume energy drinks in ever increasing numbers? They’re easy to drink, some of them taste good and many people like the apparent “energy rush” they get from drinking them. The perception that the drink is working and is giving you energy is known as a rush – the feeling of floating on air, a tingling sensation in your body, and a rush of lively and active feelings. However, this short-term rush is deceptive. You feel good for a short period, but once your body starts to use up the substantial quantities of sugar in these drinks, the effects of the caffeine and other stimulants wear off causing you to “crash” – and leaving you with a tired and drained feeling.

When energy drinks are consumed and a short-term rush or feeling of stimulation is experienced many people think that they are getting energy. This is not true. What they are frequently getting is a large dose of caffeine with some carbohydrates thrown in as a side order. It is a recipe for short-term stimulation and long-term fatigue.

The best piece of advice to remember is that the energy needed to sustain difficult and long training schedules and other daily activities and responsibilities is not going to be found in a can or a bottle. The only reliable way to maximize peak performance is to evaluate and modify your dietary intake to ensure that you are meeting the nutritional requirements for your body and level of energy output. When it comes to optimizing your diet, the sensible and scientific approach is to consult a dietician or other health care professional rather than rely upon the grandiose claims of an advertising firm.

Remember, as an athlete, anything that you put in your body should be of utmost importance to you. It is up to you to be sure that the food and drink you consume will satisfy your body’s needs and not strip you of the valuable energy you need to be at the top of your game. Do the research. Don’t just give in to an advertiser’s self-serving claims – because simply guzzling energy drinks in does not mean peak performance will come out.



For further information, please refer to the USADA nutritional module:

Optimal Dietary Intake...The Basics, which can be found at

www.usada.org/go/nutrition.