



Foundations of Coaching 201

Energy Drinks: A No-No for Swimmers

The USA Swimming Sports Medicine and Science Committee has recently reviewed the risks and benefits related to energy drinks and is providing information to call attention to the differences between energy drinks and "sports drinks" used for rehydration, to point out the risks associated with such drinks, and to provide suggested alternatives to use of these drinks.

Red Bull, Rock Star, Amp, Monster Energy—enticing labels for a tired and thirsty swimmer. Energy drinks are one of the fastest growing segments of drink sales in America and their popularity is growing, especially among youth. Athletes use energy drinks to rehydrate after a workout, boost attention and focus during school, “wake up,” or as a routine beverage at meals. Don’t be misled by something that sounds too good to be true—while an all-in-one drink is tempting, it carries some serious considerations for young athletes. According to the American Academy of Pediatrics (AAP), children and teens should avoid energy drinks.

Confusion exists about the difference between a sports drink and an energy drink, so let’s clear this up. A sports drink contains a small amount of carbohydrate, minerals, electrolytes and flavorings and is designed to replace those nutrients lost through sweating after exercise. Gatorade is an example of a sports drink.

Energy drinks contain stimulants including caffeine, guarana and yerba mate (herbal stimulants) and taurine (an amino acid). Ginseng, if present, enhances the effects of caffeine. Other elements may be added to energy drinks, but their benefits, safety and side effects are questionable.

An average energy drink contains 70-200 mg caffeine per 16 ounces. Some energy drinks can contain up to 500 mg of caffeine, the equivalent of 14 cans of soda. For children and teens, caffeine consumption should be limited to 1.25 mg per pound of body weight (for a 100-pound swimmer that’s 125 mg caffeine per day). More than 100 mg of caffeine per day in adolescents has been associated with higher blood pressures.

Growing children and teens should avoid excess caffeine consumption. Excess consumption of caffeine is associated with agitation, anxiety, poor sleep, rapid heart rate, increased blood pressure and altered mental states.

Too much caffeine can mask fatigue. Gauging fatigue is important to staying fit, healthy and in the pool. If jacked up on caffeine, swimmers may miss the body’s signal for rest.



Foundations of Coaching 201

Caffeine can alter mood and behavior, resulting in physical dependence or addiction. How do you know if you're a caffeine-addict? Without caffeine, you experience withdrawal symptoms such as headache, tiredness, depressed mood and nausea.

If that's not enough to make you re-think your drink, here's some more food for thought.

Energy drinks contain sugar—up to 30 grams per cup (almost ¼ cup of sugar). Limiting sugar consumption is a healthy practice, for any growing child and teen, whether an athlete or not.

Energy drinks are dehydrating. Due to the concentration of caffeine, energy drinks encourage frequent urination, and energy drinks with higher sugar content can compound the dehydrating effects of caffeine.

Feeling tired, losing focus and struggling with low energy? Rethink your nutrition, hydration and sleep program. No magic bullet replaces a nutritious diet of real, wholesome food, adequate water and other healthy liquids, or a good night's sleep. And that's no (red) bull.

By Jill Castle, MS, RD

Jill Castle is a registered dietitian and child nutrition expert. She is the owner of Pediatric Nutrition of Green Hills and creator of Just The Right Byte, a child and family nutrition blog.