

Grade 11 Informational

Energy Drinks: Boost or Bust?

Each weekday Stephanie gets up at 5:00 A.M. for band practice, spends six or seven hours in class, and then goes to her part-time job. Once she gets home, she does homework and chores, finally dropping into bed at 11:00 P.M. What keeps her going? A 16-ounce energy drink that packs a punch of sugar and caffeine allows her to continue her mad daily schedule. What Stephanie does not know is that, although the energy drinks she loves give her an energy boost, they may actually be harming her.

The appeal of energy drinks stems from the effective marketing strategies employed by their manufacturers. Some manufacturers claim that their products increase energy and alertness, provide extra nutrition, and even improve athletic performance. These supposed benefits come with a premium price tag. The drinks are expensive for a reason, and it's not because they hold the secret to improved physical or mental performance. The consumer is really paying for the fancy labeling, big-budget advertising campaigns, and celebrity images associated with the particular brand.

What's in a Name?

Energy drinks contain excessive amounts of sugar and caffeine along with small amounts of other ingredients, such as vitamins and minerals, which allow manufacturers to advertise the drinks as healthful. Some drinks contain performance-enhancing ingredients, such as herbs, amino acids, and protein, but usually in such small amounts that they are unlikely to noticeably affect either athletic or mental performance.

Contrary to the claims made by some energy drink manufacturers, people who consume well-balanced diets are not likely to have vitamin deficiencies, and their exercise performance will not be improved by vitamin supplements. It is true that mineral supplements aid in the replacement of sodium lost in sweat, but there is little evidence that mineral supplements affect performance.

In addition to containing known and tested ingredients, some brands of energy drinks contain mysterious additives, the safety and effectiveness of which have not been tested. Some contain herbs that are not approved by the Food and Drug Administration (FDA). Some contain ingredients that may interact dangerously with prescription medications and cause allergic reactions ranging from mild (hives) to severe (illness or worse). Always read labels carefully before consuming any dietary supplement—that includes energy drinks.

What Are the Effects?

Energy drinks typically contain up to 80 milligrams of caffeine, the equivalent of the amount in a cup of coffee. That's a huge increase over the 23 milligrams of caffeine in typical dark sodas. The quick surge of energy from caffeine is actually short-lived. Large

amounts of caffeine can cause jitteriness, upset stomach, headaches, and sleep problems. Despite claims of improved athletic performance, energy drinks should not be used while exercising. The high concentration of sugar slows the rate at which fluid is absorbed from the intestines into the blood, which can lead to dehydration. For this reason, energy drinks should not be ingested immediately before or during physical activity when rapid replacement of fluid loss from sweating is necessary.

Think before You Drink

Before consuming your next energy drink, keep the following guidelines in mind.

- Read the label. If there are unfamiliar ingredients, do not buy the product.
- Know when the ingredients are legal and safe, especially if you are a competitive athlete.
- Avoid energy drinks that contain herbs if you are taking medication.
- If there is no nutrition information on the label, do not buy the product.
- Avoid energy drinks if there is no scientific evidence to back up claims.
- Do not use energy drinks while exercising.
- Do not overindulge.
- When in doubt, consult your doctor.

Having enough energy to make it through the day requires a reasonable level of physical activity, adequate sleep, and effective eating and hydration habits. Some drinks pack a walloping calorie punch; unless you're a professional athlete who burns a substantial number of calories, drinking them may make you an unwitting victim of mystery weight gain. High levels of sugar can also lead to a "crash-and-burn" scenario. Sugar enters the bloodstream and provides a blast of energy, but after about 30 to 45 minutes, the sugar energy burns up, depleting energy and causing a sugar-deprived slump. Reflexes slow, dizziness may occur, and muscle power decreases.

Caffeine can also mimic the crash-and-burn scenario. When consumed, caffeine makes a person feel energized. After anywhere from 0 to 120 minutes, depending on the amount consumed, the person will begin to feel let down and slow. The person desires to repeat the energized feeling, and the cycle starts again.

If you think you're reaching your potential by downing an energy drink, think again. That constant cycle of power up and drop down could be detrimental to your health.

So the next time Stephanie reaches for a slim pop-top with a catchy name, maybe she'll think about how she'll feel in an hour or two and decide that trail mix, fresh or dried fruit, a bagel, a bowl of cereal, and water are better choices.

Grade 11 Narrative

Kaleidoscope

Jessica slumped unhappily in her chair and regarded her ankle reproachfully; just minutes ago, she had been preparing to participate in a track meet when, with an inadvertent misstep, she had twisted her ankle. Now she was positioned in a folding chair with her foot iced, wrapped, and elevated. She was immobile in the midst of a sea of purposeful activity. Members of the track teams were warming up: stretching, bending, running in place; and Jessica wanted nothing more than the ability to leap from the chair and join her team. Usually track meets were invigorating and satisfying for Jessica, but the hours of today's meet stretched before her like an endless desert landscape.

To alleviate her disappointment, Jessica squinted her eyes and began to play a game from her childhood—kaleidoscope. She closed her eyes to mere slits, viewed the distant scene as bits of shifting colors and movements, then blinked and turned her head to look in another direction in order to change the scene. On the far side of the field, Jessica noticed the blurred, blue brilliance of the Clarion High School Eagles' warm-up suits as a group of runners jogged lightly along the track. Beyond the joggers, were silver tiers of empty bleachers gleaming in the sunlight. Where the bleachers ended, Jessica could see a large splash of green, brightened by small, red dots. Opening her eyes wider and focusing, she could see a giant oak spreading its leafy branches protectively over a patch of grass where two or three spectators in red T-shirts had established themselves in comfortable chairs and propped their feet on foot stools—clearly planning to watch the entire meet.

Jessica wished that she were with the spectators, so she would at least have someone to talk to. The other members of the team had paused to commiserate with her, but everyone had returned to the practice areas—except for Janet, who suddenly appeared beside her.

"I'm sorry you've been sidelined, Jessica," she said. "We'll try our best to do well in the meet. Coach is having Stephanie take your place, but it won't be the same without you." Janet gave Jessica an amicable pat on the back and jogged off to resume her workout.

Jessica felt confident the team would compete well—despite her accident—but she wished she could take part in the competition. Sighing, Jessica returned to playing kaleidoscope. In the distance, she could see a large orange blob—undoubtedly a belated school bus—releasing what appeared to be a flock of canaries. She opened her eyes wide and realized that the track team from Adams High—in bright, yellow uniforms—was departing from the bus.

As the hours passed, Jessica cheered at all the appropriate moments: yelling

encouragement to teammates, shouting the names of the runners as they handed off the baton in the relays, applauding when the results of the pole vault were announced. When she occasionally lapsed back into playing kaleidoscope, she told herself that she was entitled to a diversion. Though her body was growing stiff, she could at least exercise her imagination to relieve the tedium of inactivity. Her team was accruing points at a steady pace, so she felt fairly confident of the meet's outcome.

Varying blots of color now adorned the silver bleachers on the opposite side. Four small groups of spectators had taken their places with others supporting their teams; together they presented an abstract design against a silver canvas—yellow melting into gold and black, circles of blue and red separated by silver, and a twist of purple spiraling below them.

When Jessica opened her eyes and returned her attention to the meet, she was startled to see that she had almost missed the event she enjoyed most—the 1600-meter relay. This was the event that Jessica usually anchored in the competition, but today Stephanie was running in her place. Jessica had wanted to lead her relay team to a stunning victory—but now she would have to watch.

The runners were already into the third segment of the relay, and Stephanie was poised to receive the baton and begin the final segment of the race. The runners from Adams High were moving more quickly than Jessica's team; but at the handoff, the anchor from Adams High dropped the baton—an action that would disqualify the team from the competition. Jessica watched attentively to see if Stephanie would become agitated since the runner from Adams had been running next to her. Stephanie stayed confident, took the baton smoothly, and managed to move out a little ahead of the others.

By the time Stephanie made the final turn on the track, Jessica was on her feet, hopping and cheering wildly. The runners were a blur of moving arms and legs, but Stephanie broke away from them and won decisively. Jessica collapsed into her chair, still clapping, and propped her foot up once again—her eyes wide open. Very soon Stephanie and the other members of the team encircled her, laughing and performing an impromptu victory dance. Jessica grinned and enjoyed this final—and gratifying—shifting of the kaleidoscope.