

NEWS

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Energy drinks pose risks

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Writing a paper with no end in sight at the end of last Winter term, Allen Odeniyi '10 turned for aid to a popular campus study buddy: an energy drink. Odeniyi is not the only student to synthetically prolong work hours — as midterms and finals roll around each term, energy drinks become a fixture in libraries, lounges and dorm rooms.

Novack Cafe has recently installed an entire cooler of RockStars to meet demand. Topside Convenience Store stocks and sells 29 different varieties of energy drinks. Compared to energy drinks, coffee products at Topside barely sell, Topside manager Tom Tattershall said.

Scott Sorensen '10, for example, said he prefers energy drinks to coffee.

“I like them and I’m all for them. I’m not a big coffee drinker, and they keep me up if I need them,” he said.

Some students, on the other hand, are wary of energy drinks. Freshman year, Jane Tucker '09 was so awed by Topside’s selection that she attempted to try them all.

“My mini-fridge was constantly stocked with about five different types,” she said. “I noticed that these drinks were packed with calories and really unappetizing-sounding artificial ingredients, and decided that I didn’t want all that junk in my body,” she said. “Since then I’ve stuck with coffee and the occasional sugar-free Red Bull only in the case of emergencies.”

Though energy drinks are popular, biology and medicine professor Lee Witters said he is concerned about the consequences of energy drinks on students’ health.

Energy drinks are high-caffeine, high-sugar mixtures combined with varying other chemicals to give the drinker an energy rush. Although the health ramifications of some of these chemicals have been investigated inconclusively, the caffeine in these drinks is the main source of the drinks’ desired effect. Caffeine acts on the central nervous system as a stimulant, quickening vital processes or functional activity, improving attention and concentration as well as decreasing fatigue when taken in small doses.

According to Witters, the FDA does not regulate the caffeine levels in energy drinks, nor are companies required to pass any type of product testing. The amount of caffeine in many energy drinks goes above and beyond that necessary to obtain the positive effects of the drug, he said.

“No doubt used in small doses, caffeine is positive in effect, and these drinks are not harmful,” Witters said. “However, many of these drinks in general have way too much caffeine, and are working their way up the dosage level.”

The average amount of caffeine in an eight-ounce serving of brewed coffee, which is considered perfectly healthy, Witters said, is 135 milligrams. The caffeine in energy drinks ranges from 80 milligrams per eight ounces of Red Bull to 33 milligrams per single ounce in the energy drink “Cocaine.”

In such large doses as those found in “Cocaine,” Witters said, caffeine can have damaging physical and psychological effects. Not only can this amount of caffeine drastically raise heart rates, but in people with hypertension and cardiac conditions — including conditions unbeknownst to the caffeine drinkers — it can also lead to serious cardiac problems such as heart palpitations. Too much caffeine can also lead to anxiety attacks, especially in people with underlying psychological disorders, he said.

“Cocaine” is not sold on the Dartmouth campus. The average energy drink, according to Dartmouth Nutritionist Claudette Peck, has more or less the same effect as that of an expensive cup of coffee.

Some students, like Shawn Hiner-Leamon '09, regularly drink at least three Red Bulls a day.

Surprisingly though, drinking more than one energy drink in a short amount of time can have the same effect as drinking one with a large caffeine content, Peck said.

“In general, the assumption is that more than 300 milligrams of caffeine per day can be problematic, interfering with sleep and causing dehydration. This can be fixed, but caffeine is addictive, so drinkers build up a tolerance, needing more and more caffeine for the same effect,” she said.

Witters noted that a tolerant drinker “may not become as anxious, but his or her heart will still be affected.”

Although most students don't report side effects, many reported regularly consuming more than the prescribed dosage of caffeine, sometimes with bad results.

One student, who wished to remain anonymous because he was embarrassed, relayed a tale beginning with the consumption of four Monsters over the course of an all-nighter and ending in violent, prolonged shaking and temporary loss of fine motor skills.

Delia Gorman '10 told the story of a friend rushed to the hospital due to heart palpitations after drinking a few cans of the energy drink Ball.

Ultimately, Witters concluded that the effects of energy drinks on the body, though certainly to be questioned, vary greatly depending on the amount of caffeine they contain and on the individual consuming them.

“It’s very hard to make a general statement about energy drinks,” he said. “There’s no easy way to identify for whom this is a danger. Therefore, drinkers should always use caution and consume energy drinks — and caffeine — with moderation,” he said.

There is one circumstance, however, under which Witters stressed that energy drinks are not to be used. Although Red Bull advertises its product on its website as “a functional beverage, specially developed for periods of increased mental and physical exertion,” energy drinks should not be used under demanding athletic circumstances.

“These drinks aren’t Gatorade,” Witters said. “They’re not aimed at giving calories.”

Rather, they inject large amounts of caffeine to an already rapidly beating and heavily strained heart, he said, intensifying the effect of a workout.

“These drinks are not a bad choice to study or stay up a little later, but they’re definitely not a good choice as athletic enhancers,” Witters said.

There are several reported deaths due to Sudden Adult Death Syndrome, a general term referring to an unexpected death in a healthy person, after drinking Red Bull and engaging in athletic activity. Irish teen Ross Cooney shared several cans of Red Bull and then died on a basketball court during a game in 2001. Though these deaths have not been directly linked to Red Bull, the drink is suspect, Peck said.

Red Bull did not return phone calls and an e-mail requesting comment.

After experiencing extreme hyperactivity and shaking first-hand, Odeniyi, who finished his paper and was later unable to sleep, vowed to stop drinking energy drinks.

“Energy drinks are terrible for your body,” he said. “The long-term research that needs to be done hasn’t been. I don’t drink them anymore. It’s not worth the toll on your body.”

Some students however, like Hiner-Leamon, continue to consume these beverages.

“If I spent my life worrying about absolutely everything that is not healthy, I would be miserable,” he said. “The stress of being at Dartmouth is not healthy. Hanging out in a fraternity basement is not healthy. Most of the dining hall food on this campus is nowhere near healthy. But I enjoy all these things, and I’m not going to give them up because of health concerns.”