Well

Adding a Deadly Jolt

The deaths of two young men have spurred a push to restrict sales of powdered caffeine.

By MURRAY CARPENTER

A year ago, Logan Stiner of LaGrange, Ohio, was an honors student and prom king looking forward to his high school graduation. "He was burning the candle at both ends, because he had a couple of projects that he had to finish for finals," said his mother, Kate Stiner.

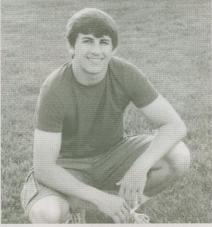
On May 27, his brother found him unresponsive on their living room floor. In an effort to increase his energy, Mr. Stiner, 18, had used caffeine powder a friend had purchased on Amazon, but miscalculated the dosage, overdosed and died. The medical examiner said the cause of death was "cardiac arrhythmia and seizure, due to acute caffeine toxicity due to excessive caffeine ingestion."

A few weeks later, 24-year-old James Wade Sweatt, a newly married recent college graduate living in Georgia, blended a drink with powdered caffeine, also purchased online. Health conscious, he reasoned that pure caffeine and water would be a healthier way to get a lift than the Diet Mountain Dew that he usually drank. He overdosed, fell into a coma and died.

Sold as a dietary supplement, caffeine powder is virtually unregulated and widely available from online vendors, and in some stores often marketed alongside vitamins and protein powders to fitness buffs who blend their own supplements. The packages typically include warning labels, but these are voluntary. And efforts to restrict sales are growing, as lawmakers, consumer groups and the parents of both young men have pushed for better regulation of the drug.

In its pure form, caffeine is quite powerful. A teaspoon of caffeine powder is roughly equal to 16 to 25 cups of coffee. Ten grams, about two-thirds of a tablespoon, is a lethal dose for an adult. A 100-gram package — as much caffeine as 400 "tall" cups of Starbucks coffee, 1,250 Red Bulls or 3,000 cans of Coke — costs about \$10.

The Food and Drug Administration in July advised consumers to avoid the powder. "Pure caffeine is a powerful stimulant,



THE LOGAN STEINER FOUNDATION

Logan Stiner died a year ago from taking too much pure caffeine powder, which is used in soda in very small portions. Two-thirds of a tablespoon is a lethal adult dose.



and very small amounts may cause accidental overdose," the statement read.

In December, the Center for Science in the Public Interest, a consumer advocacy group, petitioned the F.D.A. to ban retail sales. A lawyer for the organization, Laura MacCleery, said it was easy to think of caffeine as innocuous because of its ubiquity in coffee, tea and sodas. "It's the public misperception and familiarity with caffeine, which is something we think we know, that makes this product so dangerous in its current form," she said.

Suffolk County, N.Y., banned the sale of powdered caffeine to minors in November. In January, six Democratic senators, led by Sherrod Brown of Ohio and Richard Blumenthal of Connecticut, asked the F.D.A. to ban retail sales of pure caffeine. In March, the Stiners filed a wrongful-death lawsuit against Amazon and other vendors, as well

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as the friend who gave Mr. Stiner the powder, over the sales and distribution of caffeine powder. The Council for Responsible Nutrition, a dietary supplements trade group, recently asked its members not to sell pure caffeine directly to consumers. And the Illinois and Ohio Senates in April approved bills banning retail sales of caffeine powder. Similar bills have been introduced in Maryland, New Jersey and New York.

The controversy over retail sales is bringing attention to an important but little-understood drug. Caffeine can be extracted from products in which it naturally occurs, like coffee and tea, but it is cheaper to synthesize it in pharmaceutical factories. In 2014, the United States imported nearly 17 million pounds of powdered caffeine, primarily from China, Germany and India.

Most of the powdered caffeine in the United States is used in the \$77 billion soft drink industry. Caffeine powder is blended into the five best-selling soft drinks in the United States, and eight of the top 10. A 12-ounce can of Coke uses 34 milligrams, about one-64th of a teaspoon. Based on sales estimates, Coca-Cola needs more than three million pounds of caffeine powder to blend into the Coke and Diet Coke it bottles annually in the United States.

Depending on how caffeine is packaged and sold, products made from the powder can be regulated differently: as dietary supplements (in powder form, diet pills or energy shots), as foods (in sodas, energy drinks and gels for athletes), as over-the-counter medications (in such products as NoDoz, Vivarin, Excedrin and Anacin), or as prescription medications, often used to treat migraines.

Though the federal government has not restricted the sale of powdered caffeine, Jennifer Corbett Dooren, a spokeswoman for the F.D.A., said the agency "will consider taking regulatory action, as appropriate, to protect consumers."

Kate Stiner said she could not understand the F.D.A.'s inaction. "I'm frustrated because it seems to be cut and dried to me," she said. "And I don't know why the delays, and I don't know why people would evenfight about it. I'm not saying ban coffee."

Murray Carpenter is the author of "Caffeinated: How Our Daily Habit Helps, Hurts, and Hooks Us."