

Nootropic Brain Drugs Rise in Popularity for Today's Cutthroat Corporate Climbers

Excess is out, efficiency is in. Welcome to the world of nootropics.

By [Jack Smith IV](#) | 04/14/15 12:40pm

In an era of efficiency trumping excess, nootropics—brain-boosting supplements—are poised to become to drug of choice. (Illustration: Morgan Schweitzer)

Andrew started his college graduation day at 6 a.m. with a wakefulness agent called modafinil, sometimes known as Provigil—it was the first time he remembers nootropic brain drugs having such a startling effect. He was juggling family and celebrations along with two ceremonies, engineering in the morning and economics in the afternoon, with a band competition in between, which he won. For 22 waking hours he was happy, alert, firing on all cylinders, oblivious to any fatigue.



“At that point, it was like, ‘Holy crap, this stuff can be very powerful,’ ” Andrew told the Observer.

Now that he's a corporate strategist working with health care companies on their mergers, Andrew, who requested we use a pseudonym, will sometimes call upon some chemical assistance for business trips requiring long flights, client meetings, back-to-back dinners and work hours back at the hotel. He

doesn't want a pedal-to-the-metal amphetamine: He wants focus, creativity and clarity without the side effects or dependencies. When he began, he started by experimenting with little-known chemicals like piracetam, a cognition-booster, before adding other vitamins and herbs, carefully measuring out milligrams along the way. As his alertness and focus increased, he kept a Google Doc to share his results with friends.

But as a competitive tactic, he doesn't discuss his legal drug use with any of his coworkers.

"Other employees will burn out and ask me, 'How did you deal with that crazy week?'" Andrew said. "It's like a secret weapon."

For the modern mad men and wolves of Wall Street, gone are the days of widespread day drinking and functional cocaine use. Instead, in this age of efficiency above all else, corporate climbers sometimes seek a simple brain boost, something to help them to get the job done without manic jitters or a nasty crash. For that, they are turning to nootropics.

Nootropics, from the Greek "noos," for "mind," are chemical supplements that claim to improve cognitive function, increase alertness and strengthen memory and recall. Once the exclusive purview of online forums, where enthusiasts and self-made DIY neurobiologists would catalog their experiences and reactions to any number of experimental substances, nootropics have gone mainstream, finding devotees among the 21st century's white-collar elite.

And Silicon Valley startups and life-hacking gurus are rushing in to meet the demand. Their goal is to render nootropics simple, accessible and unafrightening—and as lucrative as Red Bull. We discovered one of these startups, a burgeoning little company called Nootrobox, and this writer, who is notorious for pulling Icarus-like all-nighters and having the diet of a trash can, ended up gulping down capsules of something called "Rise."

Michael Brandt, 26, is an ex-Gogler who was in product management at YouTube and is now the co-founder of [Nootrobox](#), a San Francisco-based company trying to make nootropics as acceptable and widespread as your morning cup of coffee.

The bright-eyed Mr. Brandt, who has sandy red hair and talks with the manic energy you'd expect of someone advocating brain-boosting drugs, started Nootrobox with an old friend in 2014 after long-time experimentation with nootropics. His partner is Geoffrey Woo, a fellow Stanford grad and coder, who founded a geolocation app called Glassmap that went through the prestigious accelerator program Y Combinator before it sold to Groupon.

Mr. Brandt started with a simple nootropic combination (or "stack") with relatively benign ingredients that most of the nootropic community—and the world at large—generally view as fit for consumption. He calls it Rise, and Mr. Brandt sees it as the ideal daily multivitamin for a healthy brain. It costs about \$26 for a bottle of 30 pills, but his real business is selling it online to subscribers, who get 10 percent off their monthly purchase.



Nootrobox’s first nootropic “stack” is called Rise. The old blue bottle, seen left, has since been replaced with something a little less opaque and alchemical—the clear bottles seen on the right. (Photo: Emily Assiran/New York Observer)

Besides a small dose of caffeine, Rise, which is manufactured in United States, contains two ingredients. The first is L-theanine, an amino acid most commonly found in green tea, which supposedly improves cognition and acts as a mood-booster. The second is *bacopa monnieri*, an herb that is meant to increase memory performance—Rise is, by weight, more than half bacopa.

These supplements aren’t new, or even terribly experimental. Bacopa, L-theanine and caffeine can all be bought on their own as over-the-counter supplements at local health food stores or pharmacies. What Mr. Brandt is doing is packaging them in a way that makes the concept of a brain-booster more, well, easy to swallow: a nice bottle, no-bullshit packaging and a simple subscription delivery.

Crossfit has taken over the same brand of body-optimizer—and they’re [having way more sex because of it.](#)

“The market’s not perfectly efficient just because you can go and buy the powders yourself on

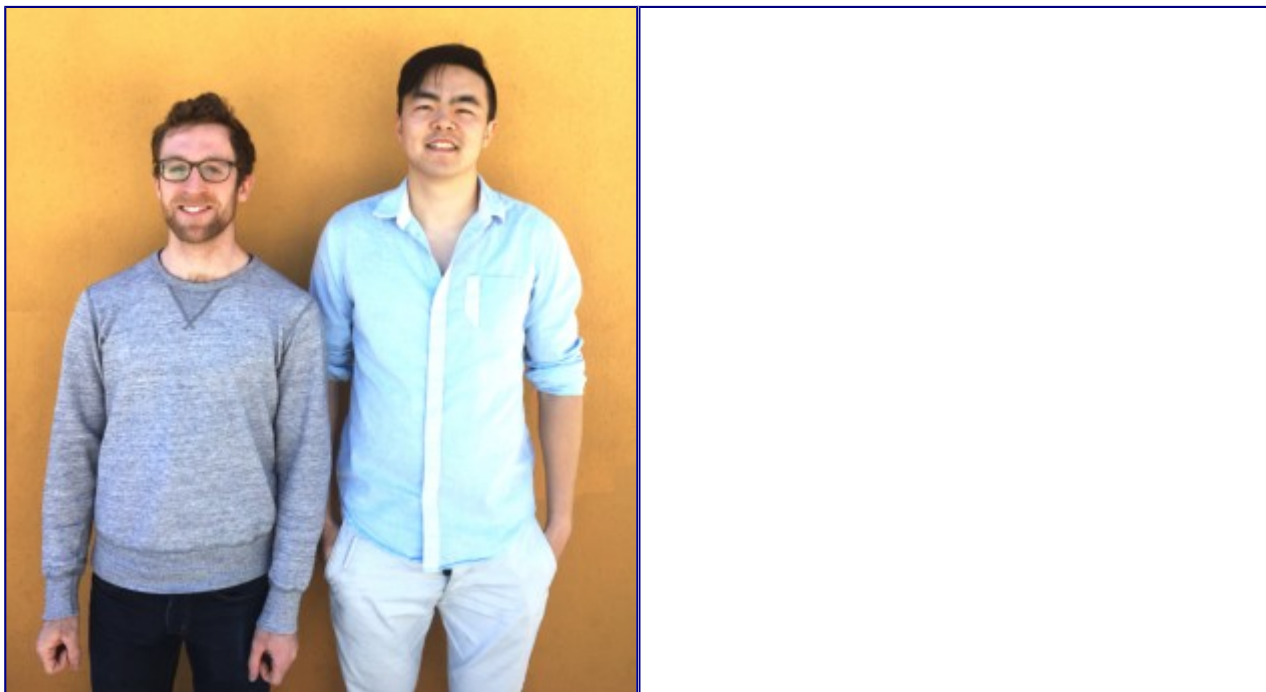
Amazon,” Mr. Brandt said. “There’s value in the person who wraps it up, bundles it and gets it to market.”

He likens it to what Steve Jobs did with his Homebrew Computer Club in the late ’70s, taking computer parts that any hobbyist could find and packaging them for the everyday user. “You can say that Google was just another take on a search engine when we already had Yahoo and Alta Vista,” Mr. Brandt said. “And is it really that interesting that you can order a cab from your phone? It turns out that the answer is, ‘Hell yeah.’ ”

The business, he says, is healthy—Nootrobox only employs five people, and Mr. Brandt claims that they’ve sold enough subscriptions to have been profitable since it launched, mostly by word of mouth, and he also claims to be currently closing a seed round with prominent Silicon Valley investors. Most recently, the Nootrobox team visited China to get a feel for how they might handle distribution overseas, where Rise sells at a 100 percent mark-up online.

Consumers are right to be skeptical of anything that goes in your body and promises to affect your mind. But Mr. Brandt and other advocates of so-called “smart drugs” draw parallels between the way athletes train their bodies—strength training, cardio, nutritional supplements and tertiary skills—with brain games, meditation, exercises with focus and, of course, nootropics.

The comparison to athletes isn’t so farfetched. Take Sam, an analytics executive who formerly ran digital media for the NYC office of one of the largest media-planning agencies in the world. When Sam was a young, single guy at NYU Stern, he was big into weightlifting, and took multivitamins, fish oil, creatine—nothing foreign to anyone with a proselytizing personal trainer.



Nootrobox founders Michael Brandt and Geoffrey Woo. (Photo: Nootrobox)

When Sam realized he could be juicing up for his operational management class the same way he did for a bench-press, he started skimming nootropics forums like Erowid.org and placing bulk orders online. Pretty soon, he was swirling brain boosters like the synthetic compound piracetam and the nervous system depressant phenibut in rocks glasses and gulping them down alongside his “weightlifting stack,” keeping track of the results, and swapping tips with other college students at parties.

To be clear, though, nootropics are not steroids for the mind. In fact, true nootropic fanatics (who call themselves “noots”) claim simply that nootropics grease the cognitive wheels, enabling the brain to operate at its “cleanest” and for longer periods of time.

Nootropics, of course, aren’t the only route to expanding brain function. Consumer EEG headbands that read brainwave activity can be tethered via Bluetooth to a phone or tablet, and brain-training games like Luminosity and Elevate always top the App Store charts during the holidays. In the quest for maximum productivity, the brain is one of the most mysterious frontiers, and one of the toughest to access and optimize.

“We only have 24 hours in the day, and we’re all trying to figure out how to make better use of that time,” Mr. Brandt said. “It’s the unifying theme that connects Google with Uber with Nootrobox with P90X.”

As someone at the forefront of neuroscience, Dr. Richard Isaacson fields a lot of questions about how to keep the brain healthy. One of his close friends is a lawyer who consults on new ideas and startups in the health care space—he’ll text Dr. Isaacson, who is the director of the Alzheimer’s Prevention Clinic at Cornell, from time to time to consult on new ideas and apps that he’s working on. But when the lawyer friend texted Dr. Isaacson about nootropics, he didn’t reply.

For Dr. Isaacson, there’s an enormous philosophical question at stake. He’s a practicing physician whose mission is to treat unhealthy brains—or at least ones that might be at risk—not to recommend treatments for perfectly healthy people looking for a little something extra.

“I try to promote brain health so people don’t develop a disease,” Dr. Isaacson said. “In that context, I’m comfortable. But when it comes to trying to game your system and push yourself to new heights ... I don’t know. This is, in some ways, uncharted territory in the medical field.”

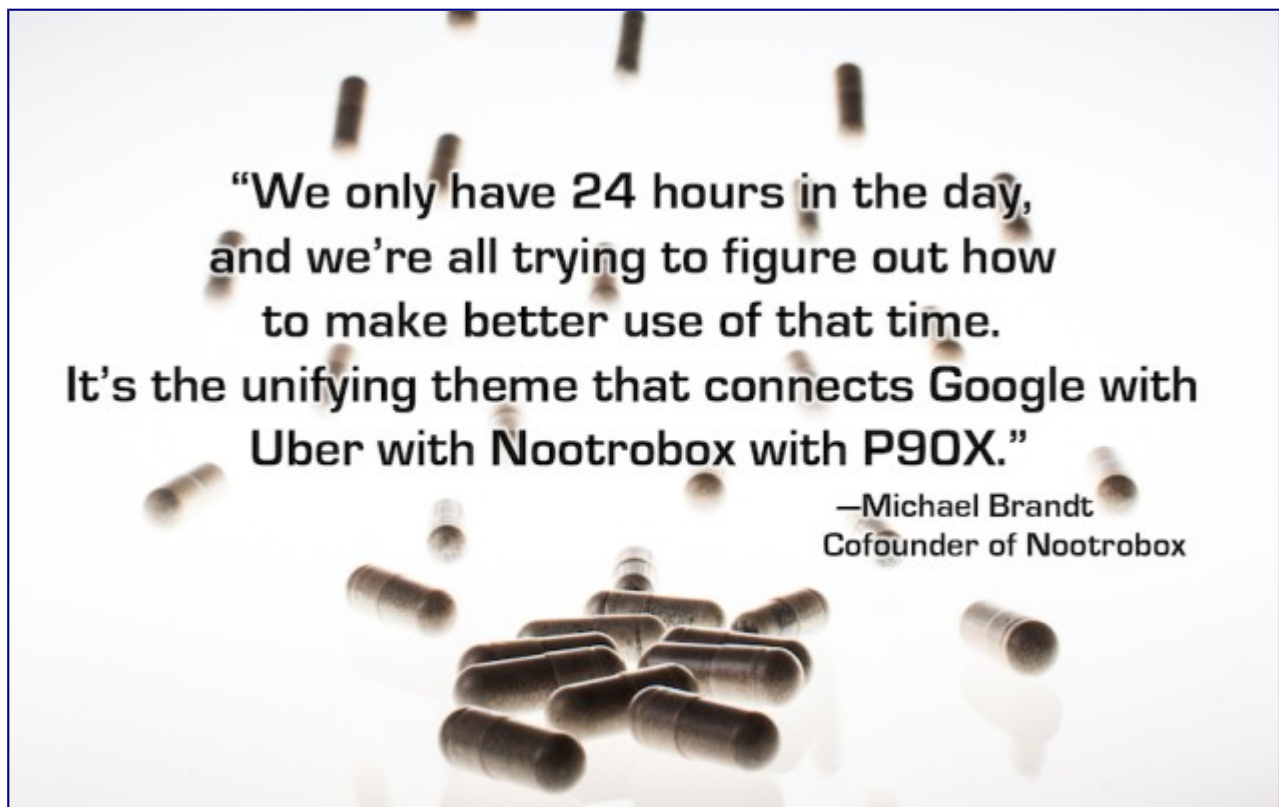
The people Dr. Isaacson deals with are mostly predisposed to neurological problems, and are seeking proactive treatment. He runs clinical exams with computer-based evaluations, nutritional backgrounding, lab work and other cognitive testing, but in regards to people who already have perfectly healthy brains, “I don’t feel strongly that the state of the science of nootropics in general warrants their widespread use,” he said. “If people have a perceived problem, go to a physician. If they have no perceived problem and they want to seek a cognitive boost, they can try a supplement or nootropic, but the amount of evidence behind their use is just not robust yet.

“In an age of information overload where people are one-upping each other on tests, I understand why

this is popular,” Dr. Isaacson added. “But personally, it doesn’t ethically sit well.”

The word he returned to is “cheating.” Cheating the body, cheating the mind, looking for shortcuts. Depression, poor nutrition, attention deficient disorder—there are a number of reasons someone could experience a loss of focus or recollection. Dr. Isaacson worries that in the rush to alleviate “symptoms,” nootropics bypass causes.

Still, he’s fascinated and disquieted. Interest in pushing the brain beyond its natural limitations is advancing rapidly, even while the medical community is grappling and debating.



(Photo: Emily Assiran/New York Observer)

Michael Gazzaniga, a cognitive neurobiologist and the director of the SAGE Center for the Study of the Mind at University of California, Santa Barbara, was among the first group of scientists and ethicists looking at nootropics dilemma about a decade ago.

“The ethical question back then was: ‘Should you be able to enhance your system brain some way?’ ” Mr. Gazzaniga told the Observer. “And then people started to say, ‘Wait a minute. What’s wrong with having a drug that helps your memory as you age?’ Nothing wrong with that, so what about a normal college sophomore who pumps himself up with drugs to get by?”

That work resulted in [a seminal 2008 paper](#) published in *Nature* called “Towards responsible use of cognitive-enhancing drugs by the healthy,” which concluded that innovation in nootropics was both important and most certainly on its way, but any substance that claimed to enhance and expand

intelligence and brain function needed to be watched closely for possible drawbacks—an uncontroversial stance, certainly.

But Mr. Gazzaniga, who worked on the *Nature* paper, says not much has changed in nootropics since then. He said he hasn't seen anything in a supplement that goes beyond a "caffeine effect" and into the realm of actually expanding memory and intellectual capability—the original promise of nootropics.

"Most of them can be chased down to effects on alertness," Mr. Gazzaniga said. "But they won't extend your mental capacity to a high order of cognition."

Most of the supplements found in amateur stacks and off-the-shelf solutions are classified by the FDA as GRAS, or "generally regarded as safe." These are food additives and supplements that most experts agree pose no proven health risk. This is the category of substances that allows concoctions like 5-Hour Energy to be sold at gas-station counters.

"Lots of supplements keep you awake and alert and studying, and they all seem to be able to hit the market because they're marketed as dietary supplements," said NY Medical College's Dr. Patric Stanton, who observes the cornucopia of supplements his med students take to pass his classes: "They can get to market quickly because they pass by the FDA. Which means they can make a lot of money."

But every once in a while, someone brings something into their stack that the FDA simply hasn't gotten around to scheduling or testing yet, and an experimental chemical or powder ordered in bulk from an online market will make its way into online discussions.

On r/Nootropics, the Reddit forum (or "subreddit") users complain about the personal price they pay for alertness—that piracetam has been causing chronic nausea, or that noopept (a peptide compound and powerful focus-booster) has them crashing down for days of sleep at a time. It's the price that fringe users pay for messing with chemicals that haven't passed through the medical community: Each one has a whole host of documented effects and drawbacks, and it can be tricky to determine what's a function of the drug, or some combination of diet, exercise and personal biology.

But Nootrobox can't afford to mess around with fringe chemicals, because Mr. Brandt has a business to build, and he just can't afford to develop a product that the FDA could suddenly forbid him from selling overnight.

Those fears of government interference lead to a certain set of commonly held politics in the nootropic community—a laissez-faire pharma-libertarianism. Noots bristle at the idea of a lobbyist-laden D.C. body popping up at any moment and taking their stacks away. But as the *Nature* piece points out, what we're experimenting with here—the human brain—is possibly the most sensitive and mysterious organ in our body.

The GRAS stuff, like caffeine, bacopa and l-theanine, are substances for which the potential for abuse is low and the side effects aren't devastating. Then there are the substances the FDA hasn't gotten around to, synthetics like the aforementioned noopept. A medical professional would doubtless advise

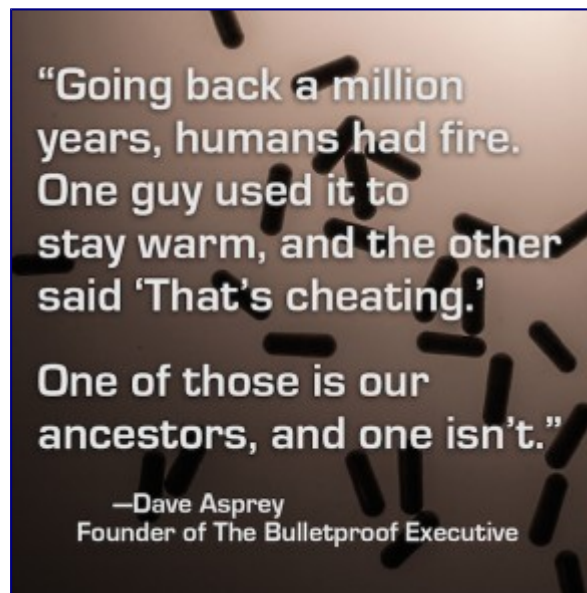
anyone experimenting with those to proceed with caution.

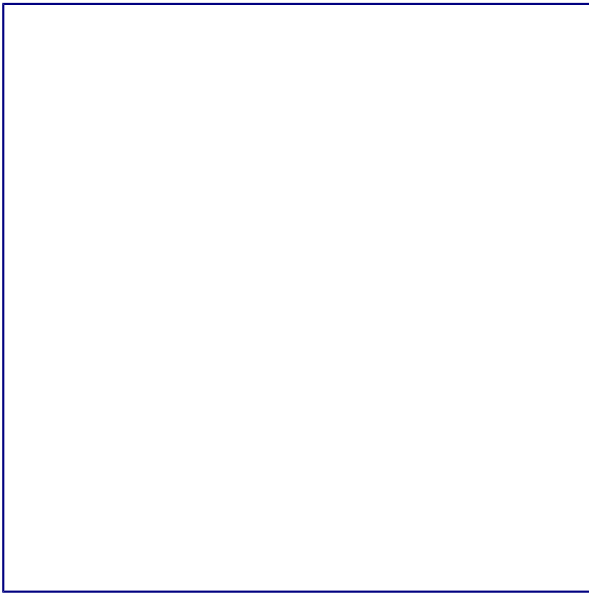
Meanwhile, Mr. Gazzaniga's proverbial college sophomore is boldly adventuring out into the brain-boosting world on his or her own. Body hackers, hobbyists and nootropics enthusiasts are doing all of the research themselves and sharing their findings in online communities. They simply don't want to wait while the FDA tries to catch up.

Austin, who requested only to be identified by his first name, is a pretty typical college student majoring in computer science. But early on in his college career, he noticed he was falling behind and had trouble concentrating.

A psychologist diagnosed him with ADD, and gave him three options: he could seek a traditional medical treatment, see a "naturologist," or just suck it up and deal with it. That's when Austin started poking around online and discovered r/Nootropics.

He started looking into L-theanine and caffeine—ingredients in Nootrobox supplements—ordering them offline and experimenting with dosages. He began customizing his stack, adding bacopa for memory, and then eventually 500 milligrams each of the nutrient choline and the amino acid taurine for energy. At night, he'd prepare a dose for the next day, mixing powders into small shots of water when he couldn't order something in pill form.





(Photo: Emily Assiran/New York Observer)

“Before, I was groggy, going from class to class and taking random naps,” Austin told the Observer. “Now, I wake up, I do my stack, and I’m alive through the entire day. I have so much more energy, and I feel slightly more focused.”

Austin stayed away from anything that had a suspect reputation in the nootropics communities, especially pharmaceutical stimulants that might have side effects like addiction or loss of sleep. He’d seen enough fellow students burn out on Adderall that he knew what not to go for.

Every once in a while, he’ll meet another noot. Austin bonded with one potential new fraternity brother over stacks, supplements and cognitive enhancers. For them, the mainstreaming of nootropics can only be a good thing. One sobering moment came when news reached the nootropics subreddit that certain suppliers of bacopa might be shipping their product with traces of heavy metals—Austin had simply been ordering his from a cheap supplier in India.

“There’s not much guidance right now, and you have to do the research yourself,” Austin said. “There’s no baseline, so if you don’t read reviews, it’s hit or miss.”

Most people in these communities are simply looking for an all-in-one solution, something that just works. Enter the gurus, businessmen and the celebrities that are the modern face of body hacking.

Even if nootropic stacks and cognitive drugs are news to you, there’s just no way you’ve dodged an encounter with Bulletproof Coffee. The [supposedly performance-enhancing beverage](#)—a blend of coffee, MCT oil and a jarring amount of grass-fed butter—earned celebrity devotees like Jimmy Fallon and Shailene Woodley, and has been the subject of uncountable TV profiles and think pieces.

At the head of the Bulletproof empire is founder and CEO Dave Asprey, the author, entrepreneur, guru, blogger and veritable cult leader who built an entire diet around his trademark coffee, which he claims

will boost productivity, alertness and metabolism. But even though he's best known for his beverage, Mr. Asprey says he has also taken some form of nootropic every day for 15 years.

"Neuroscience is actually cool for the first time in all of human history," Mr. Asprey told the Observer. "That 1 percent of the 1 percent of us who were really into this 15 years ago talked about it, shared our success and failures, and now people who aren't just on the cutting edge are benefiting."

Like other prominent productivity gurus like Tim Ferriss and Joe Rogan—both of whom are nootropics users and sell (or have sold, in Mr. Ferriss' case) their own nootropic stacks—Mr. Asprey draws millions to his own podcast and hosts his own forums for discussing wellness and DIY body hacking. But like anyone in the supplements, nutrition and smart-drugs space, he has been brutally taken to task for the claims around the proprietary products he sells through his own site. Bulletproof exists at an intersection of Silicon Valley tech hype and a morning-show level of attention that just begs for a public flogging. Mr. Asprey's counter to them all is simple: "No one is going to spend 50 bucks on a nootropic that doesn't do anything."

Programs like Bulletproof or Joe Rogan's nootropic Alpha BRAIN, a robust stack with similar ingredients to Nootrobox but with a dozen extra add-ins, each have devotees and defenders who play up their positive effects while dismissing every possible negative along the way.

"Performance isn't just about output," Mr. Asprey said. "You know what it's like when the tweaked guy comes in and the meeting is ruined? If a guy is so strung out and tired that he's a jerk and he's overworked and stressed, your company doesn't win."

If that sounds overly corporate, oh well. It's the nature of who Mr. Asprey generally works with: people trying to get the edge in their career, students just out of college, and aging men and women who don't want those students to outpace them.

David Asprey, founder of Bulletproof Executive, is most notorious for his butter-blended coffee. But he's also been on nootropics for over a decade. (Photo: David Asprey)

"Going back a million years, humans had fire," Mr. Asprey said. "One guy used it to stay warm, and the other said 'That's cheating.' One of those is our ancestors, and one isn't."



This certainly isn't the first American neuropharmacological craze. The 20th century had a strong go at psychonautic experimentation, from simple supplements to powerful hallucinogens. The movement toward nootropic experimentation could be called a second coming of America's neuroscientific popular interest. And anyone who's seen a Facebook feed full of "11 Perfect Life Hacks" articles can attest to an emerging obsession with treating the mind like a gameable system.

Devon White is the lead developer on a project called the Human Operating System, a software and training system that helps users optimize personal performance, habits and behavior. Mr. White sees the human brain the way any hacker—and an increasing number of us all—sees a well-engineered program: as a system that can be tweaked and controlled for the best results.

"No one wants personal affirmations, New Age-isms and self-help platitudes. It's not enough. They want the hard science," Mr. White said. The market demands it.

Nootrobox is on the heels of launching its newest product, "Sprint." If Rise is like a multivitamin for the mind, Sprint is about fast-acting results. The ingredients are similar: twice the caffeine and L-theanine, and instead of bacopa, there's some vitamin B6, glucuronolactone, a naturally occurring compound that strengthens connective tissue, and an anxiety-inhibiting carbohydrate called Inositol.

I insisted Mr. Brandt send me a pack, and he rush-delivered a sample of the first batch in time for this article. After a week and a half of popping Rise—a girlfriend with a barely used blue bottle passed along her stash one morning—I was to be the first person outside of Nootrobox and their third-party quality-assessment testers to give Sprint a personal trial. Rise hadn't done much more for me than a morning cup of coffee would. Sprint, supposedly, would kick in immediately.

Where capsules of Rise have an earthy, mineral color, the slightly smaller capsule of Sprint was snow white—a more pharmaceutical look. I decided to take a single pack when I needed it most, to keep me alert during an all-nighter of research and writing. The pack had two pills—I took one at 10 p.m. and one at 2:30 a.m. Though I have the occasional migraine every few months when dehydrated, my physical state is miraculously regular considering my exercise schedule is scattershot, and glazed donuts are the keystone food group on my personal dietary pyramid.

Here's what Sprint did not do: It didn't render me capable of new levels of thought and cognition. My pupils did not suddenly dilate—in fact, nothing happened "suddenly" at all. I kept my focus through the evening, but I did not feel an intense and unfamiliar tunnel vision.

There were most definitely effects, though, to the tune of what many nootropics users told me about. Though my senses weren't heightened, they were at least all at attention, and I was able to remain of sound mind even as I physically began to weaken. As the specter of a migraine throb surfaced with the sunlight, I nonetheless found myself able to stay alert—a divergence from my typical habit of passing out as soon as my body starts to settle.

After more than 24 hours of being awake, I was eerily chipper when I headed into the office from my desk at home, and the only side effects seemed to be a weird fixation on the superficial plots of the pop

music that accompanies my morning commute.

Of course, I had done exactly what Andrew, the corporate strategist, had told me not to, and used the drug not just to amplify my healthy, waking state, but to push past my body's muffled cries for rest. After a brief nap after work that night, I found myself with a debilitating migraine—decidedly worse than usual—and vomiting profusely. It was just like the forums and other users had told me: overextend yourself, and prepare to pay a price for it.

It was my own fault, really. When I used it correctly, I got what I bargained for: It wasn't a whole new me, but at least I was operating at my best, and for a longer time than normal. And if I can get peak performance without putting half my paycheck up my nose, why shouldn't I?