



MEDICATED

education

She glared at the clock: 3 a.m. She sighed, her eyes felt droopy, and her fingers began to drag. She still had three pages to finish. She glanced at the amber bottle sitting next to her clock. Inside was a blue and white pill that would solve all her issues.

"When I have a lot going on all at once and I know I have to spend four to five hours straight doing homework, [Adderall] helps me stay focused for that time period," a female honors student said. No doctor has prescribed the drug for her. She, like 18 percent of the NW student body, takes it as a study drug.

She swallowed the pill. About 20 minutes later, her pupils were dilated. She was literally wide awake.

"I always get a little talkative and really focused on whatever I am doing [after I take it]," she said. "I take it because I know I must finish the work. I know I can trust it to help me complete an essay late at night, or do well on a test the next day. I honestly believe it helps me perform better."

Adderall is typically prescribed for people who are diagnosed with attention deficit hyperactivity disorder (ADHD) or attention deficit disorder (ADD). People who have these disorders have problems focusing, paying attention, and/or struggle with overactivity; therefore, they need the prescription. In order to focus on everyday activities, those diagnosed with ADD or ADHD are prescribed Adderall, Vyvanse or Ritalin.

"It's almost like a funnel," junior Gabby Lorino said. "You usually have all these thoughts and [the medication allows you to focus on what] you really need to think about."

According to the National Institute of Mental Health, the brains of ADHD patients mature roughly two years later than the average person. The particular region of the brain that the delay affects most is the area that controls attention, cognition and organization. According to WebMD, those with ADHD have a low amount of dopamine. Dopamine is a neurotransmitter, a chemical that sends signals to nerve cells in the brain. Therefore, ADHD patients need stimulants to increase the amount of dopamine in the brain.

"Dopamine is an important chemical in the brain," Dr. Gene-Jack Wang said in a Health Line News report about the effects of ADHD medication on dopamine transporters, "Low levels of the neurotransmitter are associated with, among other things, high levels

of novelty-seeking behavior, such as participating in high-risk sports and abusing drugs."

A person who is not affected by ADHD has a functioning frontal cortex and a stable amount of dopamine. After they take a stimulant, they will feel motivated, sharp and ready to go.

"It helps me actually get things done when I don't have the motivation on my own," a junior IB student without a prescription said. "A lot of things happen all at once. Although [school work] is not that big on its own, all of it together makes it overwhelming."

Eighteen percent of NW students admit illegally using the substance. Eight percent of the student body uses these stimulants and is not in any honors classes. The difficulty of the class is not necessarily what drives students to take the class. Student athletes are also taking these study drugs because they believe it helps them focus on their sport better.

"I take it so I can prepare and be ready for a swim meet," a female athlete who is not prescribed the drug said. "It helps me stay focused on my event."

It's not just students prescribed the medications who are using ADD/ADHD drugs. Nearly 20 percent of the student body either sells these prescription medications or purchases them. If caught, both the buyer and the seller could be charged with possession of a controlled substance.

"The problem with these medications is the addictive implications that come with them," pharmacist Jackie Baker said. "Students don't realize that what they are taking is dangerous when it's not prescribed. They are using it as a study drug."

Stimulants such as Adderall and Vyvanse are listed by the Drug Enforcement Administration (DEA) as Schedule II drugs, meaning that they are grouped with cocaine and oxycontin due to their high risk of addiction.

Some students who are prescribed the drugs are selling them to students, making the drug easily accessible. These students, if caught, could be charged with distribution of a controlled substance. According to the DEA, this can include giving or exchanging a prescription drug, as well as an offer or agreement to sell or exchange.

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“I sell it because

“I sell it for \$5 because I don’t need all of the pills,” said a junior prescribed the drug. “If I take one every other day, I’m fine. So, I make about \$40 per bottle by selling them.”

Adderall and its counterparts are not the only things students are relying on to help them study. In fact, students are consuming energy drinks or taking caffeine pills to stimulate their brains.

“Students are using unsafe amounts of caffeine to stay awake,” Baker said. “Many fail to realize that the unnecessary stimulation many energy drinks can give you causes damage to your brain.”

These side effects range from loss of appetite to,

in extreme cases, death (see sidebar for more details). According to the National Center for Biotechnology Information, Adderall contains amphetamine, which activates norepinephrine. Norepinephrine is a neurotransmitter that accelerates the heart and increases blood pressure. The other main ingredient in Adderall is dextroamphetamine, which can cause a sense of euphoria due to the rise in dopamine levels. Together, they increase the risks of heart failure or a heart attack, in both short-term and long-term users. (See the sidebar for healthy alternatives these drugs).

According to students, the pressures of school continue to grow: grades, teachers, friends, dating, etc.

However, some who are prescribed the drug believe that the medication allows them to connect with their peers and stay focused.

“I NEED my medication. Without it, I would be lost and go crazy,” a sophomore prescribed to a stimulant said. “I am afraid if I don’t take my meds, I might lose all my friends.”

Time management and organizational skills can help students stay on top of their workload without having to resort to aids like study drugs. Parents, teachers and counselors can help students explore healthy alternatives.

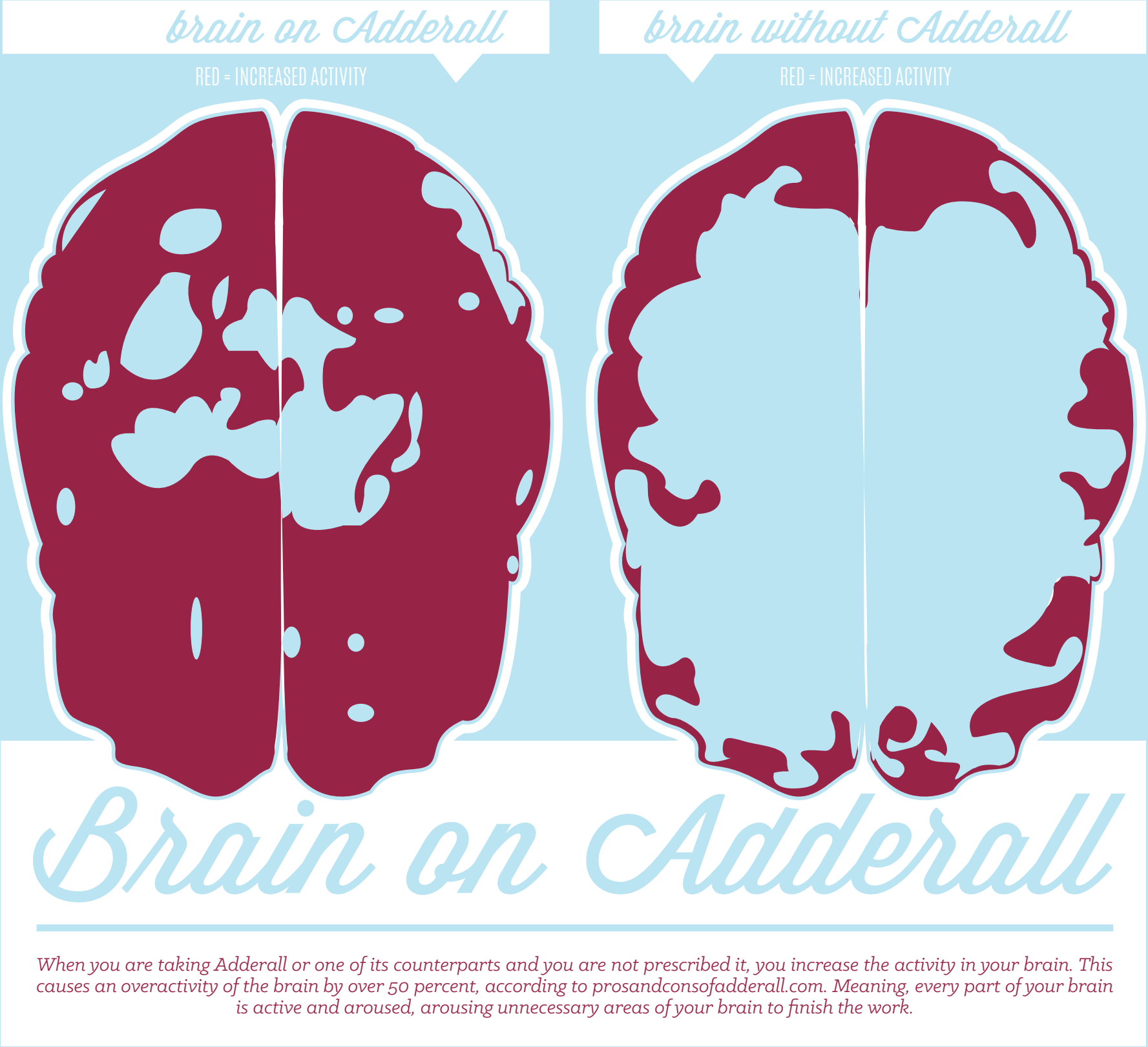
“I think one of the things that draws teachers to

the profession is our desire to build relationships with students,” English teacher Marc Gibbens said. “If the situation arises that students don’t think they can talk to a parent, I hope that most students have a teacher they would feel would be receptive to a personal conversation after school.”

For more information about substance abuse, or if you or someone you know is abusing prescription medications, contact the Substance Abuse and Mental Health Services Administration at 1-800-662-HELP or www.samhsa.gov.

► BY ATALIE BLACK + LENA DENNINGTON + HAENA LEE + ALAURA MOORE

	PURPOSE	USES	SIDE EFFECTS
Offline	stimulate central nervous system, muscles, and heart	commonly used to improve alertness	raises blood pressure, increases urine flow, hyperactivity, chest pain, anxiety, stomach irritation, increased breathing and heart rate, nausea and insomnia
Adderall	stimulate central nervous system	treats symptoms of various forms of Attention Deficit Disorder	rashes, irritation, anxious, seizures, difficulty breathing or swallowing, headaches, chest pain, swelling of the eyes, face, tongue or throat, nausea, loss of appetite, lack of sleep or having trouble sleeping, unusual changes in personality and/or behavior, hyperactivity, depression, fatigue
Ritalin	stimulate central nervous system	treats symptoms of various forms of Attention Deficit Disorder	rashes, fatigue, hyperactivity, changes in sensitivity in toes and fingers, sporadic muscle movement, and erratic outbursts and vision changes.



Drug **misuse and abuse** among teens **is up 33 percent** since 2008

A 2009 study from University of Rhode Island researchers found **60%** of students knew someone who *took study drugs.*

IN 2013, THE DRUG ENFORCEMENT ADMINISTRATION APPROVED THE PRODUCTION OF **189 tons** of legal speed (RITALIN, ADDERALL, CONCERTA, ETC.) *or 34mg for every* MAN, WOMAN AND CHILD LIVING IN THE U.S.

Stimulants such as Adderall and Ritalin were misused by **1.1 million** Americans in 2010

The U.S. is **4 percent** of the world's population, but in 2010 **produced two-thirds** of the world's Adderall.

ADHD Anonymous

When I take my prescribed dose of Vyvanse, I feel like I can do anything my teacher puts in front of me.

Let's say I'm assigned questions 1-4 of a packet in AP U.S. History. As soon as I get the packet, I start working. The only thing I can think about is getting that packet done. Ten minutes later, I've answered all 15 questions — more than assigned.

I don't stop there. I finish my precalculus homework and some AP English annotations. By the time the hour is over, I complete all my homework. Don't get me wrong, being able to get all of my homework done before I leave school is awesome, but Vyvanse has some undesirable side effects.

When I walk in and tonight's homework is on the board, the only thing I care about is getting it done. I ignore the day's lesson.

When I'm with my friends, they have to tell me to slow down, not to talk so much. That's hard when it feels like my mind is racing.

Other times, my friends think I don't care because I zone out when they talk, and they constantly have to repeat themselves.

On the days I forget to take it, or when my refill is delayed, I can't focus on anything. I can't get my homework done. I am fidgety and nervous, and the stress builds with every assignment. Even if I have all night, I just can't bring myself to do it.

I have to have Vyvanse to function normally. When I don't have that rush, I don't have the motivation to do anything. But it is a prescription drug, highly addictive and dangerous for those who take it as a study drug. It may cause hallucinations, seizures, depression and, if you overdose, death. When prescribed and monitored, it is an aid. When it is abused, it is not only dangerous but illegal. It's insulting to think that while I need it to function, others are taking it to simply to perform better on the ACT.

Editor's note: We have chosen to allow this editorial to run anonymously for two reasons:
1) Medical professionals warn those who take prescription stimulants not to share this information with friends to avoid being pressured to share or sell the drug.
2) Because ADD/ADHD is a medical condition, the writer has the right to request privacy. We have respected this request.

18% of students take stimulant drugs not prescribed to them

3% of students use caffeine as a stimulant

65% of students do not take any kind of stimulant

14% of students are prescribed to a stimulant drug

* results taken out of 1129 surveys

Healthy Habits:

- A cup of coffee offers a couple hours of energy.
- Consuming carbohydrates can increase production in serotonin, which may make feel calm.
- Drink a glass of water. Dehydration can impair one's concentration.
- Give yourself a pat on the back. Your touch releases oxytocin, a hormone that reduces anxiety and promotes the feeling of satisfaction.
- Get some rest. A healthy amount of 8-9.25 hours of sleep can improve concentration and decrease the risk of health problems.
- Eat some chocolate. Not only does release endorphins, but it has small amounts of caffeine to keep one alert.