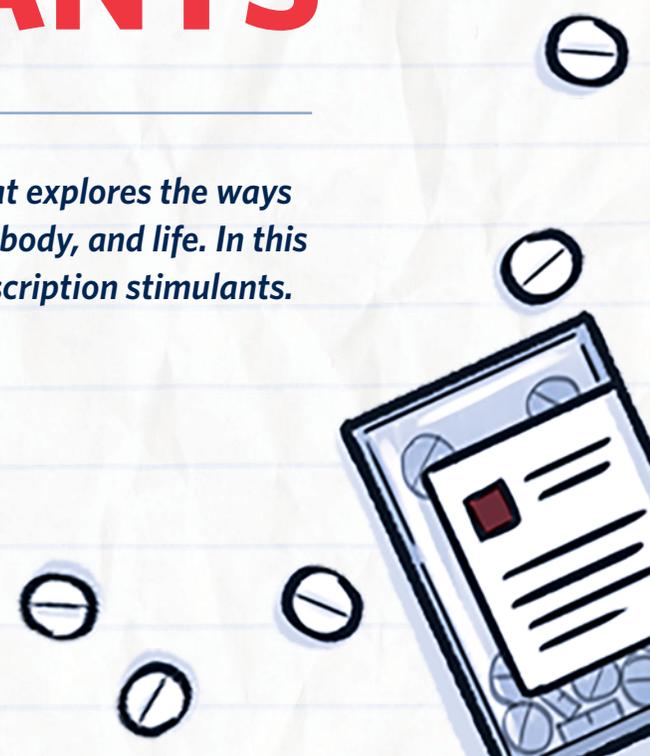


  
**mind**  
matters

*THE BODY'S RESPONSE TO*  
**PRESCRIPTION  
STIMULANTS**

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*Hi there! Mind Matters is a series that explores the ways that different drugs affect your brain, body, and life. In this issue, we are going to talk about prescription stimulants.*



## What are prescription stimulants?

Prescription stimulants are a type of medicine that doctors give people to help them with attention deficit hyperactivity disorders (ADHD) or serious sleep problems. You might have heard of stimulants like **Adderall**<sup>®</sup> and **Ritalin**<sup>®</sup>. They are usually given as pills.

If you have ADHD, prescription stimulants can make you more alert, increase your attention, help you focus, and give you more energy.



## Why do people misuse prescription stimulants?

When people who need these medications follow their doctor's instructions and take the right amount of medicine, they can feel better and focus better in school.

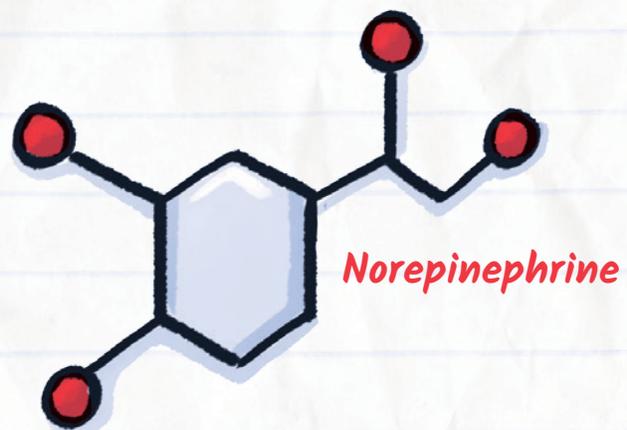
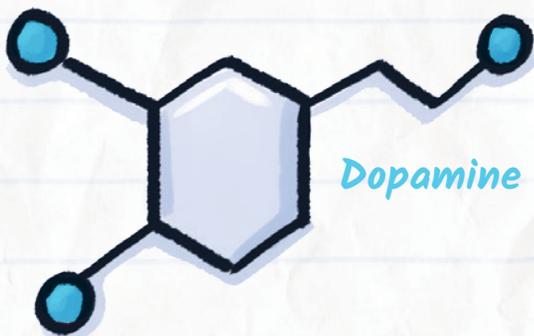
**But some people misuse these stimulants to get high,** feel more alert, or to try to get better grades. **If you do not have ADHD,** there are no studies to show these medicines improve your grades, but there could be many other reasons these young people are not doing well in school.

### Ways people MISUSE prescription stimulants:

- not following the instructions from their doctor
- taking pills that are not prescribed for them
- taking them to get high

## How do prescription stimulants work?

Prescription stimulants change the way the brain works by acting on the chemicals **dopamine** and **norepinephrine**. Dopamine makes you want to take the drug again and again. Norepinephrine gets your brain and body ready for action.



## How do prescription stimulants affect your brain and body?

Prescription stimulants can have uncomfortable side effects, even when prescribed by a doctor. When people misuse them, they can be especially dangerous.

### Misusing stimulants can cause:

- High blood pressure
- Fast heartbeat
- High body temperature
- Sleeping problems
- Angry reactions
- Heart problems



When doctors **prescribe stimulants**, they start in low doses and slowly increase the dose until someone feels better. When people **misuse stimulants**, they sometimes take high doses right away, which is dangerous.

## Can you become addicted to prescription stimulants?

**Yes, you can.** Over time, misusing stimulants can change the way your brain works, and you can become addicted. Addiction means you want to continue to take a drug even if bad things start happening to you — like getting poor grades or having problems with family and friends.

You can also go into withdrawal if you stop taking them all of a sudden. This can be unpleasant, painful, and make you feel really bad. It makes it very hard to stop taking the drug.

**This is why it is very important that people take stimulants exactly as their doctor says.**

People who can't stop taking the drug could be addicted. It doesn't matter where you live or how smart you are. There is no way to predict who will become addicted.

The right treatment can help someone who is addicted feel better and stop misusing prescription stimulants, but treatment is hard work and it can take many years to recover from addiction. The best approach is to never start using the drug in the first place.





*What if someone I  
know needs help?*

If you think a friend or family member has a problem with drugs, talk to an adult you trust — like a parent, coach, or teacher — right away. Remember, treatment is available and people can get better.

For more information, go to [nida.nih.gov](https://nida.nih.gov).



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