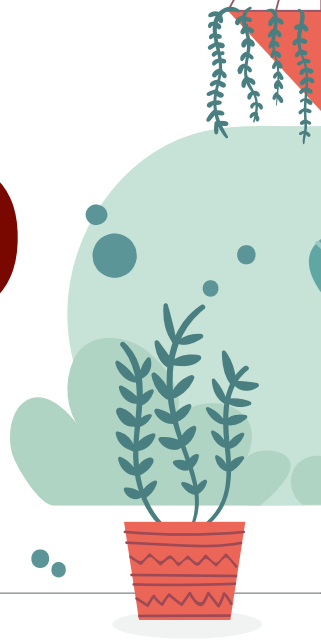


# STRESSED OUT?

Learn how the body responds to stress—and healthy ways to cope.



**T**hink of a time you were stressed. You may remember your heart racing, palms sweating, shoulders tensing up.

These reactions are part of the body's natural stress response. When the brain perceives a threat, it triggers a release of chemicals that prepare the body for the challenge.

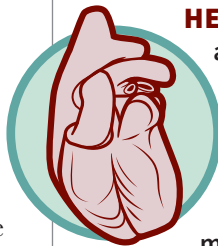
Known as “fight or flight,” the stress response evolved to help us survive (imagine an early human chased by a lion). But it can also be triggered by events that aren't life-threatening. You may feel stressed by school demands, personal relationship struggles, or social media pressures. National or global challenges can also cause stress, such as the COVID-19 pandemic and social issues like racial discrimination.

Feeling some stress is normal and can even be helpful. For example, the stress response can boost your energy and focus for a test. But constant stress can take a toll on your health. Here's why it's important to recognize when you are feeling overwhelmed and to take actions that can help you cope.

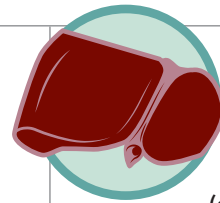
## YOUR BODY UNDER PRESSURE



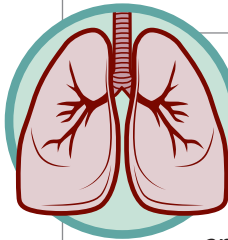
**BRAIN:** When you feel stressed, the brain sends a signal to the adrenal glands (located above the kidneys). The signal triggers the glands to release stress hormones. These chemicals cause changes to the body to prepare it to fight or run away (the “flight” response).



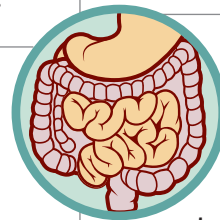
**HEART:** Heart rate and blood pressure increase so that blood travels through the body faster. This helps deliver oxygen to make muscles work.



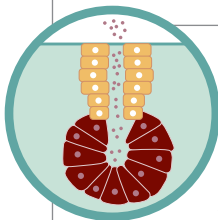
**LIVER:** The liver releases glucose (sugar) into the bloodstream. This powers cells in the body.



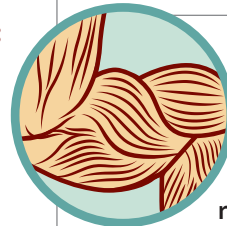
**LUNGS:** Breathing rate increases to deliver more oxygen to muscles and tissues.



**STOMACH/INTESTINES:** Digestion decreases so that the energy needed to break down food can be redirected to other parts of the body.



**SWEAT GLANDS:** Stress can trigger sweat to be released from some parts of your body. Stress-sweat is different from sweat caused by being hot.



**MUSCLES:** Muscles tense up throughout the body to prepare for responding with action.

A message from Scholastic and the National Institute on Drug Abuse (NIDA)



## HEALTHY TIPS TO HELP YOU COPE



**MOVE YOUR BODY:** Regular aerobic exercise, like running, activates a response that helps your body cope with emotional stress.



**MEDITATE:** Meditation and deep breathing exercises can help you decrease blood pressure and improve symptoms of anxiety and depression.



**TAKE A TIME-OUT:** Stepping away from distractions, such as social media and texting, may be stressful at first, but with practice it can help you relax.



**DO ONE THING AT A TIME:** If you feel overwhelmed with multitasking, try to tackle one challenge at a time.



**GET SUPPORT:** If you are stressed, ask for help from your family, friends, or a professional, such as a doctor or school counselor.



**RELAXING DURING A TEST:** If you experience stress during a test, you may feel your mind “go blank.” This happens because norepinephrine—a stress hormone—may temporarily disrupt brain circuits that are used to recall memories.

**TIP:** If you experience your mind going blank, pause for a moment, take a deep breath, and try to relax to help the hormone surge ease off. *You’ve got this.*



# CHRONIC STRESS

Ongoing, or chronic, stress does not allow the body’s stress hormones to return to normal levels. This can lead to health problems. Chronic stress can:

- ▶ Increase the risk of getting sick by weakening your immune system
- ▶ Cause sleep problems because of the energy surge brought on by stress hormones
- ▶ Lead to headaches from constant muscle tension
- ▶ Increase the risk of anxiety and depression
- ▶ Lead to problems with learning and memory
- ▶ Increase the risk for heart disease, obesity, and diabetes

## STRESS AND DRUG USE: NOT A GOOD MIX



Talking to a doctor about medical treatments to deal with stress can be helpful. Attempting to relieve stress by misusing prescription drugs or using substances like alcohol, tobacco, cannabis, or other drugs may actually make it harder to cope.

Substance use can affect the brain and body in the same way as stress does. For example, some drugs increase heart rate and anxiety, which causes the body’s stress response to increase—not decrease. Even drugs like alcohol that appear to alleviate stress in the short-term increase the body’s stress response over time. People who are stressed are also at higher risk for developing addiction.

# STRESS TEST

## PART 1 MATCH THE RESPONSE

When you feel under stress, your body's stress response system kicks into gear to tackle the situation. Match each body organ below with the way in which it responds to stress.

**1. Heart**

a. Tense to protect against injury.

**2. Brain**

b. Releases glucose into the bloodstream to power cells.

**3. Liver**

c. Rate increases to push blood through the body faster.

**4. Muscles**

d. Activity decreases so energy can be used in other parts of the body.

**5. Stomach/  
Intestines**

e. Signals the release of stress hormones.

## PART 2 THINK ABOUT IT

Use information from this activity sheet, as well as the article "Stressed Out?" to respond to the questions below on a separate sheet.

1. Identify a situation in which you experienced stress.

2. Write about how your body responded to the stressful event, and explain why your body reacted the way it did.

3. What strategies will you use to reduce this type of stress in the future?

## PART 3 COPING WITH STRESS

Stress-release strategies can help you cope with day-to-day stress so that it doesn't turn into chronic stress. Pick one of these activities and try it for at least 10 minutes every day for a week. Report back to your class how it helped you or not.



**Deep Breathing Focus:** Find a quiet space. Breathe deeply through your nose for a count of four. Hold your breath for a count of two. Then, let the breath out through your mouth for a count of four. Try to continue for 10 minutes or more.

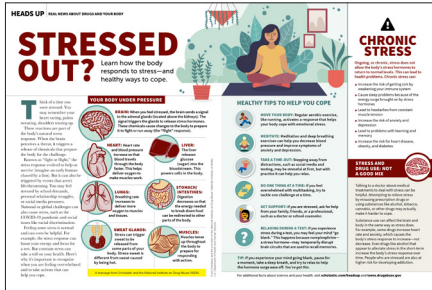


**Physical Activity:** Lace up and go for a walk or a run. Try to get your heart pumping, but not so much that you can't talk. In fact, you might ask a friend or family member to join you to help make it more fun!



**Step Away From Your Phone:** Put your phone away and do not check it for one hour on the first day, then gradually increase that time for a few days. Let your parents know, and ask them not to call you unless absolutely necessary. Only pick up the phone for them. At first you may feel stressed and worried about what you are missing. But see if it gets better each day. Track your progress.

# STRESSED OUT?



# OUT?

Find the article at:  
[headsup.scholastic.com/students/stressed-out](https://headsup.scholastic.com/students/stressed-out)

**adrenal gland** (*noun*): one of a pair of glands located near the kidneys that produces hormones, including norepinephrine

**alleviate** (*verb*): to make something, such as pain or suffering, easier to handle

**anxiety** (*noun*): feelings of worry or fear that may be strong enough to interfere with a person's daily activities

**blood pressure** (*noun*): the force caused by the blood pressing against the body's tubes that carry blood through the body (arteries); high blood pressure is connected to a higher risk for heart disease

**chronic** (*adjective*): continuing for a long time or repeatedly occurring

**cope** (*verb*): to handle a problem successfully

**depression** (*noun*): a condition in which a person feels sad and hopeless and may have difficulty concentrating and thinking

**evolve** (*verb*): to develop over time by natural processes

**hormone** (*noun*): a chemical produced by cells and released into the bloodstream that has specific effects on the body

**meditation** (*noun*): the act or process of sitting quietly to relax

**norepinephrine** (*noun*): a chemical produced and released when the body is under stress; it has many effects on the body, including increasing heart rate

**perceive** (*verb*): to notice or become aware of something

**response** (*noun*): a reaction to something

**stress** (*noun*): something that causes feelings of worry or anxiety; the state of worry caused by problems in life

**stress hormone** (*noun*): one of several chemicals produced and released in the body when a person feels threatened or afraid

**symptom** (*noun*): something that occurs in the brain or body that suggests that there is a disease or disorder present



# Can Too Much Screen Time Harm You?

Learn how spending excessive time on electronic devices can affect your brain and body.



A message from Scholastic and the National Institute on Drug Abuse (NIDA)

**P**hones, tablets, even watches—screens are everywhere you turn. According to Common Sense Media, teens spend an average of seven hours and 22 minutes on screens *every day*! And that doesn't include computer time for schoolwork! Studies show that too much screen time can affect your body. Adolescence is a critical time for brain development so teens may be especially at risk. While watching videos or texting with friends is fun, it's crucial to limit screen time. Here's why—and how.

## Trouble Sleeping

Excessive screen time can disrupt your sleep. You may stay up later interacting with your device. Your body releases a chemical called **melatonin** at night, in response to darkness. It helps your body fall asleep and stay asleep. Bright screen lights can reduce melatonin production, keeping you awake.



**Some studies link higher levels of screen time to increased symptoms of depression.**

### **Altering Your Brain**

Too much screen time may cause physical changes to your brain. The **cortex** is the outer layer of the brain that processes information. During adolescence, the cortex undergoes critical development. Screen time may affect its growth. A study called Adolescent Brain Cognitive Development (ABCD) revealed that some kids who use screens more than seven hours a day had a thinner cortex than those who used screens less. Future studies hope to show how this will affect kids' brains over time.

### **Tune Out**

Your brain goes through major changes during your teens. Everything you experience during this time can affect your brain development. It's essential to challenge your brain by trying new things—like sports, music, and cooking—so it can help you process information and solve problems in the future. Screens may always be a part of your life—but they don't have to be the *main part*.

Sleep is especially important for teens. Getting too little sleep can weaken your immune system, making you more likely to get sick. It can also affect your ability to concentrate, learn, and remember. While you sleep, your brain stores what it's learned during the day. This makes it possible to recall information come test time.

### **Mood Changes**

Too much scrolling and texting may affect your emotional health. Scientists are still studying the link between screen time and mood. But some studies link higher levels of screen time to increased symptoms of depression. Many other factors also play a role in depression. Other studies have shown that excessive screen time may lead some teens to neglect responsibilities, use screens to deal with stress, and feel anxious without a device.

### **Tips for "Turning Off"**

- 1 Use an app to track your screen time. Set limits.
- 2 Turn off all screens 30 to 60 minutes before bed. You'll fall asleep more easily and feel better-rested in the morning.
- 3 Schedule time to do things without phones or other screens: Go outside, try a new hobby, hang out with friends.
- 4 Exercise—you'll feel a natural boost of your brain's feel-good chemicals.
- 5 Keep a journal. Does screen time make you feel anxious or stressed? Talk to your parents, a school counselor, or your doctor for help.

