STRESSED OUT?

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

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

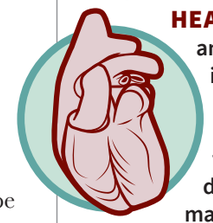
These reactions are part of the body's natural stress response. When the brain perceives a threat, it triggers a release of chemicals that prepare the body for the challenge.

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.

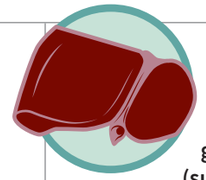
Feeling some stress is normal and can even be helpful. For example, the stress response can boost your energy and focus for a test. But constant stress can take a toll on your health. Here's why it's important to recognize when you are feeling overwhelmed and to take actions that can help you cope.

YOUR BODY UNDER PRESSURE

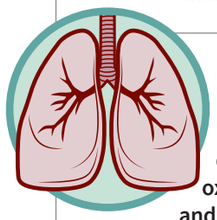
BRAIN: When you feel stressed, the brain sends a signal to the adrenal glands (located above the kidneys). The signal triggers the glands to release stress hormones. These chemicals cause changes to the body to prepare it to fight or run away (the "flight" response).



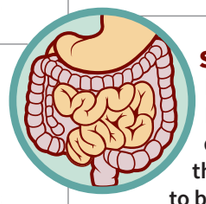
HEART: Heart rate and blood pressure increase so that blood travels through the body faster. This helps deliver oxygen to make muscles work.



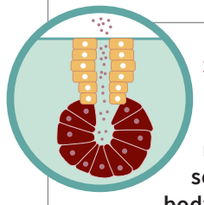
LIVER: The liver releases glucose (sugar) into the bloodstream. This powers cells in the body.



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)

From Scholastic and the scientists of the National Institute on Drug Abuse, National Institutes of Health, U.S. Department of Health and Human Services

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.

For additional facts about science and your health, visit **scholastic.com/headsup** and **teens.drugabuse.gov**.