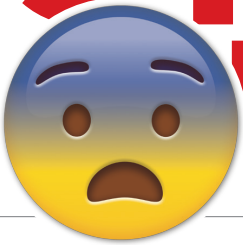


STRESSED OUT?



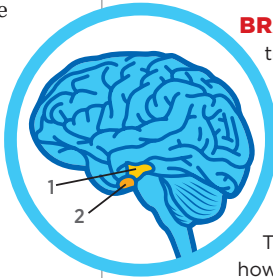
Learn how the body responds to stress—and healthy ways to cope

Your Body Under Pressure

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 situation to be threatening, it triggers a surge of hormones that prepare the body for the challenge.

Known as "fight or flight," the stress response evolved to help us survive. But it is also triggered by events that aren't life-threatening. This can include academic and relationship pressures, or even stress from being over-connected to technology and social media. Some stress is helpful, like keeping you energized to study for a test. But constant stress can take a toll on a person's emotions and body, which can lead to serious health problems.



BRAIN: The body's stress response is triggered when the brain's hypothalamus (1) sends a signal to the pituitary gland, located at the base of the brain (2).

This gland then signals the adrenal glands (located above the kidneys) to release stress hormones.

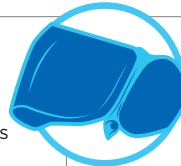
These hormones change how organs and systems act to prepare the body to fight or take flight.

Fast Fact:

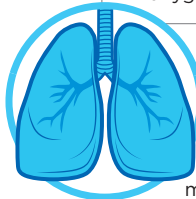
Adrenaline, norepinephrine, and cortisol are the body's major stress hormones.



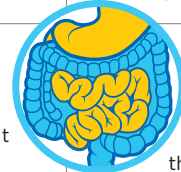
HEART: Heart rate and blood pressure increase so that blood travels through the body faster. This helps deliver oxygen to power muscles.



LIVER: The liver causes more glucose (blood sugar) to be released into the bloodstream. This powers cells in the body.



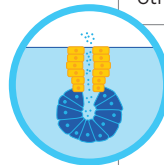
LUNGS: Breathing rate increases to deliver more oxygen throughout the body to power muscles and tissues.



STOMACH/INTESTINES: Digestion decreases. This redirects energy that would be used to break down food to power other parts of the body.



MUSCLES: Muscles tense up to prepare the body for action.



SWEAT GLANDS: Stress-triggered sweat is chemically different from sweat that cools the body. Stress sweat interacts with bacteria on the skin to cause body odor. Researchers aren't exactly sure why we sweat when stressed.

► **More Info:** For additional facts about health, visit scholastic.com/headsup and teens.drugabuse.gov.

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 the hormones adrenaline and cortisol.

PART 2

THINK ABOUT IT

Why is constant stress bad for you?