

Stress Down: Eustress-ing Me Out! (Grades 6-12)

DESCRIPTION

Are you feeling stressed out? Good news: you're not alone. All animals share basic biological responses to perceived dangers. Learn to recognize your reactions to stressful situations, distinguish between what you can and cannot control, and discover techniques to manage your stress response. With your newfound knowledge, harness the power of your brain to control the effects of stress on your body and mind.

OBJECTIVES

- Identify stressors within one's own life, comparing these stressors with those of other humans as well as non-human animals.
- Identify how living things respond to stress, both positively and negatively. Discuss the evolutionary background of our biological stress responses.
- List and practice various methods for managing stress, including stressor control and stressor response control.

National Health Education Standards

Grades 6-12: Health

- **Standard 1:** Students will comprehend concepts related to health promotion and disease prevention to enhance health.
- **Standard 2:** Students will analyze the influence of family, peers, culture, media, technology, and other factors on health behaviors.
- **Standard 5:** Students will demonstrate the ability to use decision-making skills to enhance health.
- **Standard 6:** Students will demonstrate the ability to use goal-setting skills to enhance health.
- **Standard 7:** Students will demonstrate the ability to practice health-enhancing behaviors and avoid or reduce health risks.

Before Your Program

How you can help us make this Virtual Field Trip (VFT) a success:

- If your students are joining us from your classroom computer, please arrange your room and projection screen so everyone can see us clearly.
- Please test your visual and audio connections prior to the day of the program. If you would like us to facilitate a test connection with you, we are happy to do so.
- If you and your students are joining us from your homes, we will have an educator monitoring the Chat feature for questions. We may ask that you or another staff person serve as a Co-Host to help monitor students for any inappropriate Chat or camera behavior.
- If you will have a hybrid class (some at school, some joining from home), our educator will monitor the Chat and camera behavior, and we reserve the right to temporarily move any disruptive students to our Waiting Room so we or school staff can correct the undesired behavior.
- If you prefer, we can turn off all cameras and interact solely via the Chat feature.

VOCABULARY

Adaptation: a part of a living thing's body/behavior that helps it survive and fulfill its basic needs

Adrenal glands: endocrine glands located on top of your kidneys; producers of many important hormones, such as cortisol and adrenaline; regulators of several bodily functions, including your body's response to stress

Adrenaline: a neurotransmitter and hormone that plays an important role in your body's "fight-or-flight" response and is also used as a medication to treat many life-threatening conditions

Distress: a state of suffering or discomfort

Dopamine: a neurotransmitter made in your brain that plays a role as a "reward center" and in many bodily functions, including memory, movement, motivation, mood, and attention

Emotion-focused coping: a strategy in which a person focuses on regulating their negative

emotional reactions to a stressor. This stress-management strategy is typically applied in situations where the individual does not have control over the specific stressor.

Eustress: stress that helps an individual to perform better; gives one a feeling of fulfillment

Fight-or-flight response: instinctual response by living things to a perceived threat characterized by increased activity in the SNS

Hormones: chemicals that coordinate different functions in your body by carrying messages through your blood to organs, muscles, etc. to tell your body what to do and when to do it

Mindfulness: the awareness of one's internal states and surroundings; a concept that has been applied to various therapeutic interventions to help people avoid destructive or automatic habits and responses by learning to observe their thoughts, emotions, and other present-moment experiences without judging or reacting to them

Neurons: fundamental units of the brain and nervous system; the cells responsible for receiving sensory input from the external world, sending motor commands to our muscles, and transforming and relaying the electrical signals at every step in between

Neuroplasticity: your brain's ability to learn and adapt

Neurotransmitters: your body's chemical messengers; they carry messages from one nerve cell across a space to the next nerve, muscle, or gland cell to help you take in and respond to all information your body receives from other internal parts of your body and your environment

Problem-focused coping: a strategy that involves addressing or changing a situation that causes feelings of distress. This stress-management strategy is typically applied in situations where the individual has control over the specific stressor.

Stress: a state of physical, mental, or emotional tension, strain, or suspense

Stress management: techniques used to help an individual cope and respond to difficult

situations or experiences

Stressor: a stimulus that activates the fight-or-flight response

Therapy: a treatment or method used to alleviate a disease or disorder. Examples of therapies used to manage stress include (but are not limited to) Meditation and Mindfulness-Based Stress Reduction (MBSR) and Cognitive Behavioral Therapy (CBT).

Wabi-sabi: a concept of Japanese aesthetics that stresses unpretentiousness, plainness, earthiness, and satisfaction with imperfection

EXTENSION ACTIVITIES

WHAT STRESSES YOU OUT?

- Have students create a list of ten things that cause them to be stressed out. Rank these stressors by level of intensity (1=low, 10=high).
- As a class, compare and discuss these stressors and create general categories (such as homework, looks, grades, sports, family, etc.). Find out how many students share similar stressors.
- Create a pie graph showing the percentage each category is a stressor for the class as a whole.

GOOD STRESS AND BAD STRESS

- Ask students to create a list of ten things that activate the stress response in their bodies. Next to these items, have students list symptoms or cues of their bodies responding to these stressors.
- Have students compare and contrast how they feel following various stress response episodes. Ask them to identify when the stress response was a benefit to them or a handicap.

CLASSROOM STRESS MANAGEMENT

- Lead a discussion in which students use their knowledge of the stress response to develop a “classroom stress management toolbox”
- This “toolbox” can be implemented on a daily/weekly basis as a group activity to focus the class for the day ahead, or it can be saved for more specific occasions, such as before an important test. Examples for your “toolbox” can include movement breaks, mindfulness meditations, and breathing exercises.



ART/SCIENCE CONNECTION

- The aesthetics of wabi-sabi are often displayed in Japanese art.
- Students can research online or look up books in the library of Japanese art, and discuss how the art forms show wabi-sabi. One website with good examples of contemporary Japanese art is www.yufuku.net.

ONLINE RESOURCES FOR TEACHERS AND STUDENTS

Click the link below to find additional online resources for teachers and students. These websites are recommended by our Museum Educators and provide additional content information and some fun, interactive activities to share with your class.

CMNH Educators regularly review these links for quality. Web addresses often change so please notify us if any links have issues.

[Cleveland Museum of Natural History](#)

[Cleveland Clinic Health Library](#)

[ScienceDirect -- Topics in Psychology](#)

[American Psychological Association – Psychology topics: Stress](#)

