

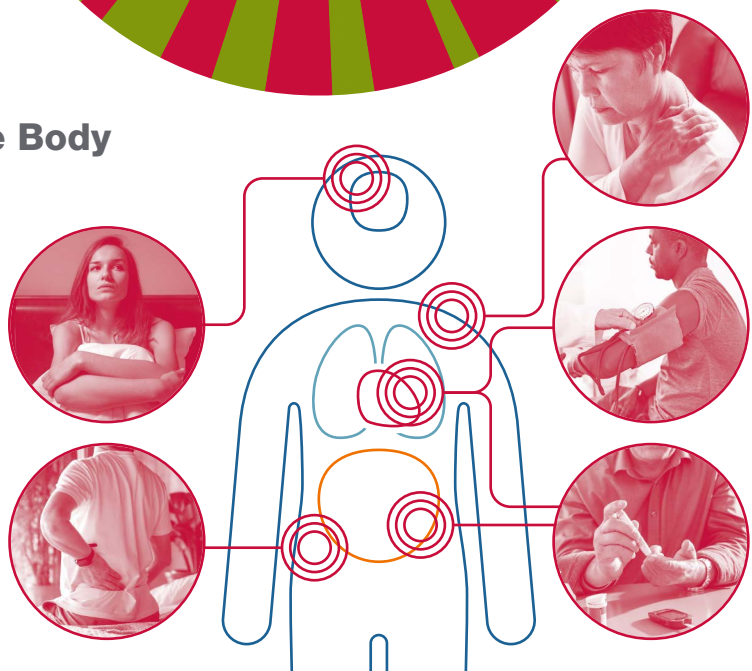


What Is Stress?

Stress is a physical and emotional reaction that people experience as they encounter challenges in life. When you're under stress, your body reacts by releasing hormones that produce the "fight-or-flight" response. Your heart rate and breathing rate go up and blood vessels narrow (restricting the flow of blood). Occasional stress is a normal coping mechanism. However, long-term stress or chronic stress may contribute to or worsen a range of health problems.

The Effects of Chronic Stress on the Body

Chronic stress negatively impacts every organ system of the body, down to our cells and molecules: "fight or flight" response overdrive, elevated stress hormones, disrupted sleep, muscle tension, metabolic dysfunction, immune dysregulation, and inflammation. Chronic stress has been linked to the development of some diseases such as cardiovascular disease, diabetes, cancer, autoimmune diseases, and mental illnesses such as depression and anxiety disorders. Using alcohol or drugs to dull the effects of stress can make the problem worse and interfere with sleep.



Acute Stress, Chronic Stress, and Anxiety. What's the Difference?

- ⦿ **Acute stress** is a response to an external event, such as taking a big test or arguing with a friend. Acute stress goes away once the situation is resolved.
- ⦿ **Chronic stress**, however, lasts for weeks, months, or longer. As you go about your life, your body is acting as if you're being threatened. Causes of chronic stress include routine stress from the demands of work or school; family or money problems; stress from sudden, difficult changes in your life, such as divorce or illness; and traumatic stress, which may happen when you're in danger of serious harm or death.
- ⦿ **Anxiety** is a common mental reaction to stress and can occur even if there is no current threat. Both stress and anxiety can affect your mind and body, and some of the symptoms are the same.

If anxiety doesn't go away or you are struggling to cope, it may be time to talk to a professional.

The National Institute of Mental Health at the National Institutes of Health has information on stress and anxiety. If you are in immediate distress or are thinking about hurting yourself, call, text, or chat 988. This three-digit number will route you to the 988 Suicide & Crisis Lifeline, which is now active across the United States. The Lifeline provides 24-hour, confidential support to anyone in suicidal crisis or emotional distress.

Whether you are suffering from acute stress, chronic stress, or anxiety, there are simple tools that can help.

Creating the relaxation response through the use of relaxation techniques and mindfulness can counteract the negative effects of stress. Research evidence is accumulating that these can reduce blood pressure, inflammatory cytokines, and oxidative stress, as well as improve glucose metabolism and sleep.

How Do I Press Reset on Stress?

There is no drug to cure stress. But we do have access to a built-in “stress reset button” that acts as an antidote to stress. It’s called the relaxation response. In contrast to the stress response, the relaxation response slows the heart rate, lowers blood pressure, and decreases oxygen consumption and levels of stress hormones.

Chronic Stress increases

Heart rate	Muscle tension
Blood pressure	Glucose in bloodstream
Oxygen consumption	Buildup of plaque in arteries
Stress hormones	Risk of diabetes, peptic ulcers, viral infection

Slow, deep breathing

Progressive muscle relaxation

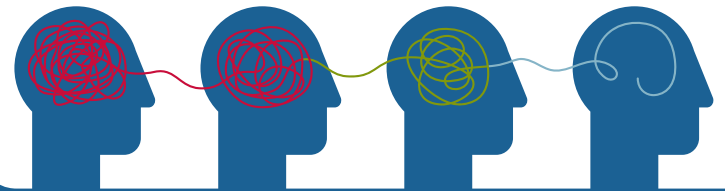
Mindfulness

Relaxation Response decreases

Heart rate	Oxidative stress
Blood pressure	Stress hormones
Inflammatory cytokines	Muscle tension
Elevated blood glucose	

Pressing Reset on Stress Can Be Done Anywhere, Anytime.

At your desk, in your bed, or doing dishes, simple tools such as deep breathing, progressive muscle relaxation, and mindfulness can produce the relaxation response.



Slow, Deep Breathing

(also called diaphragmatic breathing)



For deep breathing exercises, take a few slow deep breaths, letting your abdomen expand as you fill up your lungs, then breathe out slowly and completely. Notice where you may be holding some tension—throat, shoulders, chest—and relax so that each breath becomes slower and deeper.

Progressive Muscle Relaxation



This technique involves relaxing different muscles in your body, progressing from head to toe, or toe to head. Briefly contracting each muscle before relaxing it can help you feel which muscle is tense. At the same time take deep breaths, inhaling through the nose and exhaling through the mouth.

Mindfulness



For a mindfulness exercise, focus on being aware of what you’re sensing and feeling in the moment—sight, sound, smell, taste, or touch. Mindful body scan practice involves focusing attention on different parts of your body and their sensations in a gradual sequence. You can combine mindfulness with the other muscle relaxation and breathing techniques.

Pressing reset on stress for just a few minutes several times a day can prevent stress from building up and can lead to better sleep, giving you more energy the next day.

For more information about relaxation techniques and mindfulness, visit

nccih.nih.gov