

How Does Stress Affect Our Bodies?



We've all experienced stress, whether it be running late to work or preparing for a large party. It's inevitable that we encounter some forms of stress, but could our stress be harming our bodies. Researchers have been studying the effects of stress and have shown that it affects almost every part of your body.

What is Stress?

Stress is a physical and emotional reaction to a challenge or demand within your life. When you're stressed, the brain sends triggers, both chemical and along the nerves, to the adrenals. The adrenals then release hormones, such as cortisol and adrenaline, which affect your body in different ways depending on which type of stress you are dealing with.

These hormones can increase:

- Alertness
- Blood pressure
- Blood sugar

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- Breathing
- Heart rate
- Muscle tension
- Sweating
- Irritability
- Anxiety
- Depression
- Headaches
- Insomnia

The Difference Between Good Stress, Bad Stress, and Chronic Stress

Good Stress

It is natural for us to encounter stress in our day-to-day lives. Good Stress will temporarily increase your energy and focus so that you are able to take whatever challenge is in front of you.

When you experience good stress, you may know that the challenge is difficult, but you are confident in your abilities to complete the challenge. Generally, stress is good for us when it meets to basic criteria:

1. What's being asked of us feels doable
2. We know the stress is temporary

When stress leads to action, and you know the action leads to satisfaction, you're experiencing good stress.

Bad Stress

When a challenge no longer feels doable and is not temporary, we encounter bad stress.

Dr. Menchola outlined the following ways stress is harmful:

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- **It interferes with your functioning:** You start making mistakes on things that are routine in your life. You also experience this by having trouble falling asleep or staying asleep due to your stress.
- **It affects your health:** You stop taking care of yourself. Maybe you're relying on substances to take the edge off or picking up food every night instead of cooking at home.
- **You're spending too much time and energy on small things:** Dr. Menchola states that we often do this when we are trying to gain control because we are stressed over things that we can't control.
- **You feel paralyzed:** This is when small things seem impossible. Maybe you have a hard time getting up to do household chores or procrastinate on daily responsibilities.
- **You isolate:** You're so stressed that you no longer want to see or friends or family, you don't ask for help, and you have a hard time conversing with others.

Chronic Stress

People often believe that chronic stress is normal. It is normalized to skip meals, toss and turn in the middle of the night, and have stress-induced headaches. Yes, chronic stress is common, but it is not normal for our bodies to experience this kind of stress.

When our stress is chronic or long-term, that's a signal that we're in an unsustainable situation. Sometimes it can also trigger mental health disorders, such as anxiety and depression. However, our chronic stress is not a sign to keep pushing through at all costs because it can continue to negatively affect our health.

Chronic stress impacts almost every system in our body, and if you already have chronic conditions like irritable bowel syndrome or asthma, chronic stress can make these conditions much worse.

The Effects of Chronic Stress on Your Body

Stress creates a fight or flight response on your body. Stress is a natural physical and mental reaction to life experiences. For immediate, short-term stress, it can be beneficial to your health and can potentially help you cope with more serious situations. Yet, if your stress continues for longer than is necessary for survival, it can negatively impact your health. There is a fine line between good and bad stress.

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Central Nervous and Endocrine Systems

Your central nervous system is responsible for your fight or flight response. When your brain tells your adrenal glands to release adrenaline and cortisol, these hormones begin to speed up your heartbeat and send blood rushing to the areas that need it most, such as your muscles, heart, and other important organs. When the fear is gone, the hypothalamus should tell all of your systems to go back to normal. If the stressor doesn't go away, then the response will continue. This is what we call chronic stress. Research has shown that those who face chronic stress are more likely to face problems associated with overeating or not eating enough, alcohol or drug abuse, and social withdrawal.

Respiratory and Cardiovascular Systems

During the stress response, you breathe faster in an effort for your body to distribute oxygen-rich blood. The muscles that help you breathe can also tighten up, which can make you short of breath. If you already have a breathing problem like asthma, stress can make it more difficult to breathe.

When you're stressed, your heart also begins to pump faster so that blood can quickly reach your vital organs and limbs. Stress hormones cause your blood vessels to constrict to deliver more oxygen to your muscles, allowing you to take quick actions. But this also raises your blood pressure.

If you are stressed for too long, then your heart will work too hard for too long, increasing the risk of heart attacks and strokes. Over time, an increased heart rate and high blood pressure can damage your arteries, leading to a heart attack.

Many people are stressed because of work. 10% to 40% of people who are employed experience work-related stress. 33% of those people experience severe chronic stress. People who experience stress from work are more likely to develop cardiovascular disease.

People who have a high stress job have a 22% higher risk of a stroke than those with low-stress jobs. People usually experience stress when they have less control over their jobs and how hard they are expected to work.

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Certain behaviors can also increase the risk of heart disease:

- Lack of physical activity
- Not taking medications as prescribed
- Overeating
- Smoking
- Unhealthy diet

Digestive System

When you are stressed, your liver produces extra blood sugar (glucose) to give you a boost of energy. When you are under chronic stress, your body might not be able to handle this large amount of glucose, which can increase your risk of developing type 2 diabetes. Stress can also increase insulin resistance, which can be dangerous for those who have already been diagnosed with type 2 diabetes.

The rush of hormones and rapid breathing may also cause other problems in your digestive system. You're more likely to experience heartburn and acid reflux due to the increased stomach acid. Stress doesn't cause ulcers, but it does increase your risk of them developing and existing ulcers to act up.

If you experience short-term stress or good stress, your appetite may be low. However, if you experience stress for a long period of time, your appetite will increase. When cortisol is released in your body, your appetite increases and causes you to crave foods that are high in sugar and fat, which can lead to weight gain.

In addition, you may connect food to feel good emotions, which will cause you to eat more food than you would if you weren't under stress. This is called stress or emotional eating.

You may also experience an array of gastrointestinal issues, such as:

- Constipation
- Diarrhea
- Indigestion
- Loss of appetite
- Nausea

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- Peptic ulcers
- Stomach cramping

Muscular System

Your muscles tense up to protect themselves from injury when you're stressed. They tend to release again after you relax. However, you have long-term stress, and your muscles don't get the chance to relax, then there could be more problems coming your way. Tight muscles lead to headaches, back and shoulder pain, and body aches. Over time, this can start an unhealthy cycle as you stop exercising and turn to pain medication for relief.

Sexuality and Reproductive System

Stress is exhausting for both the mind and body, so it's not unusual to lose your desire when you're under constant stress. Stress can affect the female and male reproductive system differently.

Male Reproductive System

Testosterone may increase during short-term stress, but chronic, ongoing stress can affect testosterone production, resulting in a decreased sex drive.

Chronic stress can also negatively impact sperm production and maturation, causing difficulties in couples who are trying to conceive. Researchers have found that men who have experienced two or more stressful events within a year had a lower percentage of sperm mobility and a lower percentage of normal morphology than men who did not experience any stressful life events.

When stress affects the immune system, the body can become vulnerable to infection. In the male anatomy, infections to the testes, prostate gland, and urethra can affect normal male reproductive functioning.

Female Reproductive System

Stress may affect menstruation among girls and women, including absent or irregular menstrual cycles, more painful periods, and changes in the length of cycles. Stress may also make

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premenstrual symptoms worse or more difficult to cope with. These symptoms include cramping, fluid retention and bloating, negative mood, and mood swings.

As women juggle many day-to-day responsibilities, stress, distraction, and fatigue may reduce sexual desire.

Stress can have a significant impact on women's reproductive plans. Stress can make it more difficult for a woman to conceive and negatively impact the health of her pregnancy and postpartum adjustment. Depression is the leading complication of pregnancy and postpartum and much of this can be related to the stress that women can face. Excess stress increases the likelihood of developing depression and anxiety during this time. Maternal stress can negatively affect fetal and ongoing childhood development, as well as disrupt the bonding process with the baby in the weeks and months following delivery. If stress goes unmanaged during pregnancy, it may lead to an increased chance of low birth weight, premature labor, and postpartum depression.

As menopause approaches, hormone levels fluctuate rapidly. These changes can be associated with anxiety, mood swings, and feelings of distress. Therefore, menopause can be a stressor. Emotional distress may cause the physical symptoms to be worse, such as an increased number of hot flashes.

Immune System

Short-term stress can stimulate the immune system, which can help you avoid infections and heal wounds. But, if your stress is long-term, then this stress will weaken your immune system and reduce your body's response to foreign invaders. People who experience chronic stress are more susceptible to viral illnesses, such as the flu and common cold, as well as other infections. Stress can also increase the amount of time it takes you to fight an illness or injury.

Overview

Life can be stressful at times, and most people experience periods of stress throughout their lives. If you experience chronic stress, it's important to find ways to cope so that your mind and body are not affected. Luckily, there are many ways to manage stress. Stay tuned for our article on how to manage stress.

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