

What's the link between stress and inflammation?

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We all know that stress isn't good for us, but can it actually cause harm to our bodies? We explore the link between stress and inflammation

You've probably heard that stress has a physical effect on the body. Stress can trigger the body's fight-or-flight pathway – which is useful when you are in imminent danger and need to fight for your life, but less so when you're snowed under at work or home.

Long-term, this fight-or-flight response can weaken your immune system and lead to a whole host of physical symptoms like high blood

pressure and stomach problems.

Although the exact link isn't yet well understood, some of the effects that stress has on the body are related to inflammation.

The science behind stress and inflammation

Inflammation is the way your body defends itself against a threat. It's a natural response from the immune system that helps the body fight off invaders and to heal itself, but

unfortunately it can be a bad thing if it goes on for too long.

If you cut yourself, it's normal for your body to respond with inflammation around the cut. Cells in your immune system release chemicals to communicate danger to other cells, which in turn causes swelling, redness, and even some pain. These are all good things that promote healing and stop toxins from spreading further into your body.

However, stress leads to a different

to manage your stress and to reduce your risk.

How managing stress can improve your health

Stress is a part of life, but feeling stressed all the time isn't inevitable. When we're stressed, it can be even harder to find the time for stress-management, but this is the time we need to focus on it the most.

One of the most effective ways to manage stress is through regular exercise. Many scientific studies have found that physical exercise helps protect against chronic inflammatory diseases and reduce inflammation. The benefits don't end with your physical health – exercise can also boost emotional resilience and mood.

Although all forms of exercise are great, yoga often gets a lot of press for reducing stress as it actively promotes relaxation. By focusing on the body, mind and breathing techniques, yoga can help with both the psychological

and physical aspects of stress.

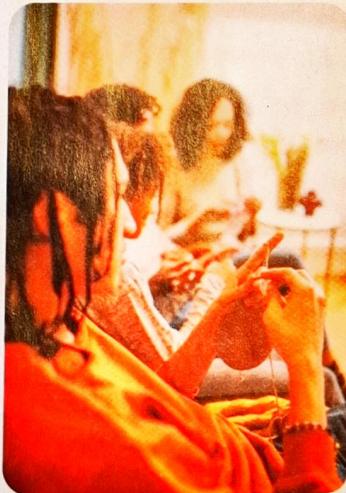
Some people turn to less healthy coping mechanisms, such as smoking, alcohol and eating unhealthy foods, to deal with their stress. Although they may provide temporary relief, these behaviours can negatively impact your mental health and even lead to addiction. They also increase inflammation levels in the body, which, when combined with stress, can worsen the risk of inflammatory diseases.

Everyone is unique, and there are loads of different stress-management strategies out there. Don't be afraid to try a few different things to see what works for you. Managing your stress in a healthy way can help you become more emotionally resilient and deal with the challenges life throws at you.



Go out into nature

Being outside is great for both the body and for the mind. Try to get outside every day, even if it is just for a short walk.

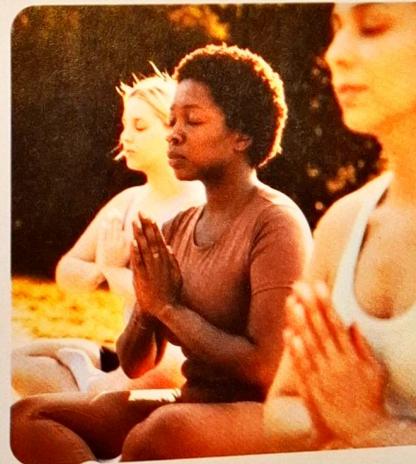


Work on your hobbies

Focusing on something you love can distract your brain from your stress. Not to mention, group hobbies are a great way to meet people and make connections.

Fit in some exercise

Exercise triggers the release of feel-good chemicals in the brain, so it can be a great way to manage your stress. Yoga is particularly good, but any exercise that you enjoy is great.



type of inflammation. Stress doesn't just activate inflammation at the sight of a wound or infection, it leads to body-wide inflammation, including in the brain.

This inflammation is mostly due to the way stress affects the immune system, but it's a little more complicated than that. Stress activates other bodily responses that are needed in an emergency that may also promote inflammation.

Imagine being chased by a tiger. To escape, you'd need to be alert and have the power in your muscles to run away or fight the tiger. The acute stress in this situation leads to a physical response from the body. Your heart rate, blood sugar and blood pressure all increase to give your muscles and brain the energy they need to deal with the situation. Once the tiger is gone, you're no longer stressed, and your body should return to normal.

The problem lies with chronic, or

"Stress is a part of life, but feeling stressed all the time isn't inevitable."

long-term, stress when your body doesn't return to normal.

Dealing with chronic stress and long-term inflammation

Modern life doesn't often involve being chased by a tiger, but it is full of many different types of stress.

When you're stressed for a long period of time, the body doesn't have a chance to recover and keeps responding in a way that promotes inflammation. Your immune cells continue to create inflammation-inducing chemicals rather than responding normally to pathogens or cancerous cells.

Not only does this mean the immune system is less effective at fighting off illnesses, but it can also trigger stress-related diseases. Other parts of a chronic stress response, such as high blood sugar, blood pressure and stress hormone levels, can also contribute.

Together, this combination of chronic stress and inflammation may lead to heart disease, diabetes, depression, autoimmune diseases or even certain types of cancer, although more research is needed for us to fully understand the specifics.

Yes, this might sound scary, but the good news is there are plenty of ways

6 simple ways to reduce stress

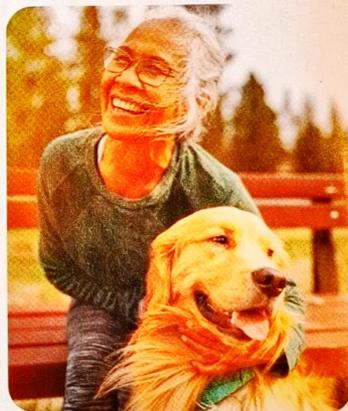


Build a support network

Whether that's family, friends or colleagues, research suggests that having a good support network makes it easier to manage stress.

Avoid these unhealthy habits

Some people turn to smoking, binge eating, alcohol, or other drugs as ways to deal with their stress. Try to find healthier ways to cope, as these habits can lead to more problems in the long run.



Take time to relax

Taking a moment to relax helps you to refocus away from the cause of your stress. Find whatever works for you, whether that's a few minutes reading a book, spending time with a pet, or something more structured like mindfulness.