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The surprising ways stress can affect your body

Whether it's due to a busy family life or a chaotic workload, we all experience stress and it can play havoc with our health and well-being. It's natural to feel stressed at times and in short bursts, it can be positive and help keep us alert and focused. But long-term [stress](#) can not only trigger or exacerbate mental health issues, it can also damage our physical health too.

Dr Niall Campbell, a consultant psychiatrist at Priory Hospital Roehampton, explains what happens when we experience stress.

"When faced with a perceived threat the so-called 'fight or flight' response automatically kicks in. Your sympathetic nervous system is activated and your body produces adrenaline, corticosteroids and other chemicals to enable the muscles to work better, the heart rate to go up and the brain to be more alert," he explains.

Although this is fine for short periods of time, continued stress – or automatically feeling stressed without a trigger – can lead your body to become exhausted, Campbell adds.

The constant release of stress hormones, including adrenaline, cortisol and noradrenaline, can cause stomach problems, and muscular issues, and affect [our menstrual cycles](#) too.

Stomach problems

[Digestion](#) is controlled by the enteric nervous system, which is made up of nerves that communicate with the central nervous system. When our fight or flight response is activated, it can affect digestion because the central nervous system shuts down blood flow, alters the secretions needed to digest food and can cause the digestive muscles to contract.

Stress can cause the stomach to tense up and become irritated, causing symptoms of [irritable bowel syndrome \(IBS\)](#), such as cramping, aches, diarrhoea and [constipation](#).

Laura*, a 29-year-old teacher, experiences stress and anxiety when making decisions. "For me, the stress of indecisiveness has the most impact on my stomach," she says. "Whenever I go shopping it causes me to have diarrhoea."

Aches and pains

Muscle tension is a common side effect of stress because your muscles contract when your fight or flight system is triggered. Over time, this can cause pain, discomfort, [tension headache](#), migraines and trouble with mobility.

Jemma*, 27, is a mother-of-one who works full-time alongside studying for a degree. She took three weeks off work in 2015 after being diagnosed with a benign [essential tremor](#), which was made worse by stress.

"I had to go to the GP because my hands were shaking so badly that I physically couldn't do my job - I do electrical design and that involves a lot of drawing software and minute details," she says. "They asked about work and stress and established I was quite stressed and suffering from [a lot of anxiety](#)."

Cardiovascular effects

Heart rate and [blood pressure](#) increase when stress kicks in, but they return to normal once the acute stress has passed. This is normal in the short-term, although it can feel uncomfortable.

Research has linked stress with serious cardiovascular problems, however. A 2017 study published in [The Lancet](#) found heightened activity in the amygdala - a region of the brain involved in stress - is associated with a greater risk of [heart disease](#) and stroke.

We also know people are more likely to adopt risky habits when they are stressed, such as [smoking](#), overeating or drinking too much [alcohol](#), which increase the risk of developing heart disease. When stressed, the release of hormones like adrenaline leads to 'arousal' which can keep us awake at night, which also increases the risk of obesity, heart disease and [type 2 diabetes](#).

If you have coronary heart disease and experience intense feelings of stress or anxiety, it may trigger symptoms like [angina](#), chest pain caused by reduced blood flow to the heart. Although it's not normally life-threatening, it can be warning sign you might be at risk of a heart attack or stroke.

Immune and reproductive systems

[Research](#) has shown the negative effect stress can have on the immune system. In short bursts, the stress hormone cortisol can boost immunity by limiting inflammation, but over longer periods of time, too much cortisol can lead to [more inflammation](#).

Stress can also affect the immune system because it can [reduce the effectiveness of white blood cells](#), which fight off viruses and bacteria.

The release of stress hormones also impacts the [reproductive system](#). Cortisol affects how much oestrogen and progesterone your body makes, which regulates your menstrual cycle. If you're stressed and have increased levels of cortisol, it can lead to irregular periods.

Dealing with stress

It's important to recognise when you are stressed. The symptoms may be emotional or mental, such as feeling overwhelmed, irritable, having difficulty concentrating, experiencing racing thoughts or having trouble making decisions. Symptoms can also be physical, such as feeling tired, [dizziness](#) or getting headaches. Stress can manifest in behavioural changes too.

"Listen to your body. Listen to those who care about you," Campbell says. "Are you eating too much, drinking alcohol, using drugs in order to cope? Are you getting irritable or snappy at work or with family?"

Lifestyle changes

[Getting more exercise](#) can help reduce tension in the body and help clear your head when you are stressed. Stretching, yoga and Pilates can help reduce muscle tension too.

Exercise can also help with the symptoms of [IBS](#), as can keeping a symptom diary for a few weeks, which may help you identify triggers such as foods or emotional stresses. Your GP will be able to advise on the best way to manage the symptoms.

Cutting down on alcohol, stopping smoking and sticking to a [healthy diet](#) will also help.

Take control

Improving your time management, setting reachable goals and ticking off chores on a to-do list can help you feel more in control and reduce stress. Simple changes at work, such as taking a proper lunch break, can help too.

Relaxation

Calming breathing exercises, [mindfulness](#) and meditation can all help you relax and beat stress. The [NHS](#) recommends taking slow, deep breaths when you feel overwhelmed.

Support network

A good support network of colleagues, friends and family can ease your work troubles and help you see things in a different way. A chat on the phone or over a coffee can really help air any worries that are causing you stress.

Set challenges

Setting yourself goals, such as learning a new language, helps to build confidence which can improve your ability to deal with stress.

Professional help

If self-help techniques aren't working for you, you can see your GP who may be able to refer you for treatment such as [cognitive behavioural therapy \(CBT\)](#). You may be able to attend a stress management course.

"It's really helpful to talk to a professional who can give you an objective view of how your life is going and how you need to change things," Campbell says. "It may - if things are worse - be necessary to see your GP or a psychiatrist for a discussion about medication."

"Always remember that we are all vulnerable to stress," he says. "It can take over our lives but it is possible to beat it and have a better life."

**Names have been changed to protect identities.*

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