

wellness

# Let go of stress

*Our body gives us many signs when it's under too much stress; learning to read and react to these signals can help us quickly back to calm*

*Words: Siobhan Mason*

**W**hen we feel under stress – whether it’s from an upcoming public speech, work overload or physical threat or danger – the hypothalamus (a tiny region at the brain’s base) sets off an alarm system that triggers the release of the stress hormones adrenaline, noradrenaline and cortisol. Together, these cause a series of physiological changes that give our bodies the energy and strength needed to fight or flee.

Our heart rate and blood pressure increase (pushing blood to the muscles and essential organs), our lungs dilate (to take in more oxygen with each breath), more glucose is released into the bloodstream (giving our brain and muscles extra energy) and our senses sharpen. Our immune system alters so that it can recover quickly from injury or infection and our digestive and reproductive systems – which aren’t needed in an emergency – slow down. Once the perceived threat has gone, our body’s systems return to normal. At least in theory...

This ancient stress system can still help us get through an exam or dodge an oncoming car, but it is not always the appropriate response to our modern, non-life-threatening sources of stress (as tempting as it can be to dart out of the office when summoned by

the boss). If one stressor follows another in quick succession, or we feel under pressure all the time, we can get stuck in a constant state of fight or flight. The changes in our body that were meant to be temporary can go on for too long, overexposing us to stress hormones and disrupting our body’s usual processes.

“Stress can have devastating consequences for health,” says Dr Rangan Chatterjee, author of *The Stress Solution: The 4 Steps to Reset Your Body, Mind, Relationships and Purpose*. “Too much of it contributes to the development of obesity, type 2 diabetes, high blood pressure, cardiovascular disease, strokes and Alzheimer’s disease. It’s also a key player in insomnia, burn-out and autoimmune disease, as well as many mental health disorders,” he says.

We may feel powerless to change our main cause of stress – say, if it’s a demanding job or an ill relative – but there are many smaller stresses in our life (notifications on our phones, for one), that Dr Rangan calls Micro Stress Doses (MSDs). By reducing these, and by making minor changes to our routine, he believes it *is* possible to reduce or completely eradicate stress. By being alert to our body’s signals that stress has struck, we can take steps to interrupt the stress response. ▶

## DE-STRESS WITH ALTERNATE NOSTRIL BREATHING

*Slowing and deepening our breath is one of the speediest ways to change our body’s physiology*

Lucy Aston, founder of yoga and meditation company Yogadoo (yogadoo.co.uk) recommends using alternate nostril breathing to restore calm whenever you feel overwhelmed: “Bring your right hand up towards your face with your palm facing you, put your “peace fingers” on your forehead, breathe out completely and close your right nostril with your right thumb. Inhale through the left nostril then close this nostril with your finger. Open the right nostril and exhale through this side. Inhale through the right nostril and then close this nostril. Open the left nostril and exhale through the left side. This is one cycle. Continue for up to 5 minutes.”

Alternate nostril breathing is believed to affect our circulatory system via our nervous system – calming us through distraction and a sense of control.





**Dr Rangan Chatterjee**

Dr Rangan is a British physician, television presenter, author and podcaster. His most recent book *Feel Better in 5: Your Daily Plan for Life* (Penguin, £16.99) draws on his 20 years' experience as a physician to offer tips for a healthier, happier you. Follow him on Insta @DrChatterjee

Often described as a moving meditation, t'ai chi reduces stress and promotes calm through gentle, flowing movements.

## Know your stress signals...

*and how to ease your symptoms and keep your calm*

**STRESS SIGNAL:** TENSE MUSCLES

Our muscles tense up in response to stress. If stress is ongoing, they can end up in a constant state of guardedness, leading to tension-type headaches and other muscular pain, particularly in the neck and shoulders.

**STRESS BUSTER:** EXERCISE

"Exercise gives our body what it needs and is expecting: a physical workout that helps us out of the fight or flight mode," says Dr Rangan. "Next time you're feeling overwhelmed or anxious, dancing to your favourite tunes for a few minutes or a brisk walk around the block will help your body process the stress that has built up in your system."

Exercising as a direct response to stress can bring relief, but regular exercise can also teach our stress response system how to recover more efficiently, according to Dr Rangan, making us more resilient to stress in the long-term.

We can also educate our bodies to release tension regularly by going to posture-promoting, calm-inducing classes such as yoga, t'ai chi or Pilates.

**STRESS SIGNAL:** HIGH BLOOD PRESSURE

Our heart rate and blood pressure increase in stressful situations to allow fast oxygen delivery to our muscles and vital organs. Frequent or chronic stress can make our heart work too hard for too long, however, putting a strain on our circulatory system and leaving us prone to heart disease and strokes. If we cope with stress by turning to unhealthy habits like smoking or eating junk food, our risk can increase further.

**STRESS BUSTER:** FIND A DAILY DOSAGE OF NATURE

Taking a lunchtime stroll in the nearest park or finding a green route to work are simple but effective ways of keeping stress at bay. A recent study at the University of Michigan showed that taking twenty minutes a day to stroll or sit in a place that 'makes you feel in contact with nature' significantly lowers our levels of cortisol.

**STRESS SIGNAL:** FINDING IT HARD TO CONCENTRATE

Stress initially sharpens our responses. "A small amount of cortisol helps your brain work better, improving the function of your hippocampus, the memory centre in your brain," says Dr Rangan. "But when the process is prolonged, the cortisol that made your hippocampus work so much better instead damages it, which can lead to multiple problems, not least the development of memory problems as you get older, including Alzheimer's."

**STRESS BUSTER:** MAKE SPACE FOR AFFECTIONATE TOUCH

"By simply stroking the skin, we can lower our cortisol levels," says Dr Rangan. "Pleasant affective touch also lowers our stress levels by increasing the tone of the parasympathetic nervous system." This is one of the reasons why he recommends a 3-D approach (with eyes, touch and voice) when greeting your loved ones every day



*Listen in*

*Learn more about coping with stress by listening to the In The Moment podcast with Dr Rangan Chatterjee – available on all major podcast apps.*

**STRESS SIGNAL:** FEELING LOW

If we don't have the chance to recover our emotional equilibrium after a stressful day, we can start to feel low and irritable. "When stressed, your emotional brain becomes dominant while your rational brain is side-lined," says Dr Rangan. Without a practised strategy, he believes we're more likely to ruminate on our problems and spiral into a whirlpool of negativity.

**STRESS BUSTER:** PRACTICE GRATITUDE

"Gratitude is the antidote to rumination," says Dr Rangan. He recommends being grateful for three Ps each day – a person, a pleasure and a promise (something that popped up that day that offered promise for the future). If we're stuck in rumination mode and need a nudge when working out what to be grateful for, gratitude meditations available on apps such as Insight Timer or Calm are ideal.

**STRESS SIGNAL:** ALWAYS COMING DOWN WITH COLDS AND OTHER INFECTIONS

When our immune system gets the message that it's under threat, it primes itself to repair tissues quickly in the event of injury or infection. It does this partly by boosting our inflammation response.

This works well in the short term, but if it goes on too long it weakens our body's defences making us more prone to infection, as well as increasing our risk of modern chronic diseases including type 2 diabetes, heart disease and depression.

**STRESS BUSTER:** A MORNING ROUTINE

Having a regular morning routine is a simple way of preventing our bodies from entering stress mode in the first place. "The act of putting yourself through a series of familiar, habitual steps at the same time every day tells your system that you're in a place of safety and control," says Dr Rangan, "and helps shift you into the thrive state."



**STRESS SIGNAL:** BOWEL PROBLEMS

During the fight or flight response, our gut goes into a resting state to allow more blood to be directed to the muscles, brain, heart and lungs. If stress goes on too long, this constant interruption can mess with the functioning of the gut, leading to pain, bloating, indigestion, constipation and diarrhoea.

**STRESS BUSTER:** FEED YOUR GUT WELL

"There are several communication highways between the gut and the brain," says Dr Rangan. "Our gut's massive population of bugs (our gut microbiome) can affect our reactivity to stress. Keep them happy by cutting out the highly processed and refined foods that damage them, and feed them food that nourishes them, such as wholefoods rich in fibre, vegetables, fruits, legumes and pulses." 🍌

Research published by Harvard Medical School found that "gratitude is strongly and consistently associated with greater happiness... [helping] people feel more positive emotions ... deal with adversity, and build strong relationships."



For more tips on how to boost your resilience to stress read *The Stress Solution: The 4 Steps to Reset Your Body, Mind, Relationships and Purpose* by Dr Rangan Chatterjee (Penguin, £16.99).