



LIFE IN BALANCE
NUTRITION, HEALTH & SELF

STRESS RESILIENCE

What happens in our bodies when we experience stress?

Our brains and our bodies are constantly monitoring the environment around us, our emotional and physical state to judge whether we are “under threat” – when it senses we’re under threat it switches you into a state of stress or “fight or flight”. Your body believes your life is in danger and you are either going to have to fight or run away from the danger which is causing the threat.

The threat triggers the release of the hormones adrenaline and noradrenaline which cause our pupils to dilate, our heart rate to increase to push more blood, oxygen and supplies to our muscles so we can fight or run away. This is our acute stress response. If the stress continues our body then sends another cascade of hormones which result in the adrenals releasing cortisol which then contribute to the physiological responses, increasing the amount of glucose in the bloodstream to help us run faster and altering our metabolic response so the glucose stays in the blood stream for longer. Our body mostly takes this glucose from our stores. But if the glucose isn’t used – and let’s face it in most modern stressful situations we don’t have anything to physically fight or run away from - the body stores it ready for next time, and the easiest / most accessible way for it to store excess glucose is as fat. Which is why for some people stress can cause weight gain – especially weight around the middle.

Obviously in the right situation this is a positive and potentially lifesaving response so our body is doing what it thinks is the right thing to protect us. BUT the problems occur when stress is either a frequent or constant addition in our life – as I said the modern world and things which trigger stress have evolved far quicker than our body’s response system.

We can’t remove all stresses from our lives, but there are some stresses which we may or may not be aware of which we can take control of so we have more resilience to stress when it does happen.

NUTRITION

The food and drink we choose to consume sends information to our body about whether we're under attack or in a calm environment.

Certain foods can trigger our stress response in our body in exactly the same way external factors might.

Caffeine - causes the release of cortisol, especially if consumed first thing in the morning on an empty stomach. Question why you are drinking caffeine – is it because you enjoy it or are you using it as a crutch to get you up in the morning or to keep you going throughout the day? If it's the latter try reducing or stop consuming caffeine altogether in the short term. If it's the former then make it a drink you savour and enjoy, not something you drink while doing a million other things – something we'll talk a bit more about later.

A more balanced alternative to coffee is something like a matcha latte which is a green tea – it contains caffeine which gives you a little lift and boost but also contains L-theanine which has been shown to balance the impact of the caffeine a little. If you want to swap to decaf look for a naturally decaffeinated – or water processed decaf coffee. The chemicals used to decaffeinate some coffee brands can be as harmful to your body – or maybe even more so than the caffeine itself!

Sugar - this is a big one and probably not a big surprise. In this context we're using the term sugar in reference to free sugars or added sugars like white sugar, syrups, honey, and refined carbohydrates like white bread, white pasta and white rice because when these enter the body they are broken down into simple glucose molecules so to the body they are very similar things.

Sugar in this form causes our blood sugars to spike and this triggers the release of insulin to transport that sugar into the cells but high blood sugar can also trigger the release of stress hormones in the body. Keep your blood sugars balanced by consuming complex wholegrain carbs in moderation and replacing with high fibre starchy vegetables and protein.

Processed foods

Anything with additive, preservatives, colourings, anything which is highly processed will trigger a stress response

MOVEMENT

Helpful v unhelpful

Exercise and movement to lower levels of stress hormones, but too much exercise can cause more stress. But it's very individual and will depend on the rest of your stress load.

A physical workout or just simply moving can help ease your body out of fight or flight mode by completing the stress cycle and utilising some of the glucose which has been pulled into the bloodstream. Movement also increases the amount of GABA – a relaxation chemical found in the brain which helps remind our stress response how to switch off, reduces anxiety and lifts mood with endorphins.

Let go of what you “should be doing” and embrace what feels good for you that day.

Moderate amounts of exercise are more beneficial than one long hard workout each week.

However you can over exercise and cause more stress on your body. Watch out for these signs that you may be doing too much or unhelpful forms of exercise:

- irritability
- unable to sleep after a workout
- racing heart day after exercising
- exhausted for rest of the day or days following exercising
- frequently getting ill

SLEEP

A lack of sleep or sleep deprivation causes a similar response

A good night's sleep makes everything in life easier. From having the energy to exercise to the willpower to make healthier food choices. But did you know sleep deprivation causes the same cascade of adrenaline and cortisol, inflammation and physical reactions in our body as an external stressor would?

Lack of sleep makes you more hungry the next day and makes you crave sugar and refined carbs. It also makes you less likely to exercise.

One research study compared people who had just 6 hours of sleep a night with those getting 8.5 hours and found that in just 1 week, there were significant alterations to the expression of genes including those linked to chronic inflammation and serious illnesses and cellular ageing. So lack of sleep has an impact on every level.

There are some situations where we can't control our sleep – particularly if you have young children, but we can do what we can to support restful sleep.

In an ideal world we would be getting between 7 and 9 hours of sleep a night.

Check out the [Sleep Hygiene](#) fact sheet for more information on how to improve your sleep.

MINDFULNESS AND MEDITATION

Meditation has been shown to help lower cortisol levels and switch off our stress response. There are a number of apps and online guided meditations available. Remember meditation isn't about stopping all thoughts, it's about not following or focusing on your thoughts but returning to your breath or a mantra/affirmation and trying to be in the present moment rather than worrying about the future or ruminating about the past. Think of your thoughts like cars passing on a road, or clouds floating across the sky, or leaves floating down a river.

But equally being able to sit down and meditate for 10-20 mins every day isn't possible or right for everyone. So here are some simple ways to take get some of the stress reducing benefits of meditation with daily mindfulness activities.

Introduce mindfulness to your daily life

Think of three daily activities which you can start to do more mindfully. Start with one and slowly build up to three. Even if each of these takes 1-2 minutes to do (and most should I hope take longer!) you will have up to 6 minutes of mindfulness in your daily life without having to change your daily activities.

Daily activities you can do more mindfully:

- Shower
- Brush teeth
- Walk up stairs
- Play with kids/animals
- Make a hot drink

Thumb to finger affirmations

A simple exercise you can do anywhere and using any words which resonate with you. Below are some examples you could use.

Place your thumb to your first finger and say/think "peace"

Place your thumb to your middle finger and say/think "begins"

Place your thumb to your ring finger and say/think “with”
Place your thumb to your little finger and say/think “me”

Alternative affirmations:

“calm begins with me”

“joy begins with me”

“I am in control”

“I can do this”

“I believe in me”

Deep breathing

To calm the nervous system and push you back into a thrive state your exhale needs to be longer than your inhale and we need to breathe deep into our belly not just in our chest. Sit somewhere quiet (if possible) and start by taking a deep breath in through your nose and exhale through your mouth for one breath releasing stresses and worries as you do so. Repeat for a second time then move on to the deeper breathing below.

Close your eyes (if it's safe to do so) and breathe in through your nose for a count of 2 – try to breathe into your belly (placing your hands on your belly can help with this) – 1, 2 - and out through your mouth for a count of 4 – 1, 2, 3, 4,

Next breathe in through your nose for a count of 3 – this time try to breath down into your belly - 1, 2, 3, pause for a moment at the top of the breathe and then breathe out through your mouth for a count of 6 - 1, 2, 3, 4, 5, 6, exhaling all the air from your belly.

You can use your fingers again to count your breaths.