

BEATING

Could stress be wreaking havoc with your body?

Learn how to give your body the TLC it needs to support adrenal dysregulation



Helo and welcome



I know you are feeling depleted, run down, dog-tired or even jittery and maybe sleep is eluding you altogether, condemning you to a Groundhog Day of symptoms. *I want to help.*

Your body is designed to handle a great deal. Humans are primed to be resilient and to bounce back after adversity. Yet there is only so much your body can take before it starts to falter – or worse.

That is known as 'adrenal dysregulation' or 'HPA axis dysfunction'. The latter stands for hypothalamus-pituitary-adrenal axis dysfunction, the current term for what we used to referred to as 'adrenal fatigue'.



Perhaps you're wondering whether that might apply to your health...

Adrenal gland 'dysfunction' is largely overlooked in conventional medicine, and yet it is pervasive and contributes to dozens of health problems. I'll go into more detail later and I'll be letting you in on some of the ways you can help support your body at this time.

My name is *Kostas Kapelas - Holistic Health Practitioner*. In this guide, I'll be explaining what it is and what you can do to regain your health and develop greater resilience to what life throws at you.

"The ability to bounce back from adversity to resist, cope with, recover from, and succeed in the face of adverse life experiences, and to see difficulties as challenges to be mastered rather than threats to be endured."

Signs your body is under pressure

The signs of HPA axis dysregulation are widespread and may include any of the following (some of which might seem contradictory!):

CodFatigue (especially in the morning or after a stressful event) Low blood pressure Memory loss Muscle wasting Panic attacks Poor concentration Sleep disturbances (insomnia, waking up) Weight loss Weight around midsection

E: hello@totalhealthnow.co.uk

Why this matters so much



You have two separate protective systems to ensure your survival: the stress response and the immune system.

The stress response - your fight-or-flight mechanism - is designed to protect you against external dangers. It is governed by the HPA Axis. The HPA axisis activated only when you're under threat. When there is no danger, it is inactive.

While the HPA axis is activated, stress hormones are produced all the time. However, cell growth requires that the stress response is switched off. Constant cell growth is crucial because, inside our body, cells reach the end of their life all the time and must be replaced. Within a cell community of 50 trillion cells, each cell has a job to do, and we need them to renew.

The other protective system, the immune system, protects us by fighting outside invaders, such as bacteria and viruses. The stress hormones released by the HPA axis block the immune system.

Knowing this, it is easy to see how something that seems minor at first glance – stress – could be messing with your health in different ways and different areas of your body. If you're feeling below par all the time, perhaps it is time to give your HPA some TLC.

How does the HPA axis work?

Several endocrine glands that secrete hormones and neurotransmitters are involved in the stress response. The pituitary is a small endocrine gland sitting at the base of the brain.

The adrenal glands, where adrenaline, noradrenaline and cortisol are produced, are two small structures located at the top of the kidneys. The hypothalamus, an area of the brain connected to the pituitary, also releases chemicals involved in the stress response and links the nervous system and the endocrine system. Together, the three glands form the HPA axis.

In the face of danger, the initial response is governed by the sympathetic nervous system. It triggers the release of adrenaline and noradrenaline from the adrenal glands. These neurotransmitters kick in within a split second, causing physical changes we have all experienced when stressed or scared, such as an increased heart rate and sweating.

About 10 seconds later, the hypothalamus registers elevated levels of adrenaline and triggers a cascade of hormones that will set off the stress response. It secretes a hormone called corticotropin-releasing hormone (CRH), which in turn stimulates the pituitary to release adrenocorticotropic hormone (ACTH) into the bloodstream. ACTH then travels to the adrenal glands via the bloodstream, where cortisol is secreted in response.



Fight or flight?

The brain still reacts to acute stress today as it did in the days when we were still roaming the savannah. Humans that encountered a predator had two options: to run or to fight. Stress hormones enable the body to do that. They cause blood sugar to rise, providing the energy required for physical exertion. At the same time, they widen the airways, you're your heart beat faster and increase blood pressure to transport sugar and oxygen to the muscles of the extremities, which need them most right now.

To ensure an adequate supply to the muscles, blood is temporarily withdrawn from other areas, such as the digestive tract or the reproductive system. At the same time, the capillaries near the surface of the skin contract. This is to reduce bleeding in case of injury. Moreover, cortisol is a powerful painkiller, so if you get injured, you're not going to know about it until later, enabling you to keep fighting for your life despite injury.

In addition, cortisol leads to increased excitability of the brain and has an anti-inflammatory effect, partly via a pronounced inhibition of the immune system. Thus, the brain is poised for split-second decisions – but it's not that good at conscious decision making and logical thinking just then.

From an evolutionary point of view, the physical stress response is perfectly designed to put the body on alert in case of imminent danger and to mobilise the energy required to escape. But the key here is that these are meant to be temporary measures.

Fight or flight?

Butif acute stress persists, the systems become exhausted, the counter-regulation fails, and the body is in a permanent state of activation. In addition to adrenaline, which impairs your ability to rest, large amounts of cortisol keep circulating in the blood.

As cortisol massively suppresses immune reactions in the body, the immune system is weakened if it remains in the blood for a long time. Constant stress costs enormous energy due to the continuous activation of performance reserves, resulting in a permanent lack of energy. Long-term stress, therefore, has a toxic effect on the body.

The stressors modern life has in store for you are rarely of the kind that requires you to run or fight so the historic stress response is no longer ideal.



Many people feel stressed all the time. After all, there seems to be a continuous parade of reasons to worry: a pandemic, climate change, job losses, health threats, debt, and loneliness, to name but a few. None of these is relieved by running or fighting. And worry, by the way, can trigger the stress response just as if the event you worry about was actually happening. That means you rarely get a break, and your body is paying the price!

With a constantly activated HPA axis, youmay be left with high blood pressure, high blood sugar, palpitations, sleep disturbances, depression, and tiredness. On top of that, you are more vulnerable to infection, inflammation and disease.

Stress is a presence in everybody's life and – I'm not going to lie – nearly impossible to escape. However, that doesn't mean that you have to take it lying down. You have options.

You can take a long hard look at our life and health, eliminate the stressors we can get rid of, and increase your resilience to the stressors you cannot do anything about

Stressors can lurk in unexpected places

If you meet a friend who is telling you that she is stressed, and you ask, "Why? What's going on?" she's likely to reel off a list of psychological stressors because that is what first comes to mind.

Consider also that your body also has physical stressors to contend with. If you are struggling with symptoms of HPA axis dysfunction, you need to consider both kinds.



Psychological stressors

These are easy to see in your own life. Most commonly, people feel stressed when they are overwhelmed with juggling relationship, family and work commitments. Add to that, financial worries, caring for a sick child or elderly parents, illness – whether your own or that of a loved one – and it can all get too much very quickly.

That's before you even start talking about even more severe issues such as trauma, domestic violence and abuse, which, even if they occurred in the past, still have an impact on your stress level today

Stressors can lurk in unexpected places

The less obvious stressors

Physical stressors are a little more challenging to detect, although many, of course, are apparent. If you live in constant pain, need to take medication daily, and can't ever get restful sleep, you'll know this is causing you stress. There could be a genetic predisposition to illness, which you know about because a family member has it.

But there are also the stealthier threats to the body that you cannot see or put our finger on, and that you might not have even considered - think toxic exposure through environmental chemicals, dental amalgams, mould or bacterial overgrowth in the gut. Food intolerance, unlike food allergies, tends not to be obvious. Invisible radiation, such as from frequent flying or electromagnetic fields (EMF), can cause havoc in the body, leaving you wondering what is going on.



Treat your HPA axis with some love. Here's how

With so many factors playing a role in HPA dysfunction, no wonder you are overwhelmed. Doing anything about it seems like just another task on your to-do list that is already as long as your arm. And is there any point if stressors are coming at you from long directions? There sure is. You can take it one day at a time, chipping away at the things that are stressing you out.

Start with the easy bit by getting rid of those tasks that add to your workload but that you do not really have to do.

Do you have to be the head of the PTA at your kid's school? Do you have to win the prize for best apple pie at the village fête? Do you have to volunteer at your local homeless shelter? Do you have to host a family lunch every Sunday? Would the world stop turning if you quit – at least for a while - to get your health back together again?

Don't get me wrong, all of those are commendable and worth doing, but consider the oft-used metaphor of the oxygen mask on aeroplanes:you're required to put it on your face first before helping others.

By the same token, you won't be much good to anyone if you are constantly exhausted and – worst case – even sick because you are completely run down. Having said that, rewarding tasks like volunteering can actually add to your energy levels. So, find out!



Rest

Avoid stressful situations where you can. Be honest with yourself about the activities/ tasks you do each week that drain your energy. Ditch what doesn't serve you.

Schedule some daily me-time- like it is an important event in your diary. Do something you do just for your own pleasure. Whether that's reading a novel, painting, a quiet cup of tea in the garden, a phone call to your sister, a soak in the bath ... Whatever it is, you must make time for enjoyment. Every day.

Learn techniques to direct your mind and body away from stress and into a restful state. The fight-or-flight response is automatic and can be triggered just by worry – justified or not -, so relaxation must be learned and PRACTISED. Breathing exercises and guided meditation are perfect for this.



Sleep

Don't even get me started on sleep – that really deserves its own book! Just know this: repair and recovery during sleep oppose destructive effects of cortisol. Your body NEEDS you to sleep to get a chance for necessary repair and maintenance.

That includes your brain. During sleep, the spaces between brain cells widen and get 'rinsed'. That way, the body cleans away waste products of metabolism and cell debris, including amyloids, the proteins linked to Alzheimer's disease. This process takes approx. 8 hours, so do not cut back on your sleep, even if you think that you don't need it. Also, you cannot make up for lost sleep, and a chronic sleep deficit significantly increases cortisol. In one study, sleeping 6 hours or less for seven consecutive nights raised cortisol levels in adults by between 50-80%



Exercise

Exercise increases your feel-good hormones – endorphins - and improves mood, reduces anxiety and depression, burns that excess sugar and oxygen circulating in your system, and improves sleepquality. Exercise may also increase body temperature, blood circulation in the brain. It even impacts the HPA axis and thus increases your resilience to stress. What's not to like?

Exercise cont...

Studies found that rhythmic, aerobic exercise of moderate and low intensity that uses large muscle groups (e. g., jogging, swimming, cycling, walking) was the most effective when done for just 15 to 30 minutes a day for a minimum of three times a week in programmes of 10-weeks or longer.

What's important when you're stressed, however, is not to overdo it. Overexercising stimulates cortisol production – the opposite of what you want right now. Ideal is gentle exercise, such as walking, or – better still - the Eastern-type exercises such as yoga and tai chi, because they don't just encourage the movement your body needs but also elicit the relaxation response



Eat

What you eat matters. Everything that happens in your body is ultimately chemistry. The chemicals involved are the nutrients that come from your food, and your body can only work with what you provide – or not.

Don't diet right now

Your body needs nutrient-dense food to recover, and caloric restriction is just another stressor, stimulating cortisol secretion.

Eat real food

You would not expect a petrol car to run on diesel. In the same way, the human body cannot function with a diet based on ultra-processed foods packed with sugar, salt, trans-fats and extra ingredients you cannot pronounce. The body just wasn't made for that and needs proper fuel. Fruit, vegetables, whole grains, nuts, seeds, meat, fish, eggs, seafood, herbs and spices have worked for humans for millennia. That's a sign.



Follow a low-GL (glycaemic load) diet

It's been found to elevate cortisol. Overeating these high-GL foods may contribute to permanently elevated cortisol, triggering a vicious cycle of chronic stress and unhealthy eating.

Chew food at least 30 times per mouthful

This takes a load of your digestive system. Once you swallow, there is nothing more you can do to help, so make the most of it.Chewing also stimulates the production of digestive juices, providing stomach acid, digestive enzymes and bile. If you eat slowly, you are giving your digestive system time to get everything ready.



Eat little but often

Although this is not normally what I would advocate, with HPA axis dysfunction, it is essential to keep blood sugar levels stable with regular meals. Make sure to include breakfast and eat something before 10:00 am.

Avoid stimulants

from caffeine, refined carbohydrates (sugar, flour, bread, fruit juices, baked goods, chocolate), nicotine and alcohol.

Reduce cortisol

"How?" I hear you ask! Well, we have a range of inexpensive, fun and even FREE suggestions

- Create a happy playlist Music can reduce cortisol levels both before and during periods of stress up to 66%
- Breathe Breathing exercises and meditation practice can reduce cortisol levels significantly up to 20%.
- Connect Research found that the better our social support and relationships are, the more likely cortisol moves to within the healthy range.
- Laugh studies demonstrated up to a 67% decrease in cortisol after the subjects watched funny videos.
- Join a choir singing was found to significantly decrease cortisol after just one hour. A choir is also a community that helps you connect, great if you just moved to a new area and don't know anyone yet.



Ask for help

Once you have put the above suggestions into practice – one by one, so that no new stress ensues – you are likely to feel considerably better. The longer you stick to the plan, the more you will feel the benefits. However, sometimes there is very little or even no improvement, even when diet, sleep, movement and relaxation are taken care of. That's when you may need to go into detective mode to find the culprit(s).

Environmental toxins, leaky gut and food intolerance can cause havoc with your system. Long-term stress can significantly upset the balance of the gut microbiota and damage the intestinal lining, allowing toxic waste products and partially digested food to enter the bloodstream.

I have various of testing options at my disposal that can help us get clear about your nutrient status, toxic load, food intolerances, the state of your microbiota and the likelihood of leaky gut. Once we know more, I can advise you on what measures to take and support you in your further journey to better health.

Book your free **[X]**minute call now, and let's have a chat!

[Insert your contact details here]

