
*The changing tune
edition*

This edition of the Patient Advocate newsletter is not going to mention, well, you know what. This month we will be looking at a life through a different lens - positivity and optimism will abound!

There are many reasons to be cheerful; a world record was set at the London marathon for the fastest cake (4 hours, 20 minutes and 12 seconds, beating the previous record for a woman dressed as a dessert by nearly 10 minutes), a runner jogged up every mountain in Wales (all 189 of them) raising nearly £10,000 for charity and a cat was reunited with his owners after going missing for 10 years in Scotland.



So, to keep the theme of positivity, we thought we would have a chat about stress – the types of stress, what triggers, what helps to control. How can we positively impact our stress levels?

And is it even our fault?

“Genetics loads the gun, and environment pulls the trigger...”

Dr Francis Collins

Is stress in my genes?

Partner content

The association between stress, anxiety and mental health has now been well established, and with the ever-increasing pace of modern-day life seemingly accelerating at an experiential rate.

Is stress in our genes, and is there anything we can do about it?

To answer this, we firstly need to understand stress in slightly more detail.

This will then help you to understand the different types of stress and how your genes may affect your response, which will then help you to manage it in the workplace.



In simplistic terms there are 3 types of stress.

Acute Stress

Acute stress happens to many people throughout the day, but it's usually fleeting. From running for the train and losing your temper at not getting a seat, to the occasional bungee jump, we can encounter the effects of acute stress from a variety of situations, but - usually - it results in no harm.

Episodic acute stress

Short-term stress can be seen from a variety of tell-tale signs:

- headaches, neck and back pain
- heart burn, digestion problems, constipation
- increased anger, depression and anxiety
- increased blood pressure, rapid heartbeat, problems relaxing/sleeping.

Episodic acute stress is when an individual continually has episodes of acute stress. People who have busy working or family lives, or cannot quite get the work-life balance, will fall into the category fairly easily. Signs of episodic acute stress include:

- muscle tension, shoulder tension, headaches and migraines
- higher risk of colds and flu
- increases risk of anxiety, depression and mental fatigue.

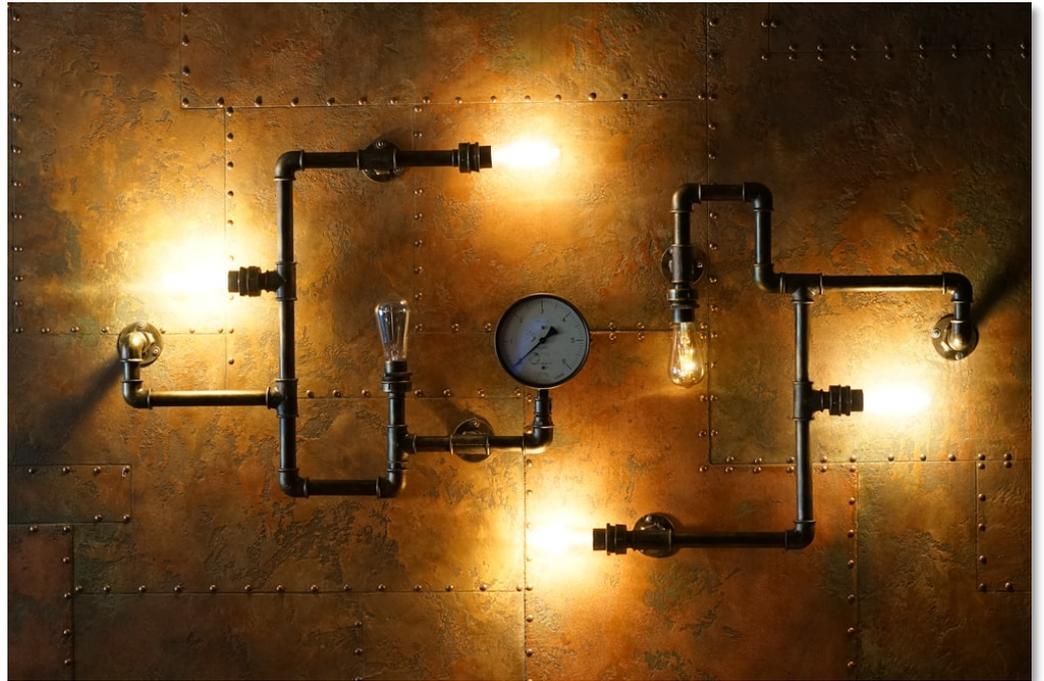


Chronic stress

Chronic stress is by far the most serious out of all the different kinds of stress, as a pronounced stress response over an extended time period will damage both physical and mental health significantly. As mentioned, when your stress levels rise, they will release the hormone cortisol, which is responsible for a whole variety of metabolic functions, such as helping to regulate your thyroid hormone.

The thyroid regulates nearly every major metabolic function in the body, and as such, a poor functioning thyroid can have a detrimental effect on nearly every area of health. Multiple examples of poor thyroid function include weight gain, reduced metabolic rate, fatigue, feeling depressed or moody, dry hair and skin, and many more.

Now, how does genetics and your individual genes play into this? Well, your genes will actually predispose you to a variety of stress outcomes.



Stress and pressure

Pressure is the perception that one may have of external factors affecting life. Many people often conclude that they are stressed due to the pressures placed upon them from finances, friends or family, perceived duty, work and a multitude of other factors. How one responds to the situation may differ due to your gene variations and so translating this result will lead to a superior understanding of oneself.

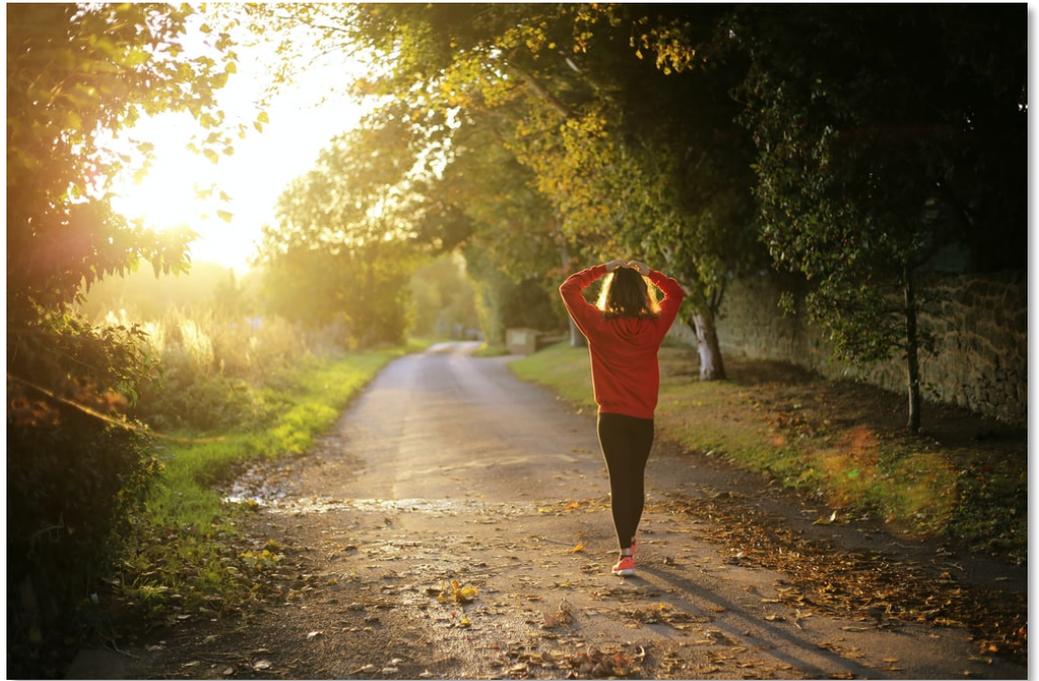
Stress and memory

Acute stress may cause a sudden loss of recall, which unfortunately could come at a time when you need it the most (think deadlines, meetings, tests, etc.). Chronic stress might also lead to an inability to actually form new memories, which - again - if you are revising, practicing for an event, or meeting new people, could be highly detrimental.

Our genes play a role in this response and understanding this may help you put into place certain measures or protocols to help, which may reduce your stress levels and therefore benefit your memory.

Dealing with stress

The way we deal with stress is highly important. Methods to reduce stress may include breathing exercises, meditation, eating certain foods, going to the gym or for a run, yoga, etc. However, some people are more likely to keep themselves isolated when chronically stressed and research has shown that it is better to talk with others instead of going into isolation. There has also been some correlation between those who are more likely to isolate themselves and certain genetic variants.



Stress leading to physical symptoms

Stress can cause a magnitude of physical symptoms. Acute stress can cause tremors, muscle twitches, sweating, flushing, increased heart rate, skin itching, headaches and more.

Chronic stress can cause increased blood pressure, muscle aches and can lead to a limitless number of diseases such as diabetes, obesity and migraines. Genetic variants are linked to how we may respond to stress from a physical perspective.

Stress and the heart

Stress can cause a host of physical issues, as highlighted in the “stress leading to physical symptoms” aspect. One major part of stress that does lead to physical symptoms is the effect it has on the heart. Stress can affect the heart in both a chronic and acute sense, and these could have the same or different symptoms, with certain genetic variants being linked to how the heart may be affected by stress.



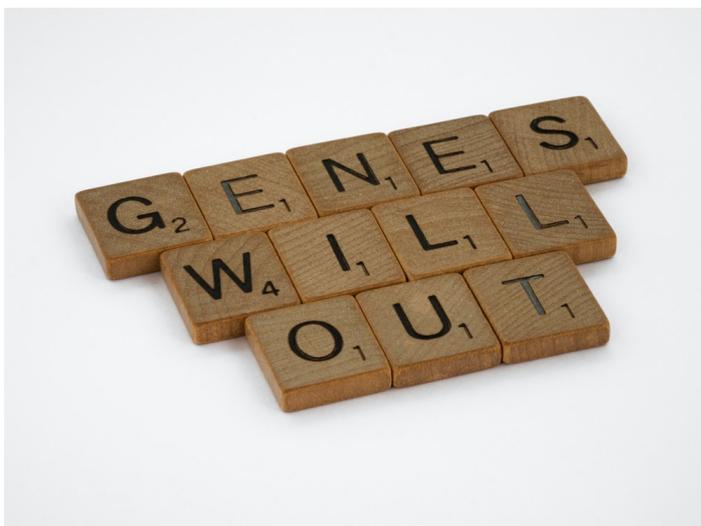
Caffeine and stress

Caffeine is a stimulant and can help to “perk” someone up if they are feeling fatigued or tired. It is often used to help with focus before exercise or learning. Caffeine, like all drugs, affects people in different ways and may or may not be a good choice in times of stress. In general, caffeine will increase heart rate, and this may be negative for some people in a stressful situation.



Energy drinks containing caffeine are often used in times of exams, tests or fatigue and so understanding how you may respond in these stressful situations is vital for making the correct choice.

You can easily see from the examples above of the differing forms that stress can manifest itself. One of the keys to combating this is firstly knowing that you may be genetically predisposed to having a specific outcome; this would hopefully give some reassurances in knowing that you are in fact “Hardwired” to feeling this way.



Then secondly, once you have made the realisation that your genes encode for a specific outcome, you can mitigate for their effect with certain tweaks to your diet, exercise and lifestyle.

A few examples of how you can change your lifestyle would be to include exercise, as it increases the expression of gene BDNF, which will improve cognitive performance, memory and help alleviate anxiety and the physical symptoms of stress. 15 minutes a day may be all you need to help.

You could also look to include more vitamin C, as studies have shown that it can curb levels of stress hormones, while strengthening the immune system.



Top 5 foods rich in vitamin C

Papaya	1 medium	168.08mg
Peppers	128 g	117.48mg
Broccoli	128g	101.24mg
Brussels sprouts	128g	96.72mg
Strawberries	128g	84.67mg

There are also a handful of other nutrients, such as magnesium, zinc and calcium, that can dramatically decrease psychological distress, and reduce your overall stress levels as well.

We hope that helps.

Many thanks to our partner for this article.

Not tonight... migraine 101

What is a migraine?

One of the effects of stress is increased headaches and migraines.

Here's a quick summary of migraines, and where to go to find out more.

Migraine



Throbbing pain on one side of the head, although sometimes it can affect both sides of your head

Stay at home

25,000,000 work or education days are lost every year due to people suffering from migraines



Impact

60% of people who suffer from migraines feel it has significantly impacted on their relationship



Main triggers

- Dietary
- Hormonal
- Emotional
- Physical



Most common symptoms

- Throbbing headache
- Vomiting
- Nausea
- Sensitive to light, noise & smell
- Lethargy



Mental Health

71% of people who suffer from migraines feel it has significantly affected their mental health



Where can I find out more information

www.themigrainetrust.org

5 steps of a migraine attack

- Premonitory stage
- Aura
- The headache or attack stage
- Resolution
- Recovery or Postdrome stage

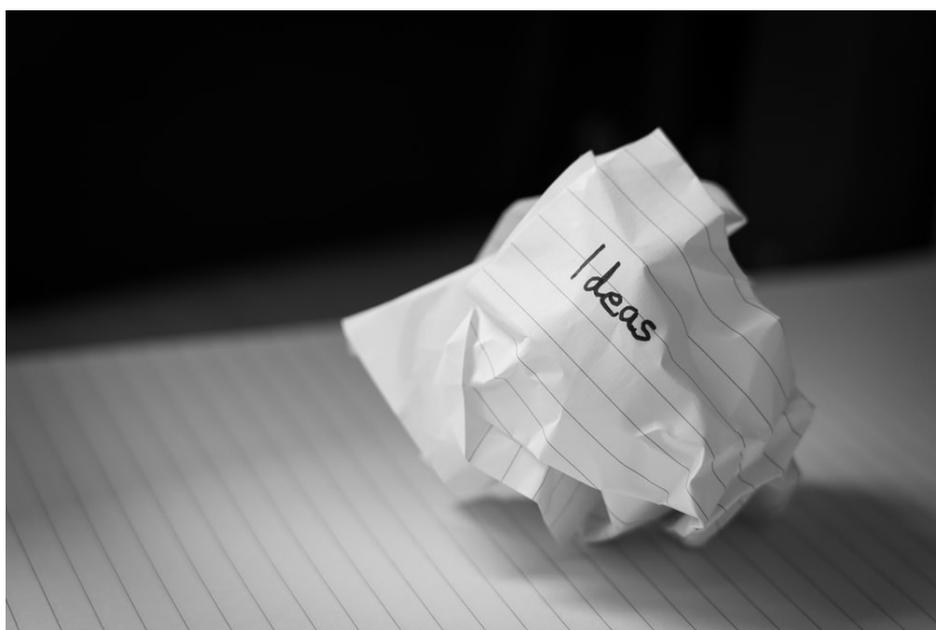


Find out more at www.themigrainetrust.org

In the next edition

Next month... November; gunpowder, treason, plot. Not the most edifying topics for a newsletter, so like last month, we will be leaving the topics up for grabs, so if there is something you would like to see, issues you'd like us to cover, just let us know and we will do our best.

Thank you to our reader who suggested we look at stress this month.



If you have any comments, or would like to submit a piece for our newsletter, please just let us know at info@patientadvocate.co.uk

Same applies if you'd like to talk to us about working in partnership - we are always happy to work with people and businesses that have the same ethos and goals as us...

Until next time,

