

to BRAIN

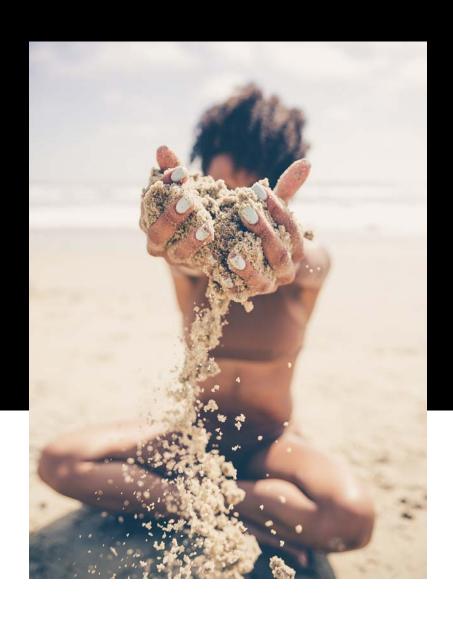
an outside-in approach to anxiety

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The Brawn to Brain model creates a holistic loop that starts with the body, transfers to the brain and feeds back to the body continuously; forming a sensory barrier against anxiety until it's no longer needed.



Introduction hey there



Let me introduce you to you

You are the lone pilot of a completely unique, once-in-a-lifetime vessel. You learnt how to drive and maintain your vessel long ago and have been winging it since. Odd, seeing as all other types of pilots are obliged to constantly update their knowledge. If you're reading this, I'm guessing you've crashed, or feel like you might. You suffer with anxiety and would do *anything* to be cured. From daily jitters to panic attacks, anxiety on any level can make us want to stay at home forever. And if it happens at home? Ouch.

Like millions of us across the world, it's so easy to end up this way. You have this wonderful, intricate machine at your disposal that no human on earth understands fully. Oh sure, the doctors and biologists and nutritionists and scientists have a firm grasp, but nobody has the complete picture of the mysterious operations of the human condition; of *you*.

So, give yourself a break. You're alive. You have anxiety. You were not born with anxiety. You do not have to live with anxiety. At some point you acquired it. You're not sure how, or maybe you have an idea, but you don't know how to undo it. You perhaps don't fully understand what *it* is, how it works and why it seems to have more control over you than your own free will. And this is all layered onto the fact that you don't truly understand the craftsmanship of your own unique vessel, so how are you supposed to fix it?

If you've sought help, you may have noticed a pattern in the type of support available. You'll be encouraged to talk and think lots about your fears. You might be invited to explore memories, visualise a happy place, practice mindfulness and even attempt to rewire your neural pathways; the mind being the primary instrument here. These types of therapies work for many people. What do you do if you're not one of them?

If you've tried talk therapy, neuro-linguistic programming, cognitive behavioural therapy, hypnotherapy and more but still battle your nerves during harmless life activities, you may need a more physical approach, like I did. The mind, after all, is only one part of the anxiety journey. What about the physical symptoms? The shaking, the sweating, the nausea? Why use the mind alone to combat a very physical issue when you have around one hundred powerful organs in your artillery?

The body is a powerhouse for mental wellbeing, but too often in western culture we are encouraged to believe that mind over matter is plausible for the average non-Jedi of us. We are constantly told that through willpower and self belief we can achieve anything we put our mind to. Mindfulness and meditation are meant to enlighten us and facing our fears is meant to empower us. I agree with these positive outlooks, right up until it comes to fight-flight-freeze.

This primal, lightning-speed survival mechanism is the beating heart of anxiety and it is not meant to be switched off. Expecting the mind alone to override thousands of years of human evolution is almost certainly setting ourselves up for failure, especially for those of us who have work, families and daily pressures to contend with. The problem with being told that the mind alone can win this battle, is that when you fail, you feel like crap and this only reinforces the problem.

It's time to take a different approach, one that embraces the power of the entire body working in unison; all the organs, brain included, engaged for optimum results. We are going to use the whole body to infiltrate negative patterns, regain control of the anxiety journey, and retrain the brain to relax into a healthy relationship with your environments - until anxiety dissolves into a thing of your past.

Before we start, let's do a sound-check. Is there anything *present* in your life that is causing you anxiety? If there is, this factor needs to be identified and addressed. Anxiety develops from all sorts of experiences - a toxic relationship, bereavement, social exclusion, financial strain, a career crisis, bullying, abuse, harassment - any of these and more can trigger anxiety. Anxiety can also develop from poor diet and sleep, alcoholism and substance abuse. Either way, what do all these factors share? They make you feel out of control.

The Brawn to Brain model aims to restore a sense of control right through the body to the brain. It does not require any significant financial investment. It does require some learning, practice and a leap of faith. While it can be applied to anxiety derived from past trauma, if there are factors in your life that are still affecting you, such as frequent interactions with someone that hurts you, an overbearing workload or the ten cups of coffee you keep downing, these factors can counteract the sense of control you are trying to restore.

Assess your situation, identify the source of your anxiety or any patterns that could reveal it and if it's *still* present in your life, try to create some distance. If you don't feel like you can, please reach out for support (see p45) and try to organise a period of time away from the issue so that you can start to heal. If you cannot escape the source, you can of course still benefit from this model. Just be extra mindful of the physical stresses you may be experiencing, as well as the mental stresses.

Brawn to Brain is designed to combat anxiety. While mental health illnesses such as eating disorders, bipolar, personality disorder, PTSD and others often include symptoms of anxiety, they require specialist support. If you have been diagnosed with an illness, your body and brain may be at a disadvantage to respond to the techniques in this model, so please always follow the advice of your health advisor.

This model also suggests consumption of various products, but please always refer to ingredients for safety and allergy advice. Finally, feel free to use the space provided on page 44 for any notes.



And what the falafel do I know

Hold onto your pantihose Mary-Beth. There are many things I don't know much about, like why Donald Trump is permanently orange, or why the Higgs Boson Particle is so damn sexy. But anxiety? This I can talk about until the cows come home.

Anxiety runs in my family. My Mum's life gave me an early education into its arresting features. I'd only had a few splashes of it during my teens and after she died, so I felt pretty good for not following in her footsteps. But when a sustained trauma unfolded over several years, anxiety hit me hard and I didn't see it coming.

By 2017, travel, crowds, concerts, shops and cities, things I'd enjoyed my whole life, had become impossible. Turning back and cancelling plans became standard. At my lowest, I couldn't face walking my dog in my local park. The anxiety noose was tightening and I obsessed over exits and routes home. I sought help from the NHS and private therapies, paying huge premiums for the latter, and getting nowhere.

Over the years, Mum battled her anxiety with anything she could. When she died, I was saddened by the state of her bookshelf; endless self-help guides promising a life free of anxiety that she never truly experienced. When I became inflicted, my greatest fear was reliving her battle. I didn't want years of therapy, fads and coping mechanisms. I just wanted rid of it, so I could feel like me again.

Overcoming the issue with my mind wasn't working for me. The underlining cause of my anxiety had ended with a tough relationship, but I was still riddled with symptoms. It was by pure chance that one incident changed everything and I saw for the first time the significance of our physical state in relation to anxiety.

My first clue was a simple rescue remedy that ended a panic attack, inspiring me to ask how else we can influence our mind through our body. This led me down an incredible path of research until I realised the bigger picture; the brain is one organ in our artillery against anxiety, why not utilise the whole body?

I started to focus on physical health and the five senses. I explored the different components of anxiety and fight-flight-freeze and grew to understand this in-built safety mechanism. So when the symptoms hit on cue next time I had to travel, I was ready to implement a sensory barrier between me and the outside world.

I used a breathing technique to stimulate a special nerve and applied a range of sensory aids that are described in this book. Yes I was anxious, but unlike in the past, my body soon steadied despite my fear and I didn't have to turn back. This was a triumph. Within months, I unpicked years of anxiety by using the power of my body to influence my brain. The model grew more effective with healthier diet, sleep and fitness routines. Finally, I was able to get on a plane for the first time in over 7 years. Then I flew solo for the first time in my life.

Today, I no longer need this model. My body and brain have healed. I enjoy travel, get excited about the unknown and live in the city I once feared. There may always be times when anxiety teases and we get that cold hit of adrenaline. But empowering our body and brain lets us reserve fight-flight-freeze for those extremes. For the rest of the time, living free from anxiety is possible, whether your mind thinks so or not.

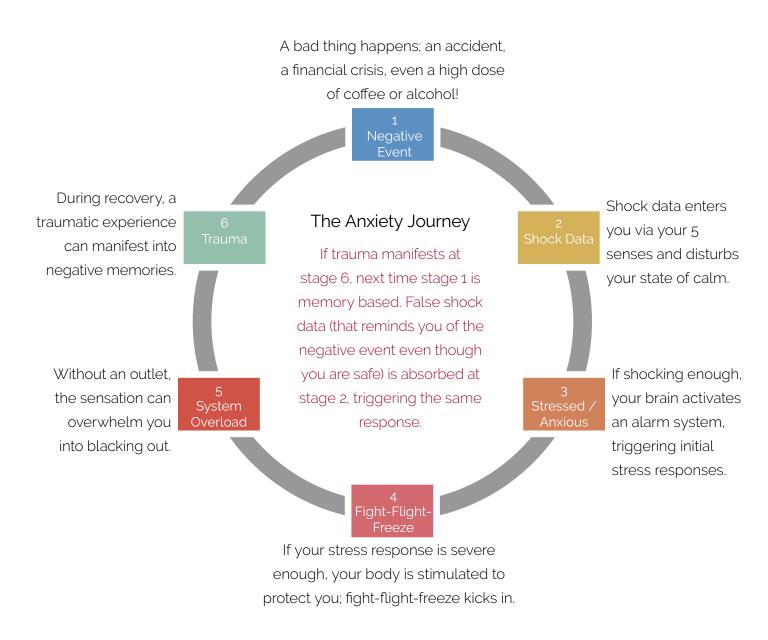


Anxiety Fight, Flight, Freeze

The anxiety journey

We are not born with anxiety. We learn it. And the problem does not start in the mind. It starts in the environment. When you encounter a negative event in the world, shock data is absorbed through your five senses, disturbing your status quo and shifting you into feelings of fear, stress and anxiety of different extremes. If the experience is traumatic enough, negative memories can manifest consciously or subconsciously, so that anxiety triggers each time you are reminded of the experience.

The below model illustrates how the anxiety journey escalates and cycles. However, it is possible to calm down and break the cycle at any stage with the right training.



What's happening

When we perceive shock data (stage 2) the amygdala, a part of the brain that holds memories and fears, sends a danger signal to our hypothalamus, the part of the brain that stimulates the autonomic nervous system into releasing adrenaline and cortisol, the stress hormones (stage 3). This can trigger nausea, diarrhoea, butterflies, trembling, heart palpitations and similar stress symptoms at different extremes.

If the danger signal is severe enough, the body starts to prepare for fight-flight-freeze (stage 4). Breathing becomes rapid to deliver more oxygen to the blood. The heart races to pump blood to the major muscles to mobilise fighting or running. Cold sweats kick in and blood drains from the face, hands and feet to prioritise the largest limbs. Blood also thickens in case of injury and our sense of pain reduces. Sight, hearing and sense of smell sharpen, and the whole sensation can last for around twenty terrifying, alien minutes.

The speed at which we transition around this cycle is based on the event, our state at the time, and our ability to regain control; something that comes with practice. When faced with a genuine threat, we tend to transition to stage 4 so fast, we bypass the sensations of stages 2 - 3 altogether. In such cases, humans can display incredible survival instincts, demonstrating why fight-flight-freeze is so important in the right context.

On the contrary, when we enter the cycle during harmless environments due to trauma, the experience can feel disruptive and unwelcome. An overwhelming dose of anxiety and fight-flight-freeze is commonly referred to as a panic attack. While the exact sensation varies between individuals, one thing is for certain; your first ever panic attack is easily one of the most terrifying and jarring experiences of your life.

You can feel like you're dying or going insane. It's *supposed* to be that frightening, because fight-flight-freeze is designed to shock us into action to *avoid death*. Entering stage 4 without any real action to deploy, as is often the case in modern day, can naturally overload us (stage 5). Without the means to fight or run away, and without knowing how to calm down, we can easily black out, physically or mentally.

Either our brain decides to shut down to avoid experiencing any more trauma, or we hyperventilate from rapid breathing. Just as uninjured mice often die from fright after a run in with a cat, there comes a point when fear is so overwhelming that freezing and shutting down from reality is the final resort.

While not every negative experience causes this reaction, and not all stress and anxiety leads to fight-flight-freeze, the association between an external event and an extreme internal response is difficult to forget. This is how and why we can end up developing anxiety disorders.

Once your body and brain has learnt to become disturbed and anxious as a result of false shock data that reminds you of past trauma, escalation around the cycle can be unsettlingly prolonged. You can be stuck for agonising amounts of time in stages 2 and 3, trying to talk yourself back down, without ever reaching fight-flight-freeze. This is because anticipated fear from false shock data, rather than genuine threat, doesn't typically activate the same extreme alarm bell that pushes you into stages 4 and 5.

Psychological impacts

It's natural to feel continuously traumatised by these experiences and for negative memories to be reinforced every time the cycle is relived. When you are reminded of past cycles, anticipation builds, more false shock data is absorbed, causing continued anxiety in ever increasing environments.

A panic attack is so mentally scarring, the first and worst can form a phobia of more. This escalation into anxiety disorder is completely involuntary. It often doesn't matter if you know that you are safe. The physical response triggers all the same and you begin to live in fear of those triggers.

Feelings of shame, humiliation, failure and guilt can develop, forming negative and reaffirming self narratives. Repeatedly telling yourself and others, "I suffer from anxiety, I can't do that, I may have a panic attack," worsens your sense of restriction and you start to ring-fence yourself from anything that might set you off. "I'm a person who suffers from anxiety," becomes part of your self identity.

As negative associations spread like wildfire, the list of scenes to avoid grows to the point that daily life becomes a nightmare. People who do not suffer from anxiety can find this difficult to understand, so additional pressures come from external circles. There is often pressure to turn to prescription drugs like beta blockers that stop the production of stress hormones, but if you're like me, you might not like this option.

Many therapies focus on addressing stage 6 of the issue, where negative memories manifest in the mind and how this resurfaces at stage 1 and 2. Through talking, thinking, meditating and visualising, they attempt to undo the manifestation of a bad memory, realigning your neuropathways so that the physical reaction stops. If they can't achieve a complete fix, they offer coping mechanisms to live with the issue instead.

For many individuals, this approach works fine, but like all things, one shoe never fits all. If you've ever been derailed by anxiety, you'll appreciate how quickly the mind can struggle when up against the rest of your body. An adverse physical reaction, even with the best coping mechanisms, can be completely demobilising. If this applies to you, rest assured the cycle can still be broken.

The Brawn to Brain model focusses on stages 1-5 instead. This involves understanding and manipulating the physical components of anxiety. Anxiety is the *teasing* of fight-flight-freeze. When this teasing is happening in response to life activities that pose no real threat, it is possible to physically intersect the data triggers, creating the opportunity to retrain the body and brain to operate in harmony.

The mind and brain are two different things. The mind is an intangible, infinite space; a rabbit hole of thoughts, emotions, memories and fears. The brain is far less scary. It's just a physical organ. It contains the mind, sure, but it is tangible and able to be manipulated and nourished.

Let's empower and mobilise your entire body, regaining control of your fear response so that stage 6 is no longer an issue. Let's harmonise the relationship between your external environment and your anxiety so that fight-freeze is reserved for the day you actually need to fight a real life bear.

Brawn to Brain in 3 steps

The Brawn to Brain model creates a holistic loop that starts with the body, transfers to the brain and feeds back to the body continuously; forming a protective barrier against anxiety. The model helps you to take control of the only physical entity we ever truly have control over; our own body. By letting go of the desire to control matters greater than ourselves, we can use our physical strengths to our best advantage.

Most of us know that a balanced diet, hydration, exercise and sleep are needed for good health. This model exploits the details of these facts in the context of overcoming anxiety. It stems from the view that we are wholly physical beings and every part of our anatomy, including our memories, thoughts, feelings and fears, are interconnected like a jigsaw. If you are suffering from anxiety and are experiencing unnecessary adrenaline spikes when you least require, this is a big indicator that something is out of place.

The model suggests you stop focussing on the trauma that did this to you and start focussing on a practical healing process. Instead of focussing on the cause, which is already part of the past (assuming the trauma has stopped and not ongoing), focus on fixing the physical damage by empowering your physical self, and your mind will soon follow.

The idea is to create a **controlled**, **positive sensory environment**, or as I like to call it, a sensory hamster ball. You can create this hamster ball anywhere. Its job is to stop any false shock data - the data that your mind has learnt to interpret as cause for alarm when it actually isn't - from entering your system in the first place.

Before you enter a problem environment, you apply a set of sensory aids (food, music, all sorts that we will explore) to replace the shock data with positive sensory data instead. This soothes your sight, sound, smell, taste and touch, so that no negative messages arrive at the brain as you enter the problem environment. These aids retrain your mind into relaxing in that environment, and in time, you may find you no longer need them. That was certainly the case with me.

Shock Data (from external environment) Positive Sensory Data Data (from external environment)

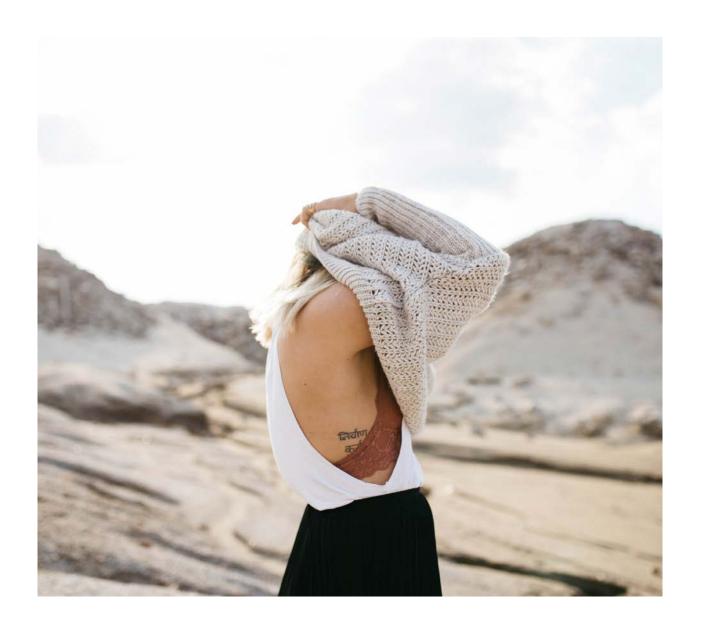
The Brawn to Brain Model

The Brawn to Brain Model

Step 1) Learn the foundations of an empowered self. Understand your anatomy and how your organs impact your anxiety so that you can optimise your physical self.

Step 2) Create a controlled, positive sensory environment. Introduce easy tools and techniques to nourish and nurture your five senses in any given environment.

Step 3) Apply yourself to your fears. When you are ready, start to face some trigger environments, incorporating your new techniques to retrain your body to relax.



Step 1

Learn the foundations of an empowered self

Human Anatomy

Bring out the guns.

Your internal physical environment is made up of twelve key anatomical systems; integumentary, respiratory, nervous, endocrine, cardiovascular, lymphatic, digestive, immune, muscular, skeletal, urinary and reproductive. Did you know each one of these has a role to play in anxiety?

By understanding your anatomical systems, you can start to listen to your body like an instrument, during times of both stress and peace. By listening and learning, you can nurture these systems and work them to your advantage instead of overlooking and hindering them.

None of this is revolutionary. The Brawn to Brain model is about realising how the well-known basic health principles impact your mental wellness and how you can leverage your physical state to improve your mental state in the context of anxiety.

Anatomical Systems:

Integumentary

Respiratory

Nervous

Endocrine

Cardiovascular

Lymphatic

Digestive

Immune

Muscular

Skeletal

Urinary

Reproductive

Integumentary, Respiratory & Nervous

These systems are the first to absorb shock data. The integumentary system is our surface barrier; our skin, hair, nails, glands and related nerves. Its purpose is to protect us from the outside world; our first defence. Anxiety can cause skin problems like excess sweat, acne, eczema, hives, rosacea and more. When we enter an environment, our skin is hit with temperature, the nerves in our five senses immediately send data to the brain, and if all these signals translate into shock data, our alarm bells ring.

The respiratory system (lungs and air passages) absorbs vital gasses from the air and transfers them into the bloodstream. Rapid breathing helps to absorb more oxygen during fight-flight-freeze, but it causes unpleasant sensations like shortness of breath and chest tightening. Exhaling more than you inhale leads to a deficit in carbon dioxide (CO2), causing hyperventilation, light-headedness and fainting. Some people find it calming to breathe into a paper bag to replenish CO2, but leveraging a special link between your respiratory and nervous systems is the real key.

The nervous system includes the central nervous system - brain and spinal cord - and the peripheral nervous system, which divides into the somatic and autonomic nervous systems. The somatic nervous system lets us move by choice, while the autonomic nervous system operates all the autopilot stuff like heartbeat and digestion. The autonomic nervous system contains our sympathetic nervous system that stimulates fight or flight and the parasympathetic nervous system that stimulates "rest and digest". So one works you up and the other calms you down.

The vagus nerve, the longest nerve in the body, starts at the brain and runs right through the body to the abdomen. It is part of the parasympathetic nervous system and sends a significant volume of data to your organs, impacting your breathing, digestion, heart rate and more. Deep, abdominal breaths activate a special type of neuron that tells your vagus nerve that your blood pressure is too high. In response, your vagus nerve reduces your heart rate and relaxes your body. This powerful link between your breathing and your vagus nerve is a way you can force your entire body into a state of calm, regardless of your mindset.

Check out the work by bestselling Author and Functional Neurologist, <u>Dr. Titus Chiu</u>, who specialises in helping people struggling with Post-Concussion Syndrome and other chronic neurological conditions. Dr Chiu talks often about the vagus nerve and its unique role in nourishing the body and brain.

Key takehome

Data first enters your body through your five senses and all your nerves. Your nervous system plays a critical role in activating both fight or flight and rest and digest. While these responses are automatic, you can force the latter by stimulating your vagus nerve with controlled, abdominal breathing to relax your entire body.

Endocrine, Cardiovascular & Lymphatic

The endocrine system is a network of glands in the body, which are responsible for producing and secreting hormones - the chemicals that travel through your bloodstream that impact how you feel and react on a conscious and subconscious basis.

Hormones are messages between your brain and body that tell you how to respond to what's going on. This exchange of information is at the epicentre of the anxiety journey and our mental wellbeing.

The glands of the endocrine system are situated in your brain, neck, kidneys, pancreas, the ovaries in women and the testicles in men. You can appreciate how the endocrine system impacts your daily experience! When our body is neglected by unhealthy choices, these functions can struggle and our hormones can become imbalanced.

The cardiovascular system includes your heart, blood vessels and blood and is responsible for transporting hormones (as well as oxygen and nutrients) through the body. The lymphatic system includes a vast network of tissues and vessels

that flush out toxins, waste and other unwanted materials, while carrying a vital anti-infection fluid called lymph to the heart.

When it comes to anxiety, the hormone culprits are adrenaline and cortisol. Your brain's hypothalamus region sounds an alarm, and adrenaline, the fight or flight hormone, prepares you for action; here comes that spike in blood pressure, racing heart and rapid breathing! Cortisol, the primary stress hormone, increases your blood sugar level and curbs functions that are not essential for fight or flight, such as digestion. This process is meant for times of danger, so if your hypothalamus is activating adrenaline and cortisol when you are safe, your fight-flight-freeze response has become impaired, usually due to trauma. When this is the case, the result is anxiety.

While it feels like seconds, by the time adrenaline kicks in you're already a few minutes into the experience. The surge *is* temporary, although it can last on average for around 20 minutes.

Healthy diet, sleep, hydration and exercise patterns harmonise all your systems alongside your endocrine, cardiovascular and lymphatic systems, enabling essential nutrients and chemicals to be distributed efficiently throughout your body via your bloodstream. Waste and toxins will be flushed out, and hormones will be able to operate when and how they are meant to. This way, you can produce more of the good stuff! The happy hormones; dopamine, serotonin, oxytocin and endorphins.

Key takehome

Hormones are chemical messages that make us feel either wonderful or terrible! Identify how and when hormones affect you by keeping a diary so that you can regulate the outcome. Opt for healthy lifestyle choices so that nutrients and toxins are processed correctly, enabling your happy hormones to flourish.

Digestive & Immune

Most of us get the importance of a balanced diet, but what about how our gut health impacts our brain? The gut homes one end of our vagus nerve, directly influences our brain, releases hormones and is considered to be the body's secondary brain! Check out Dr Mark Hyman, Founder and Director of The UltraWellness Centre, and Head of Strategy and Innovation of the Cleveland Clinic Centre for Functional Medicine who advocates the importance of gut health for the rest of the body and brain.

If, through poor diet, you develop an ineffective microbiome, not only can you face a deficit of the fuel and nutrients needed to operate physically well, you can also suffer a deficit in happy hormones such as dopamine and serotonin, which are created in the gut. Depriving yourself of these hormones can cause fatigue, fogginess, depression, stress and anxiety.

Also, most of your immune cells that protect you from illness and disease are created in your microbiome, so a poor gut environment directly lowers your defence. Without a diverse and healthy gut, your mental health has a tougher time, making your diet essential to how you feel - hence the alcohol blues!

Artificial stimulants such as alcohol and caffeine can cause havoc for some people, leading to heart palpitations and high anxiety, even followed by nausea, diarrhoea and depression. But caffeine is also believed to offer some health benefits, such as reducing the risks of some chronic diseases. So again, it's about listening to your body and being mindful of your reactions to different dosages of different foods - and keeping things in moderation.

And what about gluten, artificial sweeteners, colouring agents and preservatives? In small quantities they seem harmless, but if everything you eat is heavily processed and lacking in essential nutrients, your gut environment will start to suffer and this can directly impact your brain. Some functional medicine practitioners consider gluten as the single biggest cause of inflammation in the body and brain, leading to a whole host of health issues, including stress and anxiety.

You don't have to be a nutritionist to optimise your body with the right food stuffs. Have everything in moderation, stay hydrated, eat your veg, reduce overly processed foods and stick to a balanced diet of carbs, good fats, fibres and proteins within an appropriate average calorie intake for your body,

If you're unsure about quantities, there are many free online tools you can use, like this one from <u>Life</u> <u>Span</u>. And you can learn more about taking vitamins and probiotics to boost your gut health from <u>Harvard</u> <u>Medical School here</u>.

Key takehome

If you flood your body with junk food and deprive it of nutrients, you are laying the foundations of poor gut health that directly impacts your immunity, hormones and overall physical and mental wellness. Optimise your microbiome with a healthy, balanced diet and boost your immunity with vitamins and probiotics.

Muscular & Skeletal

It's no secret that movement is vital for health. Walking our ten thousand steps per day, ensuring we stretch after exercise and incorporating protein and calcium into our diet are all ways that we are encouraged to nourish our muscles and bones in order to stay healthy.

But the states of these two systems are inherently linked to the amount of stress and anxiety we are experiencing. When we are stressed, even a little, we can subconsciously grind our teeth and clench our jaw, putting additional strain on our facial muscles. We hold tension in our posture, leading to knotted tissues and sore muscles. Tension, stiffness and pain in our muscles and bones can loop back into increasing feelings of stress and anxiety, so we can become locked in a vicious circle.

What's really interesting is the link between the muscles and bones and fight-flight-freeze. A 2019 study from Columbia University Irving Medical Centre suggests that bony vertebrates like us humans cannot enter into fight-flight-freeze without our skeleton. According to Columbia, almost immediately after we perceive danger, our brain

instructs our bones to flood our bloodstream with the hormone osteocalcin, making the fight-flightfreeze response reliant on this hormone.

When we enter this mode, adrenaline rapidly directs our blood supply to our muscles, fuelling our muscles with additional oxygen so that we can fight or run. Our skeletal muscles (attached to our bones via tendons) contract for action. This can feel like our entire body is painfully ceasing up and why we often shake and tremble during fight or flight. Random movements such as twitching and rapid blinking are also common, and in the case of the freeze response, our body stiffens into a temporary paralysis. None of these sensations are particularly pleasant and after such an episode, our body can feel as fatigued as if we've run a marathon.

The prep work of good nutrition and exercise will always have a great impact on anxiety levels, but when it comes to specifically reducing anxiety with our muscles and bones, we can introduce massage, acupressure and an exercise called progressive muscle relaxation (PMR) which involves systematically clenching our muscles as tightly as possible, holding for a few seconds, releasing and repeating. This controlled action helps to release pent up energy and reduce tension in the body, having an immediate calming effect. It's a great technique to implement at any point during the anxiety journey.

Key takehome

Take long-term care of your muscles and bones with a healthy diet, regular exercise and recovery routines. In the short-term, understand how fight-flight-freeze relates to your muscles and bones so that those horrible sensations are less scary. Further still, counteract them with massage, acupressure and PMR.

Urinary & Reproductive

Naturally, these systems are closely linked. Let's focus on the urinary system first. This includes your kidneys, ureters, urethra and bladder and is responsible for ensuring any liquids that you consume are delivered through the body efficiently, flushing out toxins along the way.

Aside from feeling damn stressed when you need to pee without a toilet in sight, getting your daily water intake (3.7 litres for men and 2.7 litres for women) helps the urinary system do its job and reduces the risk of Urinary Tract Infections (UTIs) such as cystitis and kidney stones.

Water is part of many essential tasks that impact every system of the body. On average, around 60% of the human body is made up of water, with the brain and heart at over 70%.

To appreciate how water passing through the body can impact our overall wellness, think how it feels waking up with a hangover. Sleep is usually our longest period without hydration and urination. On top of this, alcohol is a diuretic, meaning it speeds up fluids passing through your system. When you wake up with a hangover, the first sensations you

often feel are a foggy, achy head, a dry mouth and the need to pee.

Our reproductive system is also impacted by fluid. It comprises of our sex organs and is significantly interlinked with fluids and hormones. During sex, our body releases the happy hormones dopamine, endorphins and oxytocin, which directly reduce stress and anxiety. Sex also reduces the production of cortisol, the stress hormone.

In a perfect world, the answer to all our problems would be having more great sex - all the time. But in the context of fight-flight-freeze, there is an interesting connection between sexual arousal and fear. Ok, if you suffer from panic attacks, I won't need to tell you that nothing feels *less* sexy.

That said, acknowledging how powerful arousal and sex can be at releasing happy hormones, you can use this primal instinct to your advantage. Try distracting yourself with erotic stimuli or sex with a partner ahead of facing situations that make you anxious, like the evening or morning before.

It might sound daft, but actually, this is a way of counteracting one primal, hormonal response with another. While they may not seem the obvious ways to combat anxiety, be mindful of the roles your urinary and reproductive systems play in empowering the body and brain to operate efficiently and fuelling you with happy hormones instead of stress hormones.

Key takehome

We are predominantly water! Stay hydrated so that your body and brain can function in the same way that a machine needs oil. Dehydration will slow you down and strain the connection between the body and the brain. On top of this, sex and good sexual health is essential for releasing happy hormones, so get busy!

Tips to nourish each system

Here are some healthy lifestyle choices you can try to incorporate on a routine basis that will directly nourish your different systems. Many of these cross over, because basic good health principles will generally nourish your entire body in some way or another.

Intoo	ulmo	ntary
IIILEC	Juille	ntary

Moisturise

Cleanse

Vitamins D & C

Sun block

Respiratory

Breathing exercises

Cardio workouts

Antioxidants

Fresh air

Nervous

Omega-3 Fatty Acids

Breathing exercises

Meditation

Epsom salts

Endocrine

Nurture all systems!

Protein & healthy fats

Avoid caffeine

Good rest & sleep

Cardiovascular

Get your 5 a day

Exercise

Less alcohol & sugar

Less saturated fats

Lymphatic

Hot & cold showers

Hydrate

Raw foods

Loose clothes

Digestive

Fruit, veg & fibre

Less junk food

Probiotics

Hydrate

Immune

Fruit & veg

Exercise

Healthy sleep

Wash hands

Muscular

Yoga & stretching

Anaerobic exercise

Deep tissue massage

Hot bath

Skeletal

Calcium

Vitamin D

Stretching

Good posture

Urinary

Hydrate

Herbal teas

Cranberry juice

Pee regularly

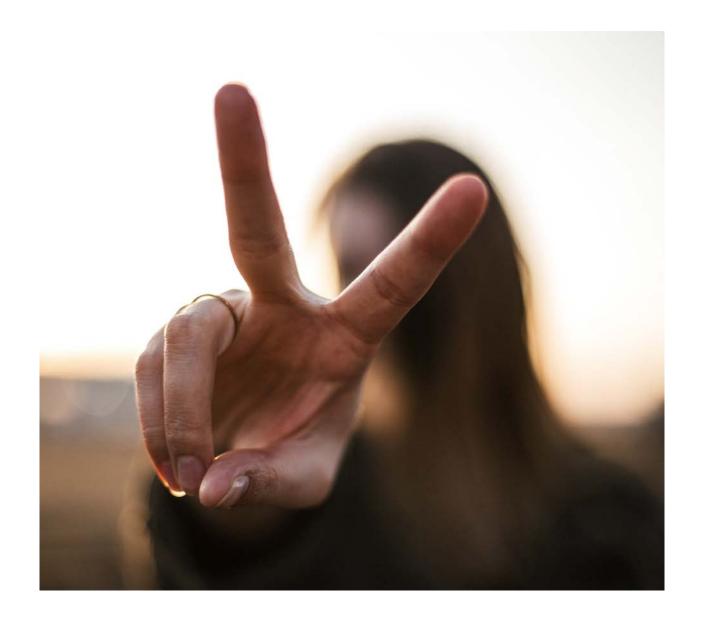
Reproductive

Antioxidants

Healthy fats

Multivitamins

Good sex



Step 2

Create a controlled, positive sensory environment.

The 5 Senses

Hamster ball time!

Now that we have explored how the body's different systems operate in the context of anxiety, the next phase of Brawn to Brain is about creating a controlled, positive sensory environment, or what I like to call the sensory hamster ball.

When you enter an environment where you've previously felt anxious, or even imagine being there, the information absorbed by your nervous and integumentary systems is familiar. The crowds, the enclosed spaces, the heights, the dark, the traffic, the shopping centre, the public transport; you've been here before and it wasn't good.

The negativity associated with all these grains of information is channelled through your body, engaging your brain and all your other systems in less than a heartbeat. To an extent, your thoughts are

irrelevant. This is physical instinct at play. The surge of adrenaline begins, blood rushes oxygen to your muscles as they tense for action. Rapid breathing starts as more oxygen is demanded, causing dizziness as carbon dioxide lowers and so forth.

Many therapies suggest that, through talk and thought, we can intersect and correct our neuropathways to stop ourselves from reaching fight-flight-freeze, or to calm down once it has started. But if you've been trying this and haven't been able to make progress, tackling the issue physically instead might be for you. Some of us are more in tune with our physical self and that's perfectly ok.

Just like a hamster exploring the world in the safety of its ball, by creating a controlled, positive sensory environment, you are utilising your body's five senses to create a physical sensory barrier between you and the false shock data in your environment. By using sensory aids such as food, water, music and more, we can pad ourselves with positive data and trick the body into responding to that, instead of to the negative data it has learnt to fear.

The great thing about this method is that it's easy to prepare, easy to implement and you can do it anywhere on your own. And the best part is that every time you achieve this, you retrain your brain to relax in the difficult environment, so that eventually you will no longer need your hamster ball of sensory aids, much like taking off your stabilisers.

The Five Senses: Sight Sound Smell Taste Touch

Step 2



Sight

As humans, sight is one of the fastest ways we absorb information. During fight or flight, our pupils dilate to absorb more data about a perceived threat, but our vision can become "spotty" as we get lightheaded from rapid breathing. Our blink rate also increases from stress and anxiety, which is why rapid blinking and eye movement are parts of body language observed to detect if a person is lying. Sight is so powerful, visual clues such as colours, patterns and textures have a direct impact on the way we feel and how we respond, a fact that advertising companies have been leveraging for years. Use the same science to create a positive, controlled, visual barrier between you and the false shock data in your environment, so that the external sights become secondary, and the data from your visual aids becomes your primary focus. Remember to control your breathing to avoid light headedness and prevent your sight from becoming blurred or spotty.

5 sight nourishing tricks

Read! Whether a great novel or a glossy magazine, reading has been shown to reduce stress by as much as 68%! A study by the University of Sussex concluded that reading for as little as six minutes slows your heart rate and reduces muscle tension, which is faster and more effective than listening to music or going for a walk. Read more about the study led by bestselling Author Dr David Lewis-Hodgson, Neuropsychologist and Founder of Mindlab.

Draw, write or do a puzzle. The processes in our brain responsible for creativity and problem solving fire up so many neurons, it's like setting off a cognitive fireworks display. Research suggests that when we are being creative, our brain's three neural networks start to work in unison, enabling incredible thought and focus. This is why games are so great for brain health. This positive energy leaves very little space for your brain to be setting off anxiety alarms!

Utilise colours. Your body and mind are constantly reacting to colours. Different light wavelengths absorbed from different colours impact the brain in different ways! For instance, orange is often used in sales promotions because it draws sharp attention. Fill your life with calming blues and greens, pastel pinks and neutrals; all colours that sooth the mind. Blue is seen as the most calming, actually slowing down your heart rate and lowering your blood pressure.

Wear sunglasses. Shielding your eyes offers an added sense of privacy, easing the social pressures of feeling anxious in public. Plus, the hypothalamus, the same bit of your brain that sets off your panic alarm, also controls your circadian rhythm; your body clock. Darkness tells us that it's time for some melatonin, the hormone that makes you feel tired. While it's unwise to mess with your body clock, sunglasses and blue light blocking glasses are harmless and can help create a sense of calm.

Use imagery. Prepare a photo album of all your best and most chilled out memories, focussing on the details associated with them. And whether a short clip or a full motion picture, film is one of the most immersive mediums. Videos draw us in and evoke emotions at lightning speed. Watching movies on your phone or laptop is a great way of quickly replacing all the shock data in your environment. This is so powerful, research even suggests horror films can directly reduce anxiety!



Sound

Our relationship with sound is very powerful. Abnormally loud noises can trigger fight-flight-freeze, which is why some war veterans with PTSD can suffer from loud sounds that remind them of war. During fight or flight our hearing sharpens to absorb more data. Soundwaves tell us how close or far away a threat is, and how fast it is travelling towards us. Some studies show there is a stress response system located within the inner ear, the cochlea, that relates to this. It mirrors our fight-flight-freeze response and is responsible for protecting us from loud noises. There are ways we can fill our eardrums with positive energy by selecting sounds that confuse the brain when it's trying to suggest we're under threat. These sounds can shield our ears from shock data and prevent the triggering of fight-flight-freeze.

5 sound nourishing tricks

Listen to upbeat music. Music can have a direct impact on our mood. This is why listening to fast music in the car can make us drive aggressively. Prepare a playlist ahead of your anxiety. Calming, meditative music is great but can be difficult to "tune into" when you're starting to get nervous and adrenaline kicks in. Try upbeat, positive songs set in a Major key - music that sounds happy instead of sad or serious. Happy music can release endorphins and make you feel great.

Listen to an audio book. Narrative and story is an excellent tool for switching your brain into imagination mode. Listening to another person's voice as they stimulate images in your mind gives you an opportunity to interact with a controlled audio process. It draws your brain's attention to words and tone of voice; communication data that needs deciphering. This is a clever trick for keeping your brain engaged with positive sound data instead of the sounds of your feared environment.

Phone a friend. Engaging in conversation is a great distraction method. Similar to listening to an audio book, your brain is presented with the task of deciphering communication cues in another person. This task requires focus that takes your concentration away from false shock sound data. The person you speak to does not even need to know you're anxious. Engage in small talk, listen to someone who can talk for England and *actively listen* to the details in what they're saying.

Play sound games. We are rarely in total silence. Some relaxation techniques suggest you focus on all the different sounds in your environment to bring you back to the present and relax you. Try this with sound apps instead. Identify all the different birds you can hear in a meadow or count the seconds between thunder. There are many free sound apps for this and they're a great way of tricking your brain by tuning into a positive sound environment wherever you are.

Count. Counting has a calming effect because it enables you to focus on the reality of time. During fight-flight-freeze, we can lose our sense of time and seconds can feel like forever. But by counting, you can ground your sense of time and take back control. Counting is rhythmic, so whether you count the seconds in your mind or count the chimes on a sound app, focusing your sense of sound on a rhythm can also be paired with controlled breathing and stimulating the vagus nerve.



Smell

Smell and hormones have a very close relationship, so much so, that hormones can actually change our smell receptors. This is why pregnant women often report a change in their sense of smell during different terms of their pregnancy. Studies also suggest that trauma can actually rewire our reaction to smell, making the brain detect harm that isn't there in some cases. Smell is another sense you can manipulate and work to your advantage. In the same way that most of us immediately inhale when we walk into a spa because of all the lush aromatherapy oils in the air, we can use a range of scented items to flood our smell receptors with positive data in any environment. What's more, pairing smell with deep, controlled breathing combines two anxiety-reducing techniques into one.

5 smell nourishing tricks

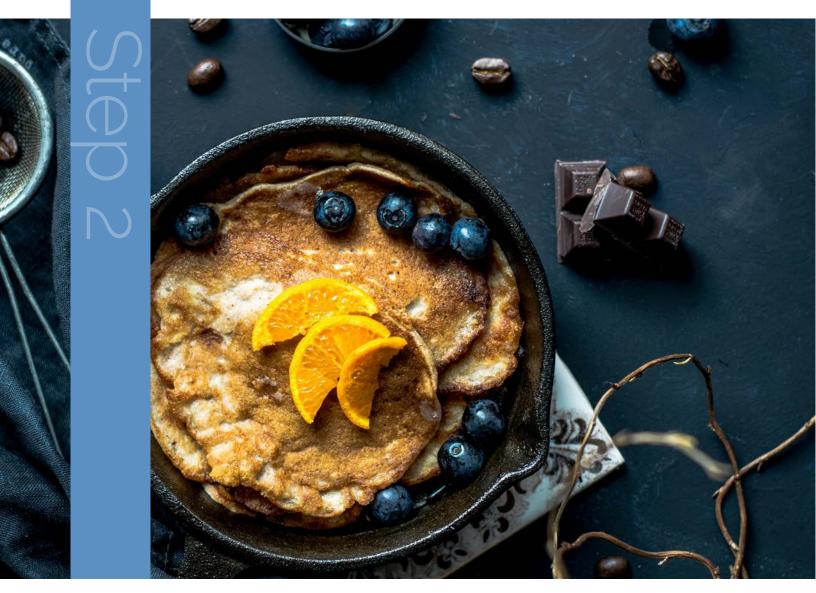
Carry lavender & vanilla. Lavender directly reduces anxiety and works as a sedative. It interacts with the neurotransmitter GABA to calm the brain and nervous system. Vanilla, if consumed, offers many antibacterials and antioxidants, but the smell is also anxiety-reducing. This is why lavender and vanilla are popular choices for candles and pot-pourri. Some studies have even shown that vanilla used in air humidifiers significantly reduced anxiety levels in people being exposed to them.

Keep scented materials. Wear or carry items of clothing such as a scarf scented with your favourite smell. This could be your own favourite perfume or that of a loved one. Parents often love the smell of their baby's clothes and happy couples love the smell of their partner's perfume or natural scent. The scent of people we love makes us happy because it triggers the release of the "cuddle" hormone oxytocin, creating a powerful calming effect.

Apply aromatherapy oils. Essential oils, applied in aromatherapy, have been used in alternative medicine for centuries as a way of inhaling or absorbing the health benefits of different plant extracts. It is believed that inhaling essential oils stimulates the brain's limbic system, which is involved in memory, breathing, heart rate and blood pressure. Dab a calming essential oil such as sandalwood or chamomile on your wrists or on a piece of material that you can inhale easily.

Breathe for your vagus nerve. As described in step 1, the vagus nerve runs from your brain to your abdomen and can be stimulated to counteract anxiety very quickly and easily. Breathe in through your nose for four seconds, then out for eight through your mouth. The key is to double the length of your inhale with your exhale. This is all it takes for the vagus nerve to kick in, relaxing your entire body within seconds. Pair this with a relaxing scent using any of the above tips for extra impact.

Look after your sinuses. We often only associate congestion problems with infection. If you suffer from allergies, you may especially appreciate how stressed we can become from sneezing fits and a blocked or inflamed nasal passage. Poor congestion can increase anxiety, so inhaling hot steam, using air dehumidifiers and mentholated ointments such as VapoRub can ease it. If you suffer from blocked sinuses, factor this in to your fight against anxiety by taking active steps to stay clear.



Taste

Like smell, our sense of taste can be affected by changes in our hormones. When you walk into a room, you can immediately taste the air, absorbing countless particles associated with your feared environment. This is literally like tasting your fear and all sorts of chemical processes can start in the mouth and gut. As well as this, breathing fast during anxiety can irritate our saliva glands, which is additionally unpleasant and can lead to nausea. The relationship between our mouth and anxiety is why oral health and related gut health is so important, both before and during an episode. We can improve this relationship by regulating our diet, hydration and oral hygiene, giving our mouth and taste buds the best fighting chance of absorbing positive data instead of false shock data.

5 taste nourishing tricks

Nurture your gut health. Our microbiome is a part of our endocrine system, so gut health plays an essential role in hormone balance. Serotonin, the hormone that regulates appetite and digestion (plus mood, sleep, memory and sex) is produced in the intestine. A well balanced diet, rich in fibre and nutrients, and a healthy body mass index, will keep your gut at its optimum and your hormones balanced. Simple over-the-counter rescue remedies and probiotics can also help.

Stay hydrated. During anxiety, you can quickly feel dehydrated, developing a dry mouth from rapid breathing and the way that fluids are redirected around the body. You can also salivate in excess, developing nausea. Dehydration causes fatigue, headaches, excess toxins and oral hygiene issues. Look after your oral health and get your correct daily intake of fluids. Keep a flask of water at hand when you enter a feared environment, so you can regulate your hydration easily.

Understand sugar. Different sugars impact energy levels in different ways; a fact we can leverage. Glucose, the simplest form of sugar, enters our bloodstream effortlessly. Sugary foods can therefore cause a sugar rush, which can feel similar to anxiety. During fight-flight-freeze, your adrenal glands release glucose stores, causing an excess in the bloodstream. Long-term, high blood sugar levels create many health issues such as inflammation and insulin resistance. But not all sugars are bad...

Quick vs slow. For your pre-anxiety meal, ease your digestion with slow releasing carbohydrates like basmati rice, quinoa and lentils to regulate your blood sugar level for longer. This prevents fatigue and faint spells. However, quick releasing healthy sugars in small doses can ease fight-flight-freeze, tricking your taste buds and brain into releasing happy hormones. Citrus has a direct positive effect on the limbic system and dark chocolate and Brazil nuts contain several stress-busting properties.

Herbs & spices. Chamomile and peppermint tea contain many anti-inflammatory, antibacterial and antioxidant properties that reduce anxiety. Green tea contains theanine which is thought to increase the production of serotonin and dopamine. The spice turmeric contains curcumin, believed to reduce inflammation and anxiety. Whether you incorporate these in your meals or with supplements, herbs and spices are great stress-busters, both before and during anxiety.

Stepoz



Touch

Skin is the integumentary system's largest asset, arming you with millions of sensors to experience the outside world and feedback to the brain. Skin and touch are therefore an essential factor when it comes to reducing anxiety in both the short and long-term. Often signs of anxiety break out in the skin, in the form of sweating, rashes and other irritations. We can develop a sense of tingling, burning and pins and needles as our anxiety levels increase. We can also experience rapid changes in temperature in our hands and feet, as blood is lost to our essential organs during fight-flight-freeze. When we enter an environment that makes us anxious, we can use our entire layer of surface skin to help us stay comfortable, soothed and stimulated in a positive sense, rather than becoming agitated and uncomfortable.

5 touch nourishing tricks

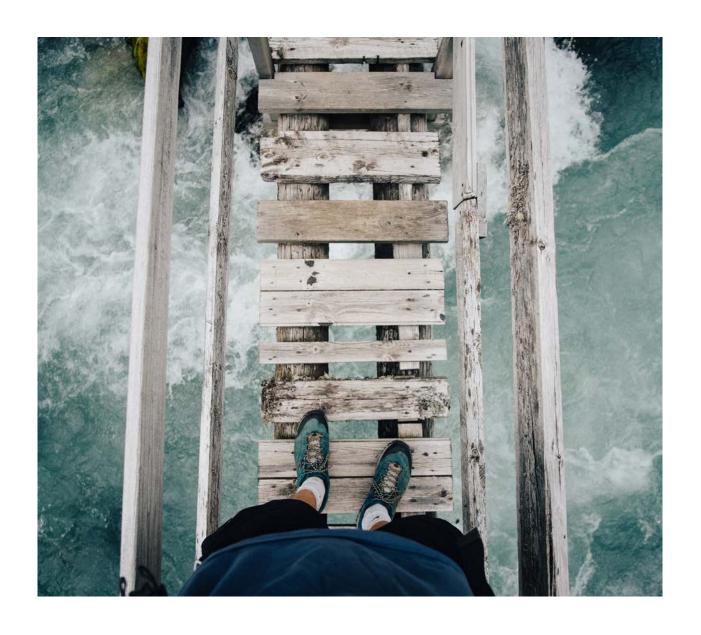
Moisturise & hydrate. Your skin is your first and largest shield to your environment. Keep it nourished and hydrated by getting your correct daily intake of water, plus using moisturising products rich with vitamins and nutrients. Skin creams are great for this, especially those you can carry with you and apply anywhere. Epsom salts and some bath bombs contain magnesium that helps produce serotonin. Plus the big one; always use sun block to protect yourself from the sun's harmful rays.

Keep a keepsake. Stimulate feel-good vibes by keeping something you enjoy the feel of, like a stone, shell or soft material. Grip it, explore it's ridges and surfaces with your fingertips. By focussing on the fine details, you distract your brain from any false shock data around you. Some people believe that crystals and gemstones like rose quartz and amethyst contain healing properties from the minerals they are made from. If the object is associated with a positive memory, even better.

Utilise healthy pressure. Applying and releasing pressure in certain points reduces tension in the body. This is why acupuncture and acupressure have been used in medicine for thousands of years. Gripping stressballs in your hand, using head and hand massagers, and pinching your own pressure points are easy ways you can tap into this. Also, if you have long hair, don't scrape it back so that it pulls hard against your scalp; wear it lose to avoid added tension around your facial muscles.

Wear comfortable clothes. Materials can have a very calming or aggravating effect on our mood. Choose comfortable shoes and clothes so that your skin is not agitated or restricted. Wear materials that allow your skin to breathe. Double up on layers to account for climate changes so that you don't get caught out feeling too hot or cold. Soft shawls, scarves and headrests can also have a calming effect. These tips avoid any additional feelings of discomfort and irritation in an anxious environment.

Hugs & hand washes. When we hug another human or animal, our body releases additional oxytocin, the "cuddle hormone", giving us a sense of pleasure and reducing feelings of sadness and stress. If you have access to a loved one or a pet, give them lots of physical affection to benefit from this process. Equally, washing your hands and taking a bath or shower has strong therapeutic effects due to the sense of cleansing water gives us, so make time to enjoy these in your routine.



Step 3

Apply yourself to your fears.



Altogether now

Have you ever headed into a place that makes you anxious and thought about anything but your anxiety? When you get used to the idea that you suffer from anxiety in some situations, it's easy to allow fear to dominate your every thought. You get anxious about getting anxious. You focus your attempts to combat this with positive thinking; "I can do this, I'm ok, I'm in control, I'm safe." But for many, this self talk is futile against the louder narrative that answers back, "I can't do this, I'm not ok, I'm losing control, I want out." Because the negative narrative is fuelled by the snowballing fight-flight-freeze response, and validated by all the false shock data flooding into your system through your five senses. With a controlled positive sensory environment, you don't just tackle these symptoms with thought alone, or with any *one* sense - you utilise all five senses together, nourishing your body and brain with positive data, *taste, touch, sight, sound and smell*, to steal back your focus.

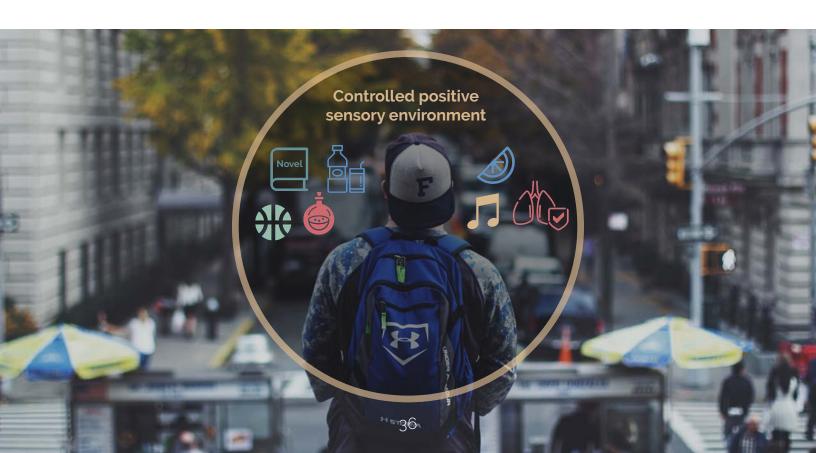
Imagine you are about to visit an environment that triggers your anxiety. Let's use a busy town centre as an example. The evening before, finish your day with a healthy, balanced meal and get a good night's sleep so that you can wake up feeling refreshed and energised. To achieve this, don't over eat, but do avoid caffeine. Take a hot bath, read in bed and keep lavender by your pillow. Set your alarm early enough to give you plenty of time to get where you need to be, avoiding any additional stresses of rushing or being late.

In the morning, shower to feel refreshed. Use your favourite moisturisers and perfumes. Have a tall glass of water to kickstart your hydration, and a healthy, light breakfast of slow burning carbs such as porridge to sustain your energy; nothing too heavy so that you don't feel bloated. Avoid caffeine again.

Put on some happy music while you're getting dressed. Wear your most comfortable clothes, layered up to account for different weather, and take a bag with the following; a flask of water, a small snack such as dark chocolate or fruit, a book or magazine, a scented item, your phone with a preplanned playlist of your happiest tunes and a photo album of your happiest photos, your sunglasses, earphones. and a charger or extra power bank so you can always call someone for help. Place a stressball or keepsake in your pocket.

Listen to your music as you head out. Travel by foot or as a passenger. If you must go by car, ask someone to drive you or get a taxi on this occasion. As you approach your feared environment, focus on your five senses interacting with all the sensory aids in place; tap to the music, grip the keepsake, look at photos, read your book, smell your perfume. Stimulate your vagus nerve with controlled breathing, inhaling your scented item.

The moment you start to notice details about the environment, shift your focus back to your sensory aids instead. Keep at it for as long as you can, because all the while, you are retraining your body and brain to relax regardless of where you are. Trust your controlled, positive sensory environment - it will work.



You've got this

Start to listen to your body *all the time*. How do you feel before and after exercise, sleep, sex and lunch? Listen to your physical and mental state as one instrument. Record your findings in a diary if it helps. How did you feel after that coffee? After that glass of wine? How are all of these factors impacting your anxiety levels on a day to day basis?

Then, when you're ready, start to step outside your comfort zone like in the example and test the benefits of your hamster ball. This retrains your brain to relax in the environments you have learnt to fear. Your controlled positive sensory environment will act as a protective barrier and soon you may not need it. Remember, you learnt to respond to these environments with anxiety, you can learn to respond with calm. By empowering your brain through your body, you *can* liberate yourself from anxiety.

Are you gripped with fear by the very notion of facing your fears? If so, even when you're thinking about facing them, start to create your controlled positive sensory environment. You can create this anywhere, any time, including at home. Because even considering facing a fear is an achievement. Instead of blocking it out, you're asking yourself, "could I?" This is a *huge* step forward no matter the outcome.

Using the fear induced by thinking about your fears is still a chance to practice empowering yourself. *Listen* to your physical reactions and address them. Think about your five senses. What physical symptoms are you experiencing? What have you eaten today? How hydrated are you? How well did you sleep last night? All of these factors contribute.

Even if you feel like you can't go any further than that today, congratulate yourself for being open minded. Every attempt to overcome anxiety is a win, whether you enter fight-flight-freeze or not. From this point on, your mind is relearning what your body and brain is capable of.

Keep going along this path, edging yourself from considering facing your fears to actually facing them. Over-imagining scenes in your mind can be counterproductive though, as you're testing yourself with imagination instead of reality. Start with open-mindedness, considering small steps.

Listen to your body the entire way, not your mind. But if your mind is louder and you want to stop, it's ok to stop! Just shift your focus back to your body. Are you shaking? Yes? Then how are you breathing? Are you activating your vagus nerve? No? Then activate it. Are you nurturing your other senses? Are you unclenching your fists? Are you sipping water? Are you tasting your favourite food? Are you hearing your favourite music? How do each of these factors feel?

Your body will not enter fight-flight-freeze if your senses are soothed and your vagus nerve will calm you down if you do the controlled breathing. Harmonise your physical environment and it will no longer matter what your mind says. What matters, is what you're physically doing. An empowered body and brain can be an anchor for an anxious mind, and very soon, through observing that physical power, your mind will follow suit. You'll find yourself suddenly saying, "actually, I'm ok now."

Overview combining the 3 steps

The Brawn to Brain model helps you to create a calm state to exist in wherever you are, so that even when you're in a place that distresses you, your body is loaded with positive messages. Use this model to retrain your brain so that it no longer reacts so turbulently to false shock data in environments where you are completely safe. Eventually, the sensory hamster ball can come away and you can be at peace without it. While the model works in three steps, it is most effective if you integrate the learning into your daily lifestyle, so that the physical foundations of calm and confidence are already in place ahead of approaching the environments that make you anxious. Try the following tasks to achieve each step of the model:

Step 1: Learn the foundations of an empowered self

This is the learning phase that you can apply to daily life. This step sets the scene of good health. It's about understanding, appreciating and applying the basic health principles; hydration, a healthy balanced diet rich with nutrients, and a good exercise and sleep routine. By taking good care of our bones and muscles, our skin, our hormone production, oral health, sexual health and so forth, we are laying the foundations of a well kept machine.

Task: Go back to page 21 and decide on at least one lifestyle choice that will better nourish each system, and start introducing those choices on a daily basis. Keep it simple so that you don't overwhelm yourself or make the task too impractical. For example, a healthy choice for your respiratory system could be the decision to practice deep breathing every morning for 10 minutes. These lifestyle choices are the building blocks to best equip your body and brain's systems to work in harmony. Then, when you do face a feared environment, you will be better prepared to overcome your anxiety.

Step 2: Create a controlled, positive sensory environment

This step does not need limiting to moments of high anxiety. You can factor all the sensory aids into your everyday life; great music and relaxing sounds, physical contact, smells and tastes that spark your happy hormones and reduce stress and anxiety. Incorporate these aids into your daily routine for optimum results, so that when you do face a feared anxiety, your sensory hamster ball is already in full motion.

Task: Make yourself a sensory toolkit. Read back through the example aids described in step 2 and note down at least one aid that you could apply to each sense. Prepare a playlist, a photo album, a new book or one that you love to read, a call list of friends or family who are great conversationalists. Buy a stash of your favourite foods. Get some material scented with your favourite smells. Start to incorporate your toolkit into your daily routines and monitor how the different elements make you feel. This makes it much easier to organise yourself when you do actually need to call upon your hamster ball for facing a feared environment.

Step 3: Apply yourself to your fears

This is the only step of the Brawn to Brain model that is limited to moments of anxiety. Everything else can be applied as part of a healthy lifestyle to bring your anxiety levels down and restore your sense of calm. Step 3 requires you to take everything you have learnt and apply it to a situation or thought process that makes you feel anxious. This is where the leap of faith comes in. On reading this book, you will not be cured of your anxiety. By introducing the methods in this book, you will stand a far greater chance of overcoming your anxiety, but you must put it into practice.

Task: Your third task, when you feel ready, is to face an environment that makes you feel anxious and implement your sensory aids. Take it slowly by choosing something that isn't your worst case scenario. Be prepared to still get anxious - you probably will - but focus your attention on your controlled sensory environment and each sensory aid you have in place, working them to your advantage. If your focus drifts to the external environment, shift it back. During this task, if you become overwhelmed, please don't treat it as a failure. The fact that you even tried is a major win. The key is to keep trying and keep focusing on your sensory aids. They, and the way they make you feel, are your focus.

The first time this process worked for me, I was astounded. I certainly didn't expect it. Now, while I maintain a healthy lifestyle, I don't need any sensory hamster ball. The only way I got here though was by taking back control of my body and brain, by facing my fears one step at a time. If possible, confide in a friend or family member for extra support and encouragement as you go through the motions of facing your fears. It can also help to journal your progress.

Learning styles and mindfulness

It all might sound too simple, but think of it this way; the education world categorises people into different learning styles; visual, auditory, reading/writing and kinaesthetic. When it comes to anxiety, some of us can learn to heal through talk and mind techniques, and others need a more physical approach.

I am a kinaesthetic learner, so I have to physically "do" to learn. I struggle with being shown or told. I can't absorb directions very well, but if I use a map to take a route just once, I can easily repeat and reverse it. To learn from books, I have to rewrite facts in my own words. As a musician, I have to play music to memorise it.

Memory recall, imagination and visualisation can be a complex space when it comes to anxiety. This, with the infinitely unique mind-map that we each contain makes successfully pairing the right type of therapy with the right patient a big challenge. Now factor in different learning styles and the challenge becomes even greater.

If you are a person who needs to physically experience the learning process, it makes sense that you may find it more effective to tackle anxiety through "doing" rather than visualising or talking. While the mind appears to be our primary tool for experiencing the outside world, the body is equally experiential:

If you drink water, you will benefit from hydration. If you eat healthily, you will benefit from energy. If you exercise, you will benefit from fitness. If you sleep well, you will benefit from recovery. If you breathe well, you will benefit from relaxation. If you nourish your five senses, you will benefit from positive stimulation.

While we can all benefit from the principles outlined in the Brawn to Brawn model no matter our learning style, if you are a kinaesthetic learner who has been struggling to make progress elsewhere, this could be the reason. Further more, *mindfulness* may be the extra power-tool you didn't know you were looking for.

For all types of learners, mindfulness is a great way to improve our ability to control and calm the mind, and for stretching our capacity to absorb data in any format. While it has its limitations, mindfulness is simply a way of being conscientious about our state of being. It helps to focus on the present and encourages you to let go of things you cannot control; your external environment, other people, the past and the future.

By focussing only on what your five senses are experiencing in the present moment, you can slow and calm the mind. This is similar but not the same as meditation, which tends to be a more formal practice. Like Brawn to Brain, mindfulness can be applied anywhere and anytime. Those who practice mindfulness often do so during hobbies that allow them to "switch off" from their thoughts; exercising, nature, listening to music and being creative are common examples that allow the mind to empty from clutter and narrative.

Where talking can still help

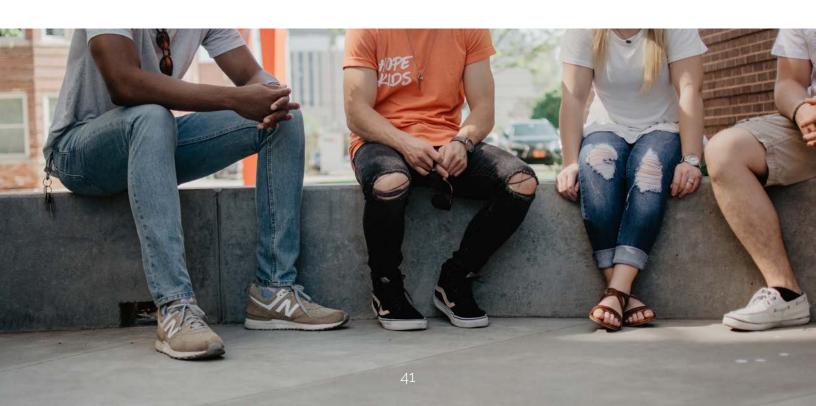
Even if you feel that talk therapy and counselling isn't working for you in terms of overcoming anxiety, there may still be a place in your life for this type of outlet. While the physical symptoms can be tackled with so much more, talking about the traumas behind your anxiety can still be beneficial.

Trauma can be so severe and confusing, we can bury the facts without meaning to. We can easily become muddled over what and how our experiences have hurt us, making them all the more difficult to heal from. A third party can provide an outside perspective and offer clarity where emotions can cloud. In counselling, revelations can be made from having somebody to prompt you to untangle your past in a safe space.

While the Brawn to Brain model is designed to help overcome anxiety with a stand-alone solution, sharing feelings and experiences can provide a better understand of why you are suffering. From this, you can harness the opportunity to learn, grow, and in some cases, forgive, which is ultimately healthier.

If you are open to counselling, visit www.counselling-directory.org.uk to find a therapist who is qualified, accredited and experienced in some of the symptoms or traumas that relate to you. Have a few trial consultations with different therapists until you click with one, and give the process time. The first couple of sessions are usually for the therapist to find their feet with your personality and unique circumstances. The average course is around 8 - 12 sessions, but people can need far more and far less. You may have to pay, although concessions can be applied for, or you can ask your GP to put you on the NHS waiting list.

Lastly, if one to one counselling really isn't for you, then try if you can to reach out to a friend, family member or support group instead. While they may not be qualified to help in the same way, a problem shared is a problem halved, and it might just remove a pin that improves your ability to heal.



And finally, why I believe in you

The problem with experiencing a panic attack, even just once, is that it teaches you what it feels like to lose complete control of yourself. Not everyone interprets this the same way, but for many, the experience manifests as a personal weakness. You learn that you're the type of person who doesn't always have full control; especially when it matters most - during survival or high-stress situations.

This self-model can embed so deeply into your identity, narratives such as "I can't, I couldn't possibly, I could never..." become second nature. You start to compensate for your lack of control by trying to take control of all the daily scenarios that might trigger you. And because that's impossible, you develop a strained link between anxiety, fight-flight-freeze and control. Now you're a person who develops anxiety when life gets stressful - when things feel out of control, and this can snowball, as it did for me.

I believe that the way to end this process and shatter this idea of yourself, is to identify the physical breadcrumbs that led you into fight-flight-freeze compared to the times you felt a heightened sense of anxiety but didn't enter fight-flight-freeze. I'll bet, if you map them all out, those breadcrumbs look different to each other. That's because there is a big difference between unnecessary environmental anxiety and a very necessary fight-flight-freeze response, and those breadcrumbs reveal it.

For instance, the breadcrumbs that commonly lead to fight-flight-freeze include severe accidents, severe pain, threats of violence, actual assault, the sight or representation of a lot of blood or violence, the loss of a loved one both momentarily or permanently, a high dose of an artificial stimulant such as a drug, caffeine or alcohol, a sickness bug, food poisoning and other such extreme experiences.

The breadcrumbs that commonly lead to environmental anxiety, while often linked back to those, tend to be less shocking and more about general stress trigger-points that vary for everyone; crowds, heat, noise, confinement, exposure, heights, deep water, work pressures, expectations from others, fatigue, hunger, nausea from over-eating, drunkenness, motion sickness and so forth.

Unfortunately, when we suffer from anxiety, the lines become blurred and it all seems like one hot issue. By identifying the physical breadcrumbs, you can start to see the difference. Do this to make peace with your fight-flight-freeze response. It is indeed an unpleasant, at first terrifying experience, but it is part of your intricate design and you can embrace the rare role that it needs to play. Fight-flight-freeze is not your problem. Your problem is living in fear by associating it with anxiety.

I had already started this research when I had my most recent fight-flight-freeze moment as a result of a physical shock. This had no relation to any environmental anxiety. I overworked in a gym session, stood up too quickly and before my body had a chance to recover, I entered into a conversation about sickness and passing out. The combination of extreme physical stress and a mental trigger related to my own past traumas tipped me suddenly into fight-flight-freeze when I otherwise would have calmed down.

This time, with my new knowledge, I understood what was happening to me, and why. I fought it physically by manipulating my vagus nerve and by doing so, avoided passing out. Once it was over, I got up, splashed my face with water and carried on with my day. In the past, I would have felt so traumatized, I'd have gone straight home to bed feeling weak and fatigued. Instead, I just laughed and put it behind me.

There are soldiers and sports professionals all over the world who regularly enter different stages of fight-flight-freeze from injury and don't see it as an emotionally scarring episode. For the rest of us, the event can feel so alien, we interpret it as something to fear and avoid. By understanding the physical components of fight-flight-freeze, we can normalise the experience and differentiate it from environmental anxiety.

There was never any reason for me to feel anxious in crowds, traffic or travel. But over the years, as life became more stressful and I felt more out of control, my anxiety spread into all these unnecessary domains; my adrenaline and cortisol levels circulating on tap. I made more and more associations with places and activities that I feared would spark a panic attack even though they never did. Controlling my external environments was my way of trying to avoid fear and reduce anxiety.

What I should have been doing was taking back control of *me*; my inner environment - my machine. As soon as I realised that I am the only thing I can ever expect to control, I let go of the desire to control anything else and became empowered by focusing on myself; through diet, nutrition, exercise and knowledge.

The controlled, positive sensory environment, or the hamster ball, is a temporary training solution, like stabilisers, that enables you to practice shifting your focus away from where you are and what's going on around you. While you are still suffering from anxiety and the need for additional control in your life, the hamster ball lets you refocus that need into your physical senses. The more you practice, the more natural it will feel until your inner control is restored and your anxiety about the external world dissolves.

I know you can do this because you are human, and this is a matter of physiology; your organs and chemicals working in harmony by your very own order. In the meantime, you are not broken. You are not weak. You're an incredible machine with parts and processes that can be nourished and leveraged to your advantage. Your body and brain are yours to empower; give them your energy and your anxiety will starve.

Your notes

Use this page to plan your list of sensory aids.			

Useful links

Support

https://www.nhs.uk

https://nopanic.org.uk

https://www.refuge.org.uk

https://www.samaritans.org

https://www.calmclinic.com

https://www.nationaldahelpline.org.uk

https://www.counselling-directory.org.uk

Research

https://drhyman.com

http://drtituschiu.com/articles

https://www.yourhormones.info

https://www.psychologytoday.com

https://www.innerbody.com/htm/body.html

https://www.wired.co.uk/article/the-good-life-human-touch

https://www.livescience.com/26496-endocrine-system.html

http://mentalfloss.com/article/65710/9-nervy-facts-about-vagus-nerve

https://www.health.harvard.edu/staying-healthy/understanding-the-stress-response

https://www.verywellmind.com/what-is-the-fight-or-flight-response-2795194

Videos

https://youtu.be/m2GywoS77qc

https://www.youtube.com/watch?v=aLyiCAkTvVA

https://www.youtube.com/watch?v=cyEdZ23Cp1E

https://medlineplus.gov/ency/anatomyvideos/000051.htm

https://drhyman.com/blog/2017/10/04/is-your-brain-broken

https://www.inc.com/amy-cuddy/how-to-take-control-of-fight-or-flight-moments.html

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