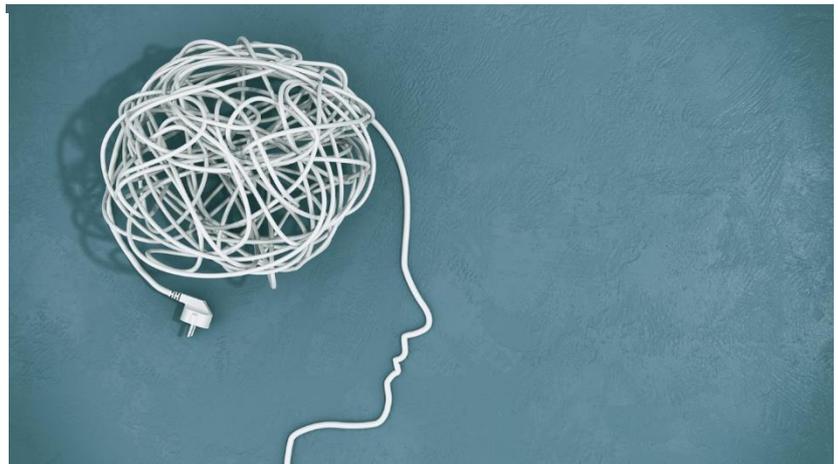


Switching off at night

Using neuroscience to unplug, calm down and have a great sleep

Article by Karyn Chalk, 2022

When it comes to getting a great nights sleep all roads lead to the brain. Learn a range of research-based brain care strategies to help you switch off at night. Implementing these into your life will help calm you down, soothe your brain and build resilience.



Introduction

Over the past 18 months I've had the privilege of learning from a number of world leaders a range of highly effective, research based resilience and wellbeing strategies. My motivation to learn brain care techniques started from my own experience of chronic workplace burnout. The barb wire headache lasting months, so tired I couldn't sleep, tears out of nowhere, intolerance of others and leaving my career as there was nothing in the tank left. Accompanying this were feelings of failure, guilt and shame.

Sleep became a real issue for me when I formerly re-entered the workplace a couple of years later. My brain quickly became hypervigilant. My husband is a night shift worker. When his alarm went off at 1am I would wake with a fright. By the time I got back into a deep sleep, it was time to get up again.

When learning how to calm down and get back to sleep it was helpful to understand what was happening in my brain, when big emotions arose and 'switching off' was difficult. The benefits from learning these sleep techniques included an increased internal sense of compassion and empathy and an understanding that I wasn't broken and there was nothing fundamentally wrong with me. The reality was my brain just needed some additional attention and reassurance.

I'm passionate about having conversations about brain health because of the far-reaching impacts that fatigue, burnout and sleep deprivation has on individuals, families, workplaces and communities.

The relationship between sleep and brain health

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Brain Health Risk Factors

Blood flow

Retirement

Inflammation

Genetics

Head Trauma

Toxins

Mental Health

Immunity/Infection

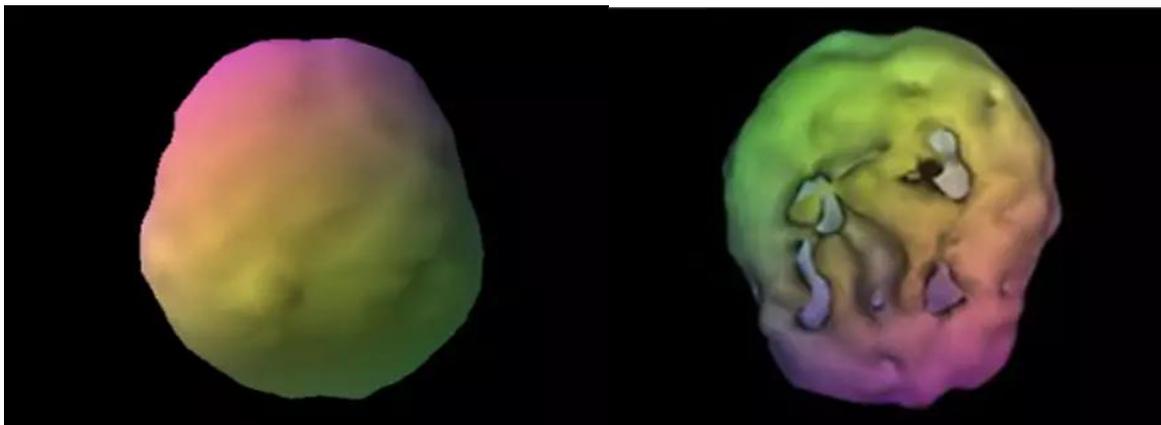
Neurohormone

Diabetes

Sleep

This article is based on brain health because when it comes to health, happiness, wellbeing and resilience all roads lead to the brain. Our brain is an electrical highway and one of the most important ways we can nourish and strengthen these highways is through sleep.

Lack of sleep has been identified by Dr Daniel Amen as a major factor in the overall health and functioning of your brain. Over the past 20 years his clinics have completed 200,000 single-photon emission computerized tomography (SPECT) scans which measure blood flow and activity in the brain. These scans consistently show negative outcomes, such as reduced activity in parts of the brain. And this makes sense because during sleep the brain cleans, washes and puts out the neural trash allowing for rest, repair and restoration. It's a bit like de-fragging a computer!



Healthy brain scan

Sleep Deprived Brain scan

Dr Amen suggests you think of sleep deprivation's effects on the brain as what your home or office might look like if the rubbish isn't taken out for a month. Sleep deprivation is a risk factor to brain health because it impacts your mental health, your memory, your relationships, your weight, ability to focus and your enjoyment in life.

If you get the health of your brain right, then everything else in your life will fall into place.

The home base of emotional responses

Your brain has developed over millions of years. Back in the day, there was no time to sit in the lotus position and contemplate cloud shapes in the sky. If you did, you'd be an easy lunch. To survive our brain developed an instant readiness to go to the negative. From a survival point of view, it's much safer to think there is a tiger around the corner when there isn't, even if this hypervigilance is now surplus to requirements.



The Amygdala

One of the most powerful parts of the brain
Fight/flight/freeze

Job description: Survival

- Am I safe, can I succeed, am I loved?

Areas of responsibility

- Pay extra attention to threats and remember them

Health Impacts when on high alert

- Heartbeat and thoughts speed up
- Get stressed and rattled
- Alarm bells ring more easily and loudly
- Stress hangovers

Much of the survival at all cost activity goes on in a small yet very powerful part of the brain called the amygdala. Your perfect employee. Willing to work 24/7 with no meal breaks, no days off, and when an emergency occurs triples its output and productivity day after day after day.

When you can't switch off your thoughts or you are experiencing lots of emotions, your amygdala has likely detected a threat, no different than a charging lion a million years ago. Stress hormones get activated and your heart beats faster to ensure you can get out of there as fast as possible. These are perfect responses for a tiger that may be in the room, not so useful when you start getting angry to your colleague or have a sudden gush of tears in the middle of a meeting.

Over time with continued stress, the alarm bell of your brain rings more easily and more loudly. Each time this happens it can take 12 to 36 hours to metabolise the stress hormones out of your body which is why

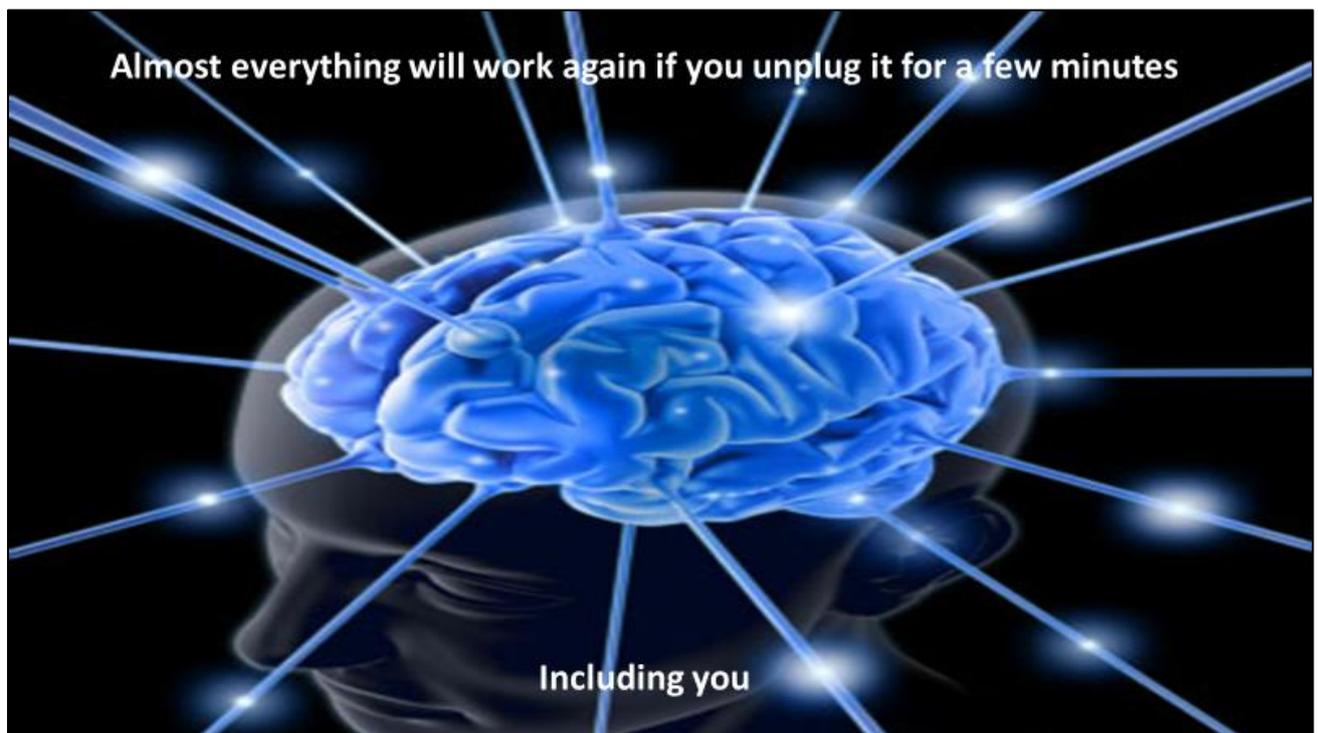
you can feel so tired, drained and depressed with chronic stress. If this happens on a regular basis you become vulnerable to more alarm bells, more stress hormones and more fatigue.

No-one has private messaged the amygdala to say lions are now seen in zoos, we've moved from sleeping under stars to sleepyhead beds, the watering hole is now called a watercooler, mating happens on tinder and hunting happens through a drive through. So basically, we now have the most powerful part of our brain still navigating life through the lens of 10,000 years ago.

This knowledge can help reframe and normalise those difficult emotions and thinking patterns:

- those emotions such as stress, anxiety, panic, rage over a seemingly small situation are simply the amygdala thinking there is a real-life lion in the room
- those sleepless nights of overthinking is likely to be the amygdala ruminating over something it thinks is a threat to your survival
- those time of intolerance to sounds, people, finding it hard to concentrate or get out of bed may just be your brain and body saying "hey I'm in the red reactive zone, I'm living life out of the window of tolerance, there's way too much cortisol and adrenaline floating around".

We are all human and we all experience times when it's hard to calm down, switch off and react appropriately. Taking all this into account it's highly likely that, if you are finding it hard to get a good night's sleep, you're not broken and there is nothing fundamentally wrong with you in these circumstances. Maybe the reality is your amygdala just needs some additional attention and reassurance while it slowly orientates into the 21st Century. The good news is that there are scientifically researched techniques that are free, easy, quick and effective. They can help you build a more resilient neurological landscape and take care of your amygdala when it's feeling distressed.



Havening Techniques®

Having worked in rehabilitation and run a life coaching business for over twenty years, I've done a lot of professional and personal development. I've trained in CBT, REBT, DBT, ACT and NLP to name a few. Havening is one of the best techniques that I've come across because it gets amazing results quickly, is simple to do and it's backed up with a pile of scientific research. Learning a range of havening techniques has literally changed my life, allowing my brain to calm down and move on from high functioning anxiety to hanging out most days in content and flexible mode.

Dr Ron Ruden, a Harvard MD specialising in addictions and trauma, is the founder of the Havening Techniques®. Around 15 years ago Paul McKenna showed Dr Ruden how to clear a phobia using 'Thought Field Therapy (TFT) or tapping. Dr Ruden was curious and sceptical so he tried it with his assistant who had a fear of cats. It worked. This piqued his curiosity and he then took a deep dive into the neuroscience behind how the brain perceives, stores and encodes trauma. As a result of years of research, he developed Havening Techniques®, a third pillar of therapy known as psycho sensory techniques. This means we use information from our senses to change the way the brain processes data it receives.



Dr Ruden's research findings go back to, how we as mammals naturally and instinctively soothe ourselves:

- a mother naturally strokes the face of her new-born baby
- when feeling stressed we wipe our brow or rub our hands together
- we wipe tears off our face when we are upset
- we wrap our arms around ourselves if feeling a bit insecure
- we give people a hug to show we care for them

The calming and gentle nature of the Havening touch naturally invites our nervous system to be soothed. This is because research shows that touch:

- promotes connection to others and reduces stress
- slows heartbeat and lowers blood pressure
- increases feel good electrochemical: oxytocin, GABA and serotonin
- decreases cortisol and adrenaline

How Havening works

There are specific types of skin receptors located in areas on our face, upper arms and palms that, when activated by touch, change the resonance or frequency of how the brain functions (Harper, 2009). Activating these receptors produces a slow brain wave called a delta wave, commonly found in deep sleep. A message is sent to the amygdala that the data it has received is not a survival threat, the situation is safe and it can stand down. A message is then sent to the brainstem to tell the body to move back into rest, digest and repair.

Self-Havening on a regular basis creates psychological safety for the brain to heal. There's less stress hormones such as cortisol running amuck and more growth hormones such as serotonin, Gaba and oxytocin being released into our system. Ultimately, we're taking stress and turning it into healing and empowerment. It's a technique conducive to having the best sleep ever.

Self Havening ® touches



The 4 havening touches utilise the power of these specific skin receptors to get activated and soothe the amygdala.

- 1) the first touch is like washing your hands in warm water
- 2) the next touch is like a moving hug, starting at your shoulders and moving your hands down your arms
- 3) the next touch goes across your brow, like a love heart going down your face
- 4) the final touch goes under your eyes just like wiping away tears

Havening on a regular basis is very calming because it directly soothes the amygdala. The best way to try Havening is to give it a go as it will just seem weird reading about it.

Using Self Havening to help get to sleep

Switch Off At Night With Havening

Adapted from Dr Kate Truitt, CPR for the Amygdala

Notice unsettled emotions or thoughts.

Havening and breathing exercise at the same time.

Havening and 5 x I am grateful for. Breathe it on, hold the feeling.

5 x Ask yourself "What if I am sleepy?"

Days can get busy, we get on autopilot, we charge ahead focused on what has to be done. Anything unresolved that is concerning the amygdala during the day is guaranteed to pop up and disrupt our sleep at night. Why? Because the amygdala doesn't sleep. Getting to sleep is next to impossible when your brain thinks there's a tiger in the room.

Dr Kate Truitt, a neuro-scientist, clinical psychologist and an internationally recognised world leader in the amygdala and trauma has designed a specific technique called "creating personal resilience for the amygdala". The neurons that have been pinged in your amygdala get deactivated, the past gets healed and the resilience zone expands.

Step One. Notice unsettled emotions.

To start with, notice any unsettled emotions or stuck thoughts going on in your body and mind from the day's events. I often do this in the shower just before going to bed.

Step Two: Havening and breathing

Combining Havening with slowing down our breathing is powerful at a neurological and physiological level. Breathing calms the body and Havening calms the brain. When we are stressed, we hold their breath. The increase in carbon dioxide sets off the amygdala's threat detection alarm bells into fight/flight/freeze mode.

- Breathing in lots of oxygen is soothing for the amygdala.
- As well as letting go and releasing worries, taking a long slow breath out activates the parasympathetic nervous system. This is when the body moves into rest, digest and restore.

A few options for breathing while Havening:

- **Breathe in to the count of 3 and out to the count of 5.**
- **Box breathing.** Breathe in for 4, hold for 4, breathe out for 4, hold for 4.
- **Waves:** Imagine a wave come in (say calm), imagine wave going out (say release). Make up your own variations.
- **Colour:** Imagine a colour or calm. Breathe in the calm colour. Long breath out a colour of release.
- **Feldman Sigh Breath:** My all-time favourite at night time. Breathe in with nose(sniff), breathe in again (sniff). Long breath out mouth (like blowing bubbles).

Step Three: Havening and gratitude

While Havening find 3 – 5 things you are grateful for. Take the time with each one, breath it in, enrich it and gently allow the positive feelings to expand inside you. This simple technique of utilising neuroplasticity to build positive experiences comes from Dr Rick Hanson, a neuropsychologist, author of *Hardwiring Happiness* and world leader in resilience.

Step Four: “What if” questions, planting new seeds

Keep doing the Havening, breathing and gratitude exercises until you are feeling calmer. Then choose a state you would like more of such as calm, confident, content, flexible, sleepy etc. Our brain loves having something to chew on so we might as well steer it in the right direction with some curiosity driven neurochemicals. You're planting new seeds of hope by creating permissiveness in your system for neuroplastic change to happen.

Keep Havening and ask yourself 5x “what if I am....”. Breathe in the preferred state, give it a colour, let it soak in.



5 other brain health hacks to help get to sleep

1) Do a brain dump before bed.

Put a note pad beside bed and write most important things to complete the next day. This helps minimise walking up in the night with a fright, calm your brain and create certainty.

Each night cross off what achieved in the day. This gives your brain a burst of dopamine, helping you feel good about yourself.

2) Acknowledge, accept and be compassionate with difficult emotions

We all know fighting worries and ruminating thoughts won't speed up the process to getting to sleep. Dr Rick Hanson in his book *Hardwiring Happiness* suggests that naming the emotions, accepting they are present and filling yourself with compassion can help settle down the threat detection centres of the brain.

While Havening say, "I acknowledge I'm feeling anxious, I accept they are present and I fill myself with love and compassion".

While havening say, "I can choose to feel safe, peaceful and calm".

3) Choose your timing to settle disagreements

Sometimes disagreements are resolved more effectively after a good night's sleep rather than when your amygdala is all fired up. Giving yourself the space to rest, digest and repair can help change perspectives and allow us to see the situation different in the morning.

Hot tip: Tell the other person that you are willing to talk things through tomorrow. This will help sooth their amygdala, minimise worry and rumination for them overnight and will improve resolution possibilities for both of you.

4) Work with your brain rather than against it

If sleep is an ongoing challenge for you and you want to get serious about improving the health of your brain here are a few suggestions to get started with:

- Get to know yourself a bit better by completing a brain health assessment designed by Dr Daniel Amen www.brainhealthassessment.com
- You can't change what you do not measure so know your important numbers such as waist to height ratio, blood pressure, complete blood count, general metabolic panel, cholesterol and triglycerides, vitamin D, thyroid, C-reactive protein, homocysteine, ferritin, testosterone. For woman oestrogen and progesterone.
- It's all about trial and error as to what nutraceuticals will help you to sleep. After 20 years of research, Dr Daniel Amen suggests:

- **Melatonin.** Can speed up falling to sleep, increase sleeping hours and feelings of alertness the following morning.
- **5-HTP.** Helpful for worriers and people struggling to turn off their thoughts as it boosts serotonin.
- **Magnesium glycinate or citrate.** Can help calm anxiety by help activate GABA receptors in the brain.
- **GABA.** Helps people who are feeling anxious or stressed feel calmed.

5) Make sleep a priority.

Invest some time designing a sleep routine set up for success. Consider a holistic brain health approach such as nutrition, exercise, supplements, calming activities, connecting with others, minimising gadget use, setting your bedroom up for success and regular routines.

References

Ashhad S, Feldman JL (2020) Emergent elements of inspiratory rhythmogenesis: network synchronization and synchrony propagation. *Neuron* 106:482–497.e4. 10.1016/j.neuron.2020.02.005 [[PubMed](#)] [[CrossRef](#)] [[Google Scholar](#)]

Amen, Daniel., (2020). *The end of mental illness. How neuroscience is transforming psychiatry and helping prevent or reverse mood and anxiety disorders, ADHD, addictions, psychosis, personality disorders and more.* Tyndale House Publishers.

<https://drtruit.com/the-havening-techniques-pasadena-los-angeles-california/>

Hanson, R. (2013). *Hardwiring happiness: The new brain science of contentment, calm and confidence.* New York, NY: Harmony Books.

Hanson. R., Shapiro. S., Hutton-Thamm. E., Hagerty. M., Sullivan. K., (2021) *Learning to learn from positive experiences.* The Journal of Positive Psychology.

Harper, M. (2012). *Taming the amygdala: An EEG analysis of exposure therapy for the traumatized.* *Traumatology*, (18)2 61-74.

Ruden R. A. (2019). *Harnessing Electroceuticals to Treat Disorders Arising From Traumatic Stress: Theoretical Considerations Using A Psychosensory Model.* *Explore* (New York, N.Y.), 15(3), 222–229. <https://doi.org/10.1016/j.explore.2018.05.005>

Ruden, R. A. (2011). *When the past is always present: Emotional traumatization, causes and cures.* New York: Routledge Taylor & Francis Group.

Sumich, A., Heym, N., Sarker, M., Burgess, T., French, J., Hatch, I., Hunter, K., (2022). *The power of touch: the effects of Havening touch on subjective distress, mood, brain function and psychological health.* *Psychology and Neuroscience.*

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Individual support

Karyn Chalk has masterfully combined her theoretical knowledge, life experience and practical coaching toolbox to create outstanding results in helping her clients recover from burnout, fatigue and anxiety. She has a natural ability to reach the heart of a wide range of problems in a relaxed, pragmatic and friendly way.

- Brain care support using havening and coaching techniques to calm your brain and build resilience.
- Brain health coaching and individualised plans to get your brain in the best shape possible.
- Supplements and nutraceuticals based on international research at the Amen Clinics.

Training for individuals and organisations

Brain Fit for Work and Life. Designed by Dr Daniel Amen this course is designed to help you get happy, healthy and productive in your personal and professional life. Learn what the brain needs for optimal health and put together an achievable and realistic plan of action to make this happen.

- Understanding the fundamentals of brain health – what helps and what hurts your brain.
- The 4 regions of your brain, the problems that occur in each region and what you can do to help these areas.
- Balancing work and home life to improve brain health.
- Scientifically researched ways to use your brain to be motivated and boost creativity at home and in the workplace.
- Planting brain-healthy habits at work to boost healthy habits and succeed in behaviour change.
- Evaluate Autonomic Negative Thoughts (ANTs) and implement strategies to support success.
- Learn how to fuel high-performance through nutrition, supplements and gut health in order to optimise brain health.
- Protect your future by applying brain health to your life.

Qualifications

- Certified Havening Techniques Practitioner
- Certified Brain Health Trainer, Amen Clinics
- Master Neuro Linguistic Programming Practitioner
- Transforming Communication Instructor
- Dip Teaching
- BCAPSci, Human Nutrition
- Grad Dip Business Studies, Dispute Resolution



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