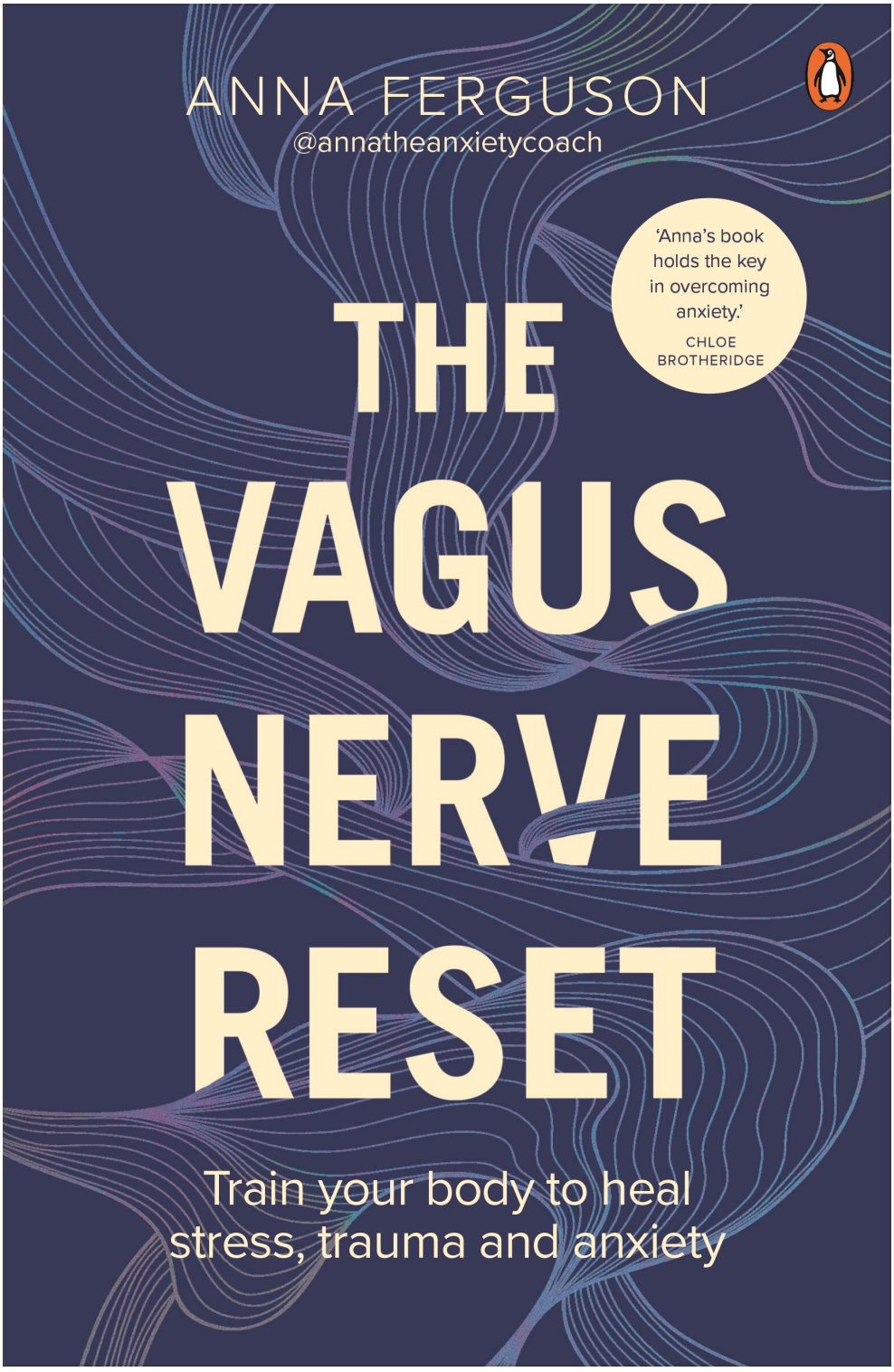
The Vagus Nerve Reset (2023) - Anna Ferguson



About Anna Ferguson
(@annatheanxietycoach)—a leading Australian mental health expert and anxiety therapist. She has built an engaged community of 330k followers on Instagram, sharing practical, holistic mind-body tools and breaking down barriers and stigma around mental health. Through her work as a counsellor, speaker and author, she provides valuable resources for those who struggle with anxiety, and is striving to change the conversation around mental health.

[What follows are quotes from the book above. These quotes stood out to psychotherapist Emil Barna in his reading of the book. They are not meant to be exhaustive nor representative of the entire book. All quotes are to be read in this context and must not replace medical and/or other professional advice. Note: Any typographical errors occured through the transcription process and do not reflect what may be found in the book.]

Preface

- As time passed, my sense of helplessness and frustration grew. I viewed myself as strong, so why did I keep feeling pain or thinking dark thoughts? Things I considered that weak people did.
- Even simple things like coughing or sneezing would raise my heart rate to over 200 beats per minute (a healthy heart rate for a 10-year-old is 60-100).
- A recent survey found that a staggering 70 per cent of adults in the United States have experienced at least one traumatic event during their lifetimes.

Introduction

- Every single cell in your body is vibrating and changing as you read this. Tiny cells in your blood live for between 3 and 120 days, while the cells lining your gut live for only about a week. Every single day 330 billion cells in your body are replaced, which is approximately 1 per cent of all of the cells that you're made of. You cannot see this constant renewal, nor can you feel it, but without the ever-present turnover of cells in your body you would no longer be alive. The 'you ‘that you yearn to return to is no longer physiologically available. So how can you ever reclaim yourself? The process of reclamation is also a journey of rediscovery. It's the action of releasing and letting go of the idea of who you think you are or used to be, in order to continue to meet yourself again and again.

Part 1: Your Nervous System

Chapter 1 - Polyvagal Theory: The New Nervous System

- **The somatic nervous system**: your *voluntary* division. This is all the nerves that connect the brain and spinal cord to the muscles and sensory receptors in your skin. The somatic nervous system controls all the processes that are managed by you thinking about them, such as walking.
- **The autonomic nervous system**: your *involuntary* division. This is

where all of the baseline and vital processes of the human body take place; think heartbeat, blood pressure and breathing. All of these processes happen without you having to think about them. They are automatic processes that are regulated - i.e. managed - by the autonomic nervous system.

- **The ventral (front) vagal pathway** is associated with social engagement, connection and safety.
- **The dorsal (back) vagal pathway** is associated with states of shutdown and immobilisation, withdrawal, disassociation and disconnection.

- Neuroception is a neural process in which we subconsciously read cues of danger or safety from our environment.
- your body is sending four times as much information to your brain as your brain is sending to your body. To put that another way, of all the traffic on that superhighway, 80 per cent of it - the information coming from your body to your brain - is heading one way, and only 20 per cent of the information is coming from your brain to your body!

[How your ANS interprets safety or danger]

1. **Mobilisation** - this is the activation of the sympathetic, fight-or-flight response.
2. **Immobilisation** - this is the activation of the dorsal vagal system where you find the freeze, collapse or shutdown response.
3. **Social engagement** - this is your ventral vagal system or parasympathetic nervous system that is activated when you feel relaxed and safe.

- If we take a look at how animals react to danger, we can see that they tend to 'shake off' the 'freeze' response caused by an external threat. This shaking is the animal's means of releasing any pent-up energy brought on by danger. If in any way or form the animal is not allowed to release this stored energy, they are at risk of dying.

[Various roles of the vagus nerve]

- It regulates a stable heart rate and prevents unhealthily irregular heart rhythms. It accomplishes this by secreting acetylcholine, a substance that slows down electrical impulses in the heart and in turn decreases its beating rate. This reduces your energy expenditure and also helps you feel calm and relaxed.
- It oversees digestion. Your vagus nerve regulates the release of digestive enzymes as well as the movement of food through your

digestive tract. It also acts as the communication link between your gut and your brain, and it signals when you're feeling full after eating a meal. The health of your gut and digestive system can have a significant impact on your emotional and mental health.
When your gut is content and healthy, this keeps your vagus nerve happy, as well as your brain.

- It assists with the release of insulin from the pancreas and the production of bile from the liver. All of this allows you to gain important nutrients from your food, which gives you energy, strength and vitality, as well as expelling waste and any unwanted nasties from your body.
- It regulates the muscles in your neck and throat to allow you to swallow and talk, which enables you to communicate effectively with others.
- It controls inflammation so that you are able to maintain a healthy immune system.
- It carries sensory information from the skin of the ear to the brain, allowing you to hear and process sounds.
- It plays a major role in keeping your immune system in good order by regulating the production of antibodies.
- It controls the muscles in your eyes and face to allow you to blink, smile or frown, enabling you to connect with others, make eye contact and change your facial expression.
- It allows you to tune into other people's voices and notice any alterations in their tones, too.

- The vagus nerve is also the body's main channel for relaying information about lung and airway conditions to the brain. It controls breathing and other respiratory functions, and provides information from the lungs to your brain about how well you are breathing - so that signals can be sent back to control the rate of respiration accordingly. As you'll come to see in the Reset Programme, your breath is one of the only automatic functions you have access to that can massively influence and shift your ANS, and is the most effective and immediate way of connecting to your vagus nerve
- Your vagal tone is a reflection of the state of your nervous system, which includes everything from how well your heart rate and breathing are regulated to how much you feel calm or stressed out in any given moment.
- The time between one heartbeat and the next changes a lot from beat to beat and moment to moment. We actually want a lot of variation in the timing of our heartbeats, because that's what gives us our ability to respond flexibly to the ever-changing circumstances of life.
- Usually individuals with high HRV are more resilient to stressful experiences and also report a greater sense of well-being.
- In general, lower HRV can be a sign of a less resilient nervous system,

with a lower capacity to handle changing situations and can be an indicator of future health issues. Less variability between heartbeats actually signals that there is an imbalance in your ANS, or sympathetic dominance.
- Individuals who have higher resting heart rates tend to have lower HRV, due to their heart beating faster, meaning there is less time in between each beat of the heart and therefore less of an opportunity for variability.

- Low vagal tone is often a sign that your nervous system isn't functioning at its best and can be reflected in many ways such as:

- Crohn's disease
- irritable bowel syndrome/disease
- Parkinson's disease
- epilepsy
- type 2 diabetes
- high blood pressure
- cardiovascular disease
- anxiety
- depression
- post-traumatic stress disorder

Chapter 2 - How The Nervous System Works

- Anxiety is often termed as a mental health issue, but in reality, it is our inbuilt alarm system. The experience of fear or worry isn't confined to your thoughts - you literally physically feel it - the trembling in your hands, the intense racing of your heart, headaches that come from nowhere and that urgent need to go to the bathroom. This is your body responding to feeling threatened. It's an 'all systems go experience.
- 'TRAUMA IS ANYTHING THAT IS TOO MUCH, TOO FAST, TOO SOON! Peter Levine

Chapter 3 - Regulating The Nervous System

- It is estimated that over 60 per cent of those who experience anxiety also have breathing-pattern disorders. This means that they are breathing too fast, too shallowly, too much and often into their chest rather than their diaphragm, which keeps their sympathetic nervous system switched on all the time. If you've ever had the opportunity to watch a baby breathing, you may have noticed that their belly expands and contracts when they breathe in and out. Babies naturally breathe using their diaphragms, which causes their bellies - and often the rest of their bodies - to rise and fall along with each inhalation and

exhalation.

- chronic incorrect and inefficient breathing patterns that become normalised throughout our lifetime cause the nerve that controls the diaphragm (the phrenic nerve) to 'forget" how to breathe correctly. In other words, instead of breathing into the diaphragm (belly breathing), we breathe high in the chest (chest breathing).
- When you inhale, the diaphragm contracts and flattens. This makes more room for your lungs to fill with air. When you exhale, the diaphragm relaxes and returns to its domelike shape.
- When the lungs don't expand fully, they don't activate the vagus nerve, which leads to less efficient vagus nerve signalling, thus lowering the vagal tone in a person. Incorrect breathing patterns cause a decrease in lung capacity, inflammation and oxidative stress
- A dysfunctional breathing pattern can also cause neck and shoulder pain, headaches, migraines and much more.
- You may have heard your gut referred to as your 'second brain' and that's because this complex system consists of over 100 million neurons lining your gut walls. Information is sent predominantly from the gut to the brain through the vagus nerve.
- About 95 per cent of the hormone serotonin, which regulates emotions and moods, is made in the gut.
- In your gut microbiome, there are trillions of bacteria, microbes, fungi and viruses that help you digest your food, protect you against harmful pathogens and even regulate your immune system.
- The 12-week-long study examined how a modified Mediterranean diet - which consists of 40 per cent carbohydrate, 30 per cent protein and the remaining 30 per cent fat - affects depression symptoms. The study showed that people in the dietary intervention group experienced a greater reduction in their symptoms of depression over three months compared to those who were simply given social support. Among those receiving dietary support, a third of the participants met criteria for remission of major depression at the end of the trial; among those receiving social support only, just 8 per cent went into remission.

Chapter 4 - Tuning Into Your Body

- Words don't serve your internal experience justice when you feel like you're no longer in control of your experience.
- Individuals who have experienced trauma, anxiety and ongoing stress may find it challenging to connect with their emotions on a truly restorative level. Instead of feeling the actual experience, they may try to understand the emotional experience by intellectualising it - by talking about it or writing down what happened, which has long been the prevailing. approach in society. Intellectualising those emotions

acts as a protective defence mechanism as words can often block access to emotions, which are felt in the limbic system of the brain. When we cannot access our emotions we feel disconnected
- It's common to experience chronic muscle tension or numbness, which can lead to spasms, fibromyalgia, migraines and other types of pain. Emerging evidence suggests that trauma doesn't only affect your brain - it can influence your cells too. Recent studies reveal that stem cells can actually store memories of past events, and these issues in your tissues' may be harming both physical and emotional health. Trauma that is not processed can lead to health problems such as heart attack, stroke, obesity and diabetes.

Part 2: The Vagus Nerve Reset [Program]

Chapter 5 - About The Vagus Nerve Reset Program

- the belief that remembering is the way to heal' has dominated the therapeutic landscape since talk therapy was created. With it comes the encouragement to retell and recall traumatic memories, experiences and moments in order to overcome or heal from them. But this push to verbalise and relive often terrifying experiences does not consistently support us in moving forward in our lives.
- While your traumatising experiences may be logically regarded as over and in the past, your body and survival brain continue to dominate the present - forever prepared and playing out the event as if it were happening right here and now. Your survival brain and body don't want to let go of that control as it has been the thing that has helped you survive until this point right now.

Chapter 6 - Phase One: Securing Your Base

- Phase One is much like building your dream house. You're so excited - it's going to be the home you've always wanted! But then, to your dismay, you find out that the company that is going to put down your concrete foundation isn't able to schedule time with you for another three months. Instead of waiting, you decide to start putting up the walls and roof - a big job! Whenever you're looking at your brand new house from outside, you can't believe how amazing it looks. However, when you step through the doors, you immediately feel on edge. You can hear the house creak and groan with every whisper of wind.
- Patience is key when creating a solid foundation. It is not something that you can opt out of if you desire long-term, sustainable and meaningful change in your life.
- For most people - and you may recognise yourself in this - there is an innate desire to self-actualise - to be all that we can be, to pursue our

passions and creative outlets. But what tends to happen is that, in this admirable pursuit, we forgo establishing the foundations that actually allow this to occur.

[Containment exercises]

Sides of head

- Place your hands, palms down, on either side of your head. Think about how you are creating edges for the container that holds your thoughts - a sort of mental cubbyhole. Feel the sensation between these walls and notice them as they pass between your two hands.

Forehead and back of head

- Place one hand on your forehead and the other at the base of your skull. Feel what's in between - where you hold all those thoughts that run through your mind.

Forehead and heart

- Place one hand on your forehead and the other over your heart. Focus closely; be aware of any sensations between these two points.

Heart and stomach

- Place one hand on your heart and the other on your stomach - either over, above or below your belly button; move your hand to an area that feels most comforting to you. Notice any and all sensations that move between these two areas of your body.

Middle of chest and base of skull

- Find the point where your ribcage branches out in both directions (left and right) of your body. This space is above your belly button and just below the centre of your rib cage. Place your other hand in the dimple at the base of your skull, slightly on your neck. Feel the sensation between these walls and notice them as they pass between your two hands.

- Through the accumulation of [stressful] experiences, our ideas and feelings of safety can become fractured. What or who once felt safe no longer does, so we shrink our idea of safety until it gets so small that even our own sensations, thoughts and feelings can feel unsafe and triggering.

Daily practices

- Daily Mood Record (night)
- Containment exercise (choose one - practise daily)
- Body exercises (choose bee breathing or arm swings - practise daily)

- Regulating resources (choose one)

    1. proprioceptive
    2. cold exposure
    3. singing
    4. natural light
    5. relaxing music
    6. hot shower or bath

One-off practices (but revisited intermittently)

- Nourishing your basic needs journal exercise (create action items)
- Mapping your nervous system (write down list of glimmers and keep handy)

Practices for when needed/desired

- Worry Record
- Recognising and sitting with emotions
- Hyperarousal regulating resources (choose one)

    1. proprioceptive
    2. cold exposure
    3. singing

- Hypoarousal (choose one)

    1. natural light
    2. relaxing music
    3. hot shower or bath

Chapter 7 - Phase Two: Reclaiming Your Body

- Body awareness primarily uses two systems: the proprioceptive system, which includes the muscles and tendons, and allows you to know where your limbs are as they move; and the vestibular system in your inner ear, which helps you maintain balance.
- The vestibular system, which is responsible for processing sensory information from the inner ear and transmitting that data to our brains, develops rapidly when we are young. This may be why rocking seems so fundamental during childhood - it's such an effective way of stimulating this critical part of our bodies!
- When we are in danger, threatened or fearful, our bodies release. stress hormones such as cortisol and adrenaline. These stress hormones flood our bodies to prepare us to overcome the danger we

face. [...] one of the most common experiences when we enter into this sympathetic state is to shake and tremble. (This is known as neurogenic tremors.)

How to practise shaking

1. Sit against a wall as though you were sitting on a chair, with your back straight and feet spread comfortably apart.
2. Hold this position for as long as possible, until you reach the edge of your comfort zone. When you start to feel uncomfortable, move slightly up or down the wall.
3. Continue holding this position until it becomes too uncomfortable once more. Move your body up the wall slightly.
4. The aim of this exercise is to allow your legs to tremble/ tremor and shake without pain.
5. After about 3-5 minutes, rise from the wall into a standing position.
6. Bend your knees slightly and allow yourself to lean forward. It is normal for the body to tremble in this position; you may want to place your hands on the ground in order not to lose balance.
7. Allow yourself to hang, continuing to shake in this position until the shaking naturally comes to a stop, or hold for a minute before coming slowly back up to a standing position.

Daily practices

- Daily Mood Record (night)
- Containment exercise (choose one)
- Body exercises (bee breathing or arm swings - daily)
- Regulating resources (one)

    1. proprioceptive
    2. cold exposure
    3. singing
    4. natural light
    5. relaxing music
    6. hot shower or bath

- **Gentle movement (choose one - practise every second or third day)**

    1. swaying
    2. rocking
    3. swinging
    4. restorative yoga

- **Balance exercise (choose one - practise every second or third day)**

    1. glute bridges
    2. crab walk
    3. balancing on one foot

One-off practice (but revisited intermittently)

- Nourishing your basic needs journal exercise (create action items)
- Mapping your nervous system (write down list of glimmers and keep handy)

Practices for when needed/desired

- **Somatic release - shaking**
- **Progressive body scan**
- Worry Record
- Recognising and sitting with emotions
- Hyperarousal regulating resources (choose one)

    1. proprioceptive
    2. cold exposure
    3. singing

- Hypoarousal (choose one)

    1. natural light
    2. relaxing music
    3. hot shower or bath

Chapter 8 - Phase Three: Using Your Superpower

- Somatic movement, or movement-based approaches to awareness of the body and its environment can be thought of as involving three aspects:

    1. **Interoception**: the perception of internal sensations.
    2. **Exteroception**: the perception of the external environment.
    3. **Proprioception**: perceiving and sensing your movement within a physical space.

- Somatic stretches are based on pandiculation, a physiological process in which muscles contract and relax regularly. An example of this is the

way we tend to stretch when waking up from sleep. The pandicular response is a natural process that our nervous system uses to release muscle tension. Somatic stretching is designed to imitate this same release of muscle tension. Somatic stretching emphasises learning to feel the tension held in our muscles and fascia rather than ignoring it. While this practice appears under the heading of healing movement, it generally requires more stillness than physical action.

- The latest research into cold exposure and cold thermogenesis shows that regular routine exposure to cold water lowers sympathetic activation and increases the activity of the parasympathetic nervous system. Not only does cold exposure strengthen your vagal tone, but it also provides many whole-body benefits such as:

    - improved heart and lung function
    - enhanced immune system
    - modulation of inflammation
    - regulation of the stress response

- Some studies have found that couples in romantic relationships actually experience something called cardiac synchrony - where heart rate and HRV between two people match one another. It was also found that during moments where one member of the couple became dysregulated and their HRV dropped, the other member of the couple increased their HRV in order to help regulate their partner. This all occurs on a subconscious level, but beautifully illustrates the physiological dance that occurs between humans - co-regulation. Essentially, co-regulation is a process that occurs through trusted connections, in which one individual may 'borrow' from a regulated nervous system in order to self-regulate and bring themselves back to a ventral vagal (parasympathetic) state.

- Humans co-regulate through a number of different ways, such as:

    - The eyes - eye 'crinkles' around the edge of the eyes when someone is genuinely smiling, a soft or hard gaze.
    - Head positioning - head tilts convey safety and empathy.
    - Vocal prosody - the pace of speech as well as the intonation (soft, hard, musical, gentle, aggressive).
    - Forward-leaning, open body posture.
    - Gentle rhythmic sounds.

- **Ventral vagal playlist** could be filled with songs that have that fun energy in them and that you love to sing along to. You may want to sprinkle in a few slower and calming tunes to the playlist too to balance it out.

- **Fight-or-flight playlist** could be those fast-paced, high-tempo songs that make you want to move your body and get any excess energy that is circulating in your nervous system up and out.
- **Dorsal vagal playlist** could be slow, rhythmic and repetitive songs that have a looping effect - over the course of the playlist the tempo and pace of the songs may pick up, increasing the feeling of energy within your body.

Daily practices

- **Heart rate tracker (daily in the morning)**
- **Mindful movement (choose one that you enjoy and practise two to three times per week)**
    - endurance
    - strength
    - balance
- **Somatic stretching (once per week)**
- **Lifestyle practices (choose one to focus on for one to three months)**
    - sleep (resonant breath training)
    - natural light in the morning
    - cold exposure
- **Reconnective practices (choose one to focus on and utilise two to three times per week)**
    - vocal prosody - breath and vocal-toning practice
    - music - playlists for nervous system states
- Daily Mood Record (night)
    - Regulating resources (one)
    - proprioceptive
    - cold exposure
    - singing
    - natural light
    - relaxing music
    - hot shower or bath

Optional daily practices

- Containment exercise

- Body exercises
  Gentle movement (choose one - practise every second or third day)

  - swaying
  - rocking
  - swinging
  - restorative yoga

- Balance exercise (choose one - practise every second or third day)

  - glute bridges
  - crab walk
  - balancing on one foot

One-off practice (but revisited intermittently)

- Nourishing your basic needs journal exercise (create action items)
- Mapping your nervous system (write down list of glimmers and keep handy)

Practices for when needed/desired

- Somatic release - shaking
- Progressive body scan
- Worry Record
- Recognising and sitting with emotions
- Hyperarousal regulating resources (choose one)

  - proprioceptive
  - cold exposure
  - singing

- Hypoarousal (choose one)

  - natural light
  - relaxing music
  - hot shower or bath