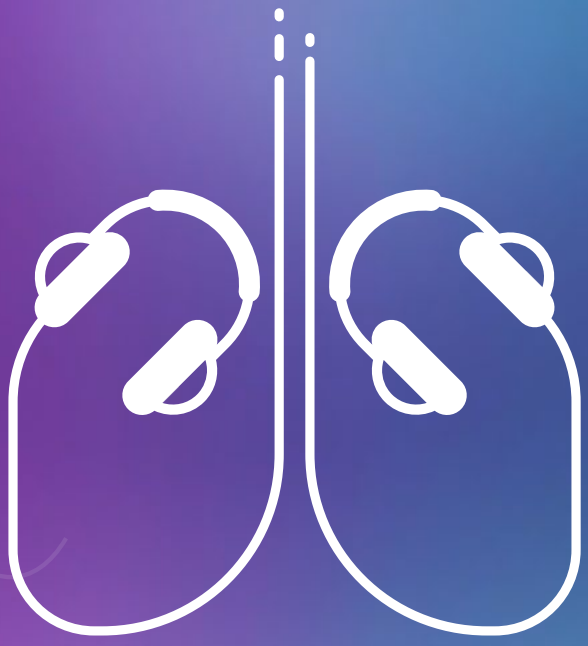

Rhythmic Respiration

A GUIDEBOOK FOR BEGINNERS

A rapid roadmap to the *benefits, techniques, history, and science* behind "harmonic breathwork"

ARIA BREATH
THE MUSICAL MEDITATION

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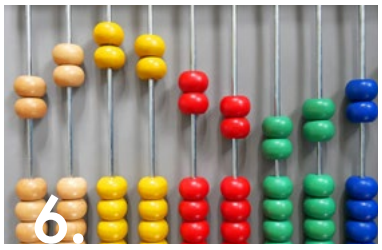


Plus, hear why the legendary, bestselling authors of these two ground-breaking breathwork books recommend Aria Breath! – Take the "app tour" at the very end of this booklet!

Why read on?

This short(ish) document is designed to help you understand the basic science behind a simple technique that I think is *so* fantastic... I have dedicated the last few years to researching and understanding it.

I wrote this booklet so that you can get started, the right way, today (without spending three years down a rabbit hole like I did!)

It's a bit longer than I intended for it to be, because (as you may know from attending my events), I get excited and talk too much. But if you stick around until the end, you'll find there's a special surprise for every dedicated breathwork nerd who reads the whole thing.

"I'm loving Aria Breath. My partner and I have been breathing to it twice a day. It's made a massive difference to his anxiety levels which he can suffer from daily."

– Sara,
Aria Breath Member

A note before we start...

This concise guide is based on the extensive research for my upcoming book *"Breathe-In Harmony"*. It condenses three years of journalistic research, and over 100 hours of interviews with more than 50 leading breathwork researchers, athletes, and luminaries into a bite-sized document.

Accordingly, for the purpose of creating real and immediate change, I have opted to simplify explanations for a wider audience and select only the most significant knowledge about this technique.

(And, as you may have already noticed, I've chosen to write as though I'm talking to you in the pub, cheers!).

For *true* mastery, *full* understanding, and *meaningful* habit creation, (plus, more importantly, lots of fun!), I recommend taking my deep-dive, online, experiential, 6-week *"Breathe-In Harmony"* course, which you can book online at AriaBreath.com and enjoy from the comfort of your own home (luckily, the course is included for free when you purchase a pre-launch membership for *Aria Breath*).

And with that shameless advertising out of the way...
Let's get on with it!

Tom Granger

Aria Breath Founder

> "I had tears in my eyes as I scrolled through the music- I really think it has touched my soul! Just what I've been looking for. Amazing and a huge thank you for starting this!"
>
> – Jo, Aria Breath Member

What's it all about?

(... and what is *Aria Breath*?)

Here's the basic idea...

Put (really) simply, slow breathing is *good for you.*

Really good for you.
Especially if you slow your breathing down to around 5 or 6 breaths per minute.

And (once you get the hang of it) slow breathing *feels* fantastic.

Really fantastic!

Essentially giving you calm, tranquil, and focused mental states *on tap* in just a few minutes (and who doesn't need that right now?)

Most of us naturally breathe at a whopping 12 to 20 breaths per minute – so slowing the breath down to 5 or 6 breaths per minute is quite a change... and therein lies the simplicity.

It's such a powerful "health hack" (as you'll find out in a moment)... but pacing your breath at the *right* rate can be boring, difficult to concentrate on for long periods, and hard to be certain you're keeping to the right speed.

That is... until you add music!

However, despite the huge and growing evidence-base for this technique and growing public understanding of it's benefits, there really hasn't been much music out there to help you practice. This was a problem for me, because I've been pretty much addicted to this breathing technique for the last four years...

So, I enlisted the help of some talented musician friends (starting with my brother) and began creating a huge menu of musical meditations that help you to pace your breathing at the *right* rate. Many more musicians from around the world joined the project, each creating more options in their own style... so now there is lots of choice, and you can enjoy the process of finding your favorites!

Aria Breath is now the world's largest library of original breath-pacing music. It allows you to take the best evidence-based practices from the world of rhythmic and resonant breathing, and set them to beautiful, original, calming music.

Getting down to it, here's one of the easiest (and most enjoyable) ways to improve your health and wellbeing... join the *Aria Breath* "club" by becoming a member, breathe along with hundreds of specially created musical meditations, and achieve *immeasurable* peace (with *measurable* health benefits!).

The more people join in, the more music we can add to the library, and the healthier (and happier) we all get!

Let's start with some science!

"But wait, I... don't like / straight up hate / am intimidated by / don't care about the science".

No problem.

In fact, you don't need to understand the mechanics of this to get the benefits from it any more than you need to understand how your local power plant works to be able to switch on a light bulb in your house.

(Honestly, I'm not entirely convinced that even the leading scientists I have interviewed *fully* understand what's going on!).

One important thing to note is that the classical meditators, monks, and yogis, who have been found to use this technique, didn't understand the science behind it at all.

Their understanding was embodied, poetic, and spiritual... and they're the best in the world at it!

But some people, (especially the technically minded, the naturally skeptical, and the hard to convince... like me), really appreciate the science. After all, it can be very empowering and inspiring to know how this works... and what it can do for you!

So, if you're not into the science, don't worry here's all you need to understand....

The easy version...

You are made of rhythms.

Your nervous system happily taps out a collection of seemingly chaotic but subtly connected biorhythms that keep you alive... your breath, pulse, peristalsis, blood pressure, circadian rhythms and so on.

To avoid using scientific terms (as promised), it's "pretty damn cool"; these signals are all listening and responding to each other and keeping the song of your life going (relatively) smoothly. You don't have to think about any of them (or do them on purpose). They just happen. It gets weirder the more you think about it, right?

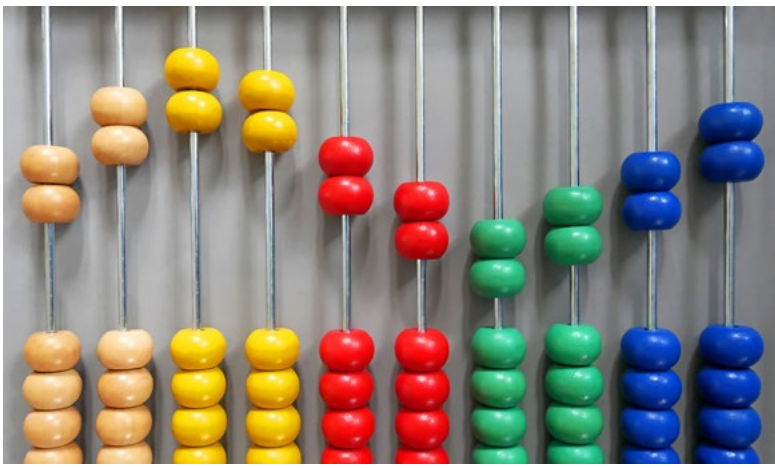
In fact, for the most part, you have no conscious control over these rhythms *at all* (just try to stop your heartbeat for even a few seconds to see what I mean!) But there is one rhythm that you *can* control. And it is a keystone – it affects all the others. We're talking, of course, about *the breath*. (I'm aware that the name *Aria Breath* ruins this "big reveal"!)

It's not just your breathing *speed* that you can control; you can change *a lot* of things about your breath if you want to.

Just think about how you might breathe to warm up your hands on a cold winter's morning whilst waiting for the bus. You breathe out deliberately through your mouth, with minimum resistance, extending your exhale to maximize the toasty warmth on your icy palms with an audible "haaaaahh" sound... That's at least 5 variables you're effortlessly changing. There are 12 at my lowest count, and as many as 20 or more "things" that you can willingly alter about your breath. Understanding just how much control you have is the basic tenet of understanding the power of breathwork – Just as you can alter the variables to create a warming breath for your hands, you can alter them slightly to create a cooling breath to blow on your morning coffee. These *external* changes might seem obvious... but it's understanding how changing the variables subtly affects the *internal* world of your physiology that is important – therein lies the real power of breathwork!

The variables that are the most *powerful* for you to change when it comes to your health are... nose vs mouth, shallow vs deep, and slow vs fast. But the one that ties all of those together, (although we almost never think about it) is *rhythm* – At the right breathing pace, your breath becomes an orchestral conductor; bringing the rhythms of your pulse, blood pressure and brain into harmony with each other. (Yes, seriously!)

[Note: I hope you like music analogies and idioms because I'm going to be unapologetically peppering them throughout this document... in the hope that they strike a chord.]



All those chaotic rhythms that I mentioned earlier? At the right breathing rate, they start to slow down in speed and synchronize in time; "cohering" with one another. That's why some of the people who study this phenomenon call it "coherence". And one of the most famous of the (many) names the technique goes by is "Coherent Breathing".

The bottom line is... this doesn't *just* feel good, it *is* good for you...

Change the *one thing* that changes *everything*

> "I absolutely love Aria Breath. I've done two sessions today! I didn't realise you could have such incredible effects at a slower pace. It's really special. Definitely going to bring more of this in with my clients. Thank you!"
>
> – Chris, Aria Breath Member

It works in a number of ways but it has two modes of action in particular that create this "goodness"...

1/ It changes your heart rate...

Breathing at this rate causes your heart to speed up... and then slow down again, far more than usual, with every breath. Which sounds like it might be a bad thing... but, actually, it gently trains the heart (and with it the whole nervous system) to get better at "applying the breaks" (in other words, relaxing). So, you literally *feel* relaxed... but your body also *gets better at relaxing every time you do it!*

2/ It changes your air volume...

When you slow down your breathing, you take less air in and let less air out.

This keeps more CO2 in your blood, for longer, and that (counter-intuitively) is a *good* thing for your circulatory system. It increases your vasodilation (altering blood pressure for the better) and oxygen delivery (which means better energy, cognition, and tissue health).

Not only that, but your body gets used to higher levels of CO2, which it had previously perceived as a stressor...

... so once again, every time you do it... you don't just get better at relaxing, *you get better at feeling relaxed!*

I told you it was cool!

There you go, it's that simple. (Can you believe it took me three years to learn this?)

OK, so if you're not into the science or the other benefits, and you want to skip the "technical" bits, you can jump straight ahead to the tips for practice section and get started (I won't get offended and I won't tell anyone).

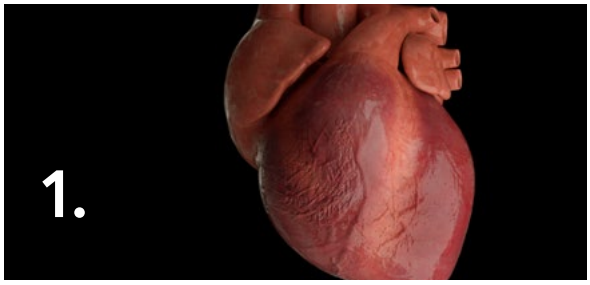
But if you're ready to nerd out, let's do it...

The Science

To understand why this technique is so powerful,
there are four concepts that you need to be aware of.

Fair warning... the names of the concepts all sound scarily scientific, but I assure you, they are actually very easy to grasp, and you may even find they make intuitive sense to you...

Four key concepts...



Heart Rate Variability
(HRV)

How "flexible" your heart can be (and why that's good!)

Respiratory Sinus Arrythmia
(RSA)

How breath gently "guides" heart rate (and why that's powerful!)

Resonance Frequency
(RF)

How rhythms get stronger when in sync (and how we can harness that!)

Polyvagal Theory
(PVT)

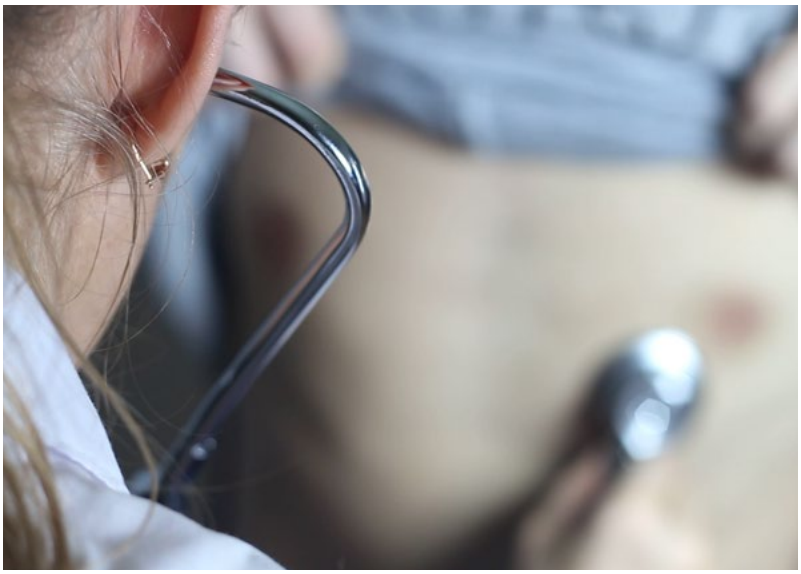
How your nervous system evolved for caring (and why you should care!)

Heart Rate Variability

.1 HRV

"I've been doing at least 30 minutes on the app each day. I have noticed a massive shift. I can only describe it as equilibrium. So calm. It's not like I wasn't breath aware before. But I think it was you Tom that mysteriously said 'something happens' when you do heart coherence breath for 30 minutes and I can attest to that. Massive thank you."

– Valerie, Aria Breath Member



If I told you that I could tell you the exact year you were going to die... ... would you want to find out?

According to one cardiologist I spoke to on my research journey, if a good doctor has enough data on your heart rate variability (HRV), they can predict how much longer you have to live...

... to the year!

Pretty scary right? Don't worry, I'll tell you in a moment how you can quickly improve your HRV and live to a ripe old age. (But it might help if I start by telling you what it actually is first...)

Your pulse is a rhythm (obviously). But not a steady one (less obviously). It doesn't beat like a reliable metronome. In fact, if you listen closely, it is pretty irregular. If your heart was a drummer, it wouldn't be a very good one, it probably would get kicked out of the band.

But your heart wouldn't mind, because the more it's able to quickly change its mind and change its speed, (speed up or slow down), the better it is at its real gig... keeping your circulatory system flowing and in balance (homeostasis).

Your heart needs to respond to tiny changes in blood pressure, oxygenation and movement. If you stand up, it needs to speed up so that you don't pass out. If you're running and you slow down, it needs to slow down so that it doesn't explode out of your chest.

It's pretty good like that. In fact, it's so good that it varies its rate between every single beat!

That's why it's called heart **rate vary**-ability.

This can be an unusual thing to discover because, until recently, many of us have thought of our heartbeat as a steady rhythm. After all, that's what technology tells us it is, and technology wouldn't lie... would it?! Well, you know when you look at your FitBit (or similar) or get your heart rate checked by the doctor, and the reading says you have a resting rate of 60bpm (or the like)? Well, that BPM isn't tapping out every-second-on-the-dot like a thumping techno track – the reading is an *average* speed.

In reality, your heart is changing speed *between every beat* – 58,62,58,61,60, and so on – the technology takes an average speed... and that's the number you see on screen. But this variability data, (the part that machines have traditionally ignored) contains all the juicy details about how healthy you really are.

The more your heart is able to vary its rate – the more *flexible* it is – and the healthier *you* are.

High HRV is an indicator that your nervous system is doing a good job, it means that when your heart feels a stressor... or something disrupts your internal homeostasis, the heart can both sense *and* quickly respond to it by subtly adjusting its speed and restoring and maintaining the ideal blood pressure and flow.

When the circulatory system is constantly being fine-tuned like this, it runs more smoothly and there is less stress throughout the whole system... and, for that matter, all the other systems that rely on the circulatory system (i.e. all the systems in your body!)

So back to that scary cardiologist who can see into the future... well, the good news is... the other interesting thing he told me was... if we breathe at the resonance frequency for a short period, every day, for 6 months... we can *"reverse the age-related decline of the heart by ten years"* – in other words, you can make your heart ten years younger!

Pretty bold claim. But what he meant was that it's possible to restore the HRV levels that you had ten years ago by using simple breathwork. This is a good thing, because up until a few decades ago, scientists didn't even know it could be improved at all!

How can such a strong benefit possibly be? We'll get to that shortly!

But first let's meet HRV's cousin...

Respiratory Sinus Arrythmia

.2 RSA

I warned you the names were scary, but like I said, this is one of those that you may have an intuitive sense of...

Respiratory sinus arrhythmia (RSA) is a fancy name for the natural variation in heart rate that happens with breathing – when you inhale, your heart rate speeds up slightly, and when you exhale, it slows back down. Go ahead and feel your pulse, take a few slow breaths, and see if you can notice this for yourself!

Here's how it works. When you breathe in, your diaphragm contracts and you create a low-pressure environment in your chest cavity, the ensuing vacuum is what draws air into your lungs. When you breathe out, the diaphragm relaxes and you create a higher-pressure environment, which pushes the air out.

But it isn't just the lungs that are affected – between your lungs is where your heart lives! It is enveloped in the lungs as though they are wings wrapped around it. And so, your heart needs to respond to these changes in pressure by speeding up and slowing down to keep your blood pressure steady.

This is where the nervous system enters the mix. The variation in heart rate is a result of the interplay between the two main branches of your Autonomic Nervous System (ANS) – the Sympathetic Nervous System (SNS) and Parasympathetic Nervous System (PNS), which regulate homeostasis.

In basic terms, the sympathetic system is "activating", it "speeds stuff up"... and in its most extreme form, it causes the famous *"fight or flight response".*

Meanwhile, the parasympathetic system is your internal "braking system", it "slows stuff down", and it when it's fully online, it creates the *"rest and digest response".*

During inhalation, the *sympathetic* nervous system is activated, (speeding up the heart rate). During exhalation, the *parasympathetic* nervous system is activated, (slowing down the heart rate). This cycle repeats with every breath, resulting in a fluctuation in heart rate called RSA. I suppose you could say that RSA is a specific form of HRV, it's how HRV behaves in response to breathing to maintain balance.

Think about when your body receives a shock or spots a threat; the first (involuntary) thing you do is "gasp", (which, when you think about it, is your most extreme, natural *inhalation*) – the body is activating the *sympathetic* system with a short, sharp in-breath. Now imagine the danger has passed... you "breathe a sigh of relief", (your most extreme, natural *exhalation*) – the body is activating the *parasympathetic* nervous system with a long, slow *out-breath.* These examples are involuntary... but you can use different breath styles *deliberately* to begin to control the activation of different areas of your nervous system.

RSA is typically more pronounced when we are young and can slowly decrease with age as our HRV declines. It can be influenced by various factors such as stress, physical activity, and even emotional state.

A strong change in heart rate in response to the breath is an indication, not only that we have high HRV, but that we are in a good place emotionally. (Yes, your heart really is as tied to your emotions as valentine's day cards suggest!). RSA has been studied for its role in emotional regulation and it is becoming clear that individuals with higher HRV and RSA (more fluctuations in the speed of their heart with each breath) are better able to regulate their emotions.

So, big changes in heart rate with each breath aren't only a sign that you're in a good mood *right now*... they serve as a physiological marker for your *overall capacity* to regulate your emotions.

Why am I telling you all of this? Well, here's the important bit for what we're talking about... When we slow down our breathing to around 5 or 6 breaths per minute, we begin to see *much stronger correlations* in heart rate and breath rate (RSA). The heart rate speeds up much more with each inhalation and slows down much more with each exhalation. If you imagine a long, smooth radio wave, that's what it starts to look like!

And that's because of a little something called...

> "I love using the Aria app - so many great tracks that make slow, paced breathing feel easy, natural, and enjoyable."
>
> – Colleen, Aria Breath Member

The Science – Concept Three

Resonance Frequency .3RF

Why is breathing at this rate called "Resonance Frequency Breathing"? And why is the speed usually around 5 or 6 breaths per minute?

One doctor that I spoke to told me... *"don't worry about that, just tell people it's the "magic" rate; don't try to explain it, you will confuse people".* But I know you're smarter than that, so here goes...

Cast your mind back to when you were a kid, and you went over to your friend Nancy's house who had a trampoline. Remember how it was way more fun when the two of you jumped slightly off-beat from one another? – When you were both on the trampoline and jumping just-out-of-time with each other, you could send each other much higher than you could ever get on your own... exhilarating wasn't it?!

But it didn't work unless you were both jumping at exactly the right speed, slightly out of phase with each other... if you jumped at the wrong speed, you took the "oomph" out of each other's jumps... and ended up flat on your bum.

OK, congratulations, you now understand resonance!

Well, nearly... Here are the last few missing pieces you need to understand:

A page or two ago, I spoke about HRV, and how it responds to blood pressure fluctuations caused by breathing to create RSA...

... but how does the heart actually know what speed to switch to?

It turns out that you have tiny pressure sensors called *"baroreceptors"* just above your heart. They are constantly monitoring your blood pressure, and, as it changes, they send messages to the brain about what the ideal heart rate should be to keep your blood pressure in a healthy range. This constant monitoring in the baroreceptors and the corresponding change in heart rate and blood pressure is called the *"baroreflex"*.

Here's where it gets weird – there is a slight delay between your baroreceptors judging your blood-pressure and the heart making the necessary changes…

This delay in the baroreflex is kind of like a kid in your heart that is eternally jumping at around 5 or 6 times per minute. When we breathe in phase with the delay, we uncover a hidden feedback loop. In physics, feedback loops like this are described as "resonant". This is why your friend was called Nancy in the trampoline analogy, because I'm talking about resonancy. (Ugh, I tried).

In engineering, resonance is usually avoided at all costs because it is so powerful that it can destabilize dynamic systems and even cause bridges to collapse (remember how they had to rebuild the Millennium Bridge? That was because people crossing it unconsciously began to walk at the same pace… and it caused resonance that made the bridge sway dangerously!) But luckily for us, you aren't a bridge, you're a *human* (more shocking revelations shortly)…

When you breathe in phase with this hidden feedback loop, your heart rate goes up *much higher* than it ordinarily would when breathing; that's because you and Nancy are now jumping together at just the right speed in this analogy that I'm stretching to breaking point.

Now, how can this possibly be a good thing? If anything, it sounds dangerous. Well, because… what goes up, must come down! Recall, before I got dragged into this floundering trampoline analogy, I was talking about the how the parasympathetic nervous system acts to slow down the heart with every out-breath. Remember how I said that the PNS is also responsible, in a general way, for your entire body's ability to apply the brakes and relax?

When we send the heart rate up higher than usual by breathing at RF, the PNS needs to send it back down low much further than usual. And every time we do that, the PNS gets better at doing it, (practice makes perfect) and the PNS gets *stronger overall!*

That means your body gets better at "applying the breaks", recovering from stress, and entering the healing "rest and digest" mode! So, this technique doesn't just feel nice and relaxing *in the moment,* it's a way of practicing getting better at relaxing *with every breath you take!*

It gets even more interesting than that – because there is much more to the parasympathetic nervous system, than meets the eye…

"Tremendously enjoyed slow, paced breathing with the Aria app to the "Tearstream" track. Feeling refreshed and relaxed. I love the vocals in this soundtrack."

– Colin,
Aria Breath Member

The Science – Concept Four

Polyvagal Theory

.4 PVT

Remember earlier how I made the ground-breaking assertion that you are a human and not a bridge? Well humans are mammals, so you are a mammal as well as a human, (but being the bright spark you are, you already knew that). What you *might* not know is that us mammals have evolved a very special kind of nervous system for our unique #mammalproblems.

That's because the evolution of the human nervous system is only just beginning to be properly understood. And new ground has recently been broken with the development of Professor Stephen Porges' fascinating "Polyvagal Theory" (PVT).

This is a big one. Many, long books have recently been written about PVT. So I'm going to drastically (and appallingly) summarize it for now... and recommend that you join Aria Breath so that you can watch my fantastic explainer video on it that has been described as "the best beginner's video about Polyvagal Theory ever made" (by me just now).

The key player in your parasympathetic nervous system is your *vagus nerve*. It's a big-old nerve that traverses your torso and connects most of your vital organs directly to your brain.

But some parts of this big-old nerve are even bigger, and even older, than others...

There are two main pathways (hence "poly") to the vagus nerve (hence "vagal") that seem to have evolved at different times for different evolutionary needs (hence "theory"). There is a "dorsal" branch which is very old. And a "ventral" branch, which is pretty old (compared to say... humans)... but nowhere near as old as the dorsal branch.

We've had a "dorsal" branch to our vagus nerve for so long that we share it with our distant animal cousins – fish, reptiles, and birds. It connects, from the brain stem, all the way down to everything below the diaphragm, including the gut and the genitals, and is involved in generally keeping things running smoothly. We'd be lost without it. But it's also the part that is involved with the powerful (and often unwelcome) "freeze" response that we feel when we are exposed to a threat.

The newer, "ventral" branch meanwhile, is unique to mammals. It primarily regulates the parts above the diaphragm (the heart, lungs, and face)

The ancient "freeze" response of the dorsal vagus evolved to help us avoid danger by playing dead or avoiding being seen. Meanwhile, the "fight or flight" response of the SNS evolved to help us escape danger with fast movement or defend against it with aggression.

But the newer, ventral vagus has a more subtle way of protecting us... it allows us to remain safer as part of a group – to engage in bonding behavior and to feel safe amongst, protective of, and connected to, other members of our species, family, or our mates. It enriches our complex emotional landscape... it might well be called, the "connection" response.

It seems that we mammals needed to evolve the ventral branch because we are such social creatures – we care for our young, we work in groups, and we like to enjoy dinner parties without tearing each other to shreds in bloody tooth and claw combat... so, as we evolved, we needed something to down-regulate the built-in safety features that came pre-loaded in our burgeoning mammal anatomy.

As such, the ventral branch is inextricably linked to social behaviour, it mollifies the ancient, aggressive, and fearful parts of our nervous systems and allows us to feel safe and connected to other humans in a way that snakes, ostriches, and blobfish can only dream of with their old-school, dorsal-only, *monovagal* system.

[Note: the Polyvagal Theory is still so new that I think I just invented the word "monovagal" – I claim it!]

Much of this occurs via the ventrally-mediated process of "co-regulation" – your nervous system's ability to read, interact with, mirror, and impact the nervous systems of other mammals around you with subconscious and involuntary cues. Sounds complicated but you know this already... Relaxed people make us feel calmer, angry people make us feel stressed, and so on. This is why other mammals, like cats and dogs, are much more rewarding pets to keep than... say... alligators (those monovagal losers just don't like cuddling as much).

When, due to a trauma, or the experience of chronic stress, we spend too much time in the "freeze" response, or the "fight or flight" response; we can lose touch with the newer and more pleasant "connection" part of our nervous system. It can start to become weaker, and we can lose some of its function.

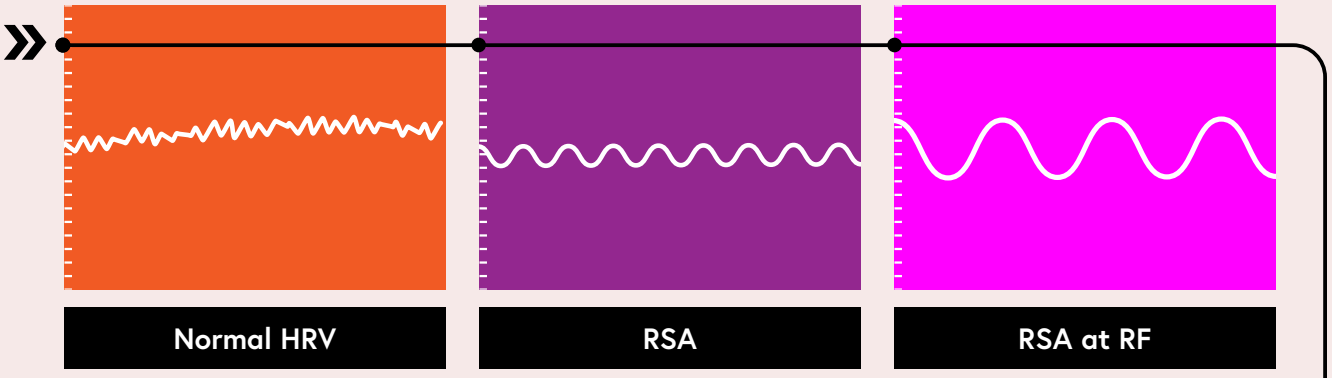
Here's the important bit... the ventral vagus is *also* the very same part of our nervous system that slows down the heartbeat during slow breathing... so by kick-starting a high amount of RSA using Resonance Frequency Breathing, we can trigger the ventral vagal ("connection") response.

This is one of the reasons that this breathing technique feels so good when we practice it for long periods of time... or in a group with other people.

So, when we improve our heart rate variability... by increasing our respiratory sinus arrythmia... by breathing at resonance frequency... we are simultaneously strengthening a very *specific* part of the parasympathetic nervous system... the part that makes us "human".

Or, at the very least... the part that makes us "mammal".

So, it's not only our ability to relax that gets stronger with each breath, but our ability to feel safe, social, and connected to the people around us... and even the world at large. Nice!



Normal HRV

Heart rate changing between beats to maintain homeostasis.

RSA

Heart rate rising and falling with each breath when calm or happy.

RSA at RF

RSA far higher with each breath when breathing at resonant speed.

Putting the pieces together...

Each time the heart rate descends, we strengthen the neural pathways that help this to happen... and, in doing so, our ability to relax, recover from stress and feel safe & connected!

When we breathe at the Resonance Frequency (RF), we create a feedback loop in the baroreflex that creates unusually high Respiratory Sinus Arrythmia (RSA). These strong fluctuations in heart rate (in time with our breathing) begin to improve our overall Heart Rate Variability (HRV), which is a reliable marker for the health of our entire body and nervous system, our ability to recover from stress, and even our life expectancy.

Recent improvements in our understanding of how HRV indicates the health of certain important areas of the nervous system, give us clear insights into how this practice goes beyond just physical health.

Thanks to Polyvagal Theory (PVT) we can begin to understand why the benefits seem to surpass the improvements in *objective bio-markers*... and actually enhance our *subjective experience* of life – by helping to heal and strengthen the parts of the nervous system that improve our capacity to feel safe and relaxed... and even increasing our unique mammalian ability to feel safe with, and connected to the people around us.

All of which leads us to...

"I just completed 30 minutes of "Rainforest" and loved it! I have done coherent breathing with an app that just uses a plain tone to time 5 breaths per minute, rather than music. But using music to time the breath is much, much more effective and enjoyable than just using a plain tone.

I was pretty stressed out this morning after a painful conversation with a family member and I can't believe how transformed I feel after 30 minutes of coherent breathing with the rainforest track. Big gratitude."

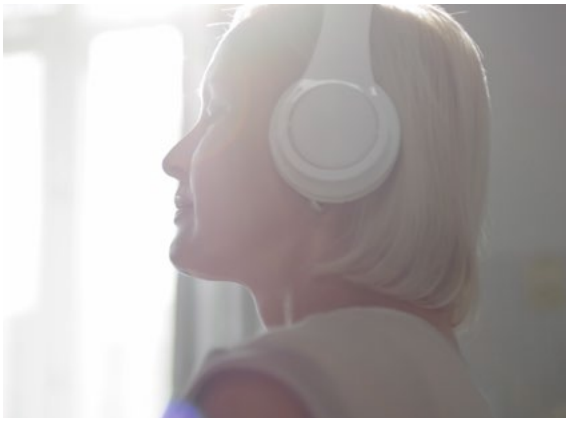
– Kathy, app user

The benefits

Why bother?

The *quick* guide to *slow* breathing...

The Health Benefits...



"I've been listening to the app every morning and sampling lots of tracks... I genuinely think this could be a game changer for me! I already have a favorite track but still have a lot more to try!"

– Joanne, Aria Breath Member

Here are just some of the *proven benefits* you will experience from breathing slowly, and rhythmically with music...

... (that we know about so far...)

Take the pressure off

Have you ever heard people describe the gut as the “second brain”? Well, your diaphragm is your “second heart”! – Not only does it’s movement play a role in determining your heart rate… It also plays its own important, (and mostly overlooked) role in helping to circulate blood around the body.

Contrary to what you might intuitively think, the heart doesn’t need to do all the work when it comes to circulation… “venous return” refers to the flow of blood from the body’s periphery back to the heart. This is the de-oxygenated blood that has traveled the furthest distance from the heart and needs a little help to complete the trip for maximum efficiency. The veins in the body transport de-oxygenated blood from the tissues to the heart, where it is then pumped to the lungs to receive oxygen and release carbon dioxide. The “help” comes from muscle contractions, gravity, and the respiratory pumping effect caused by… the diaphragm!

Here's the important bit – if your venous return isn't optimized, your heart is having to work harder to pick up the slack.

During inhalation, the diaphragm contracts, pulling down, increasing the space inside the thoracic cavity, and causing a decrease in intra-thoracic pressure (if that sounds too technical, just imagine a bellows). This decrease in pressure not only pulls air into the lungs, (the bit we can easily notice) it moves blood too (the bit we might not be aware of); creating a gradient that pulls blood from the periphery (your arms and legs), back to the heart and lungs where it can re-oxygenate.

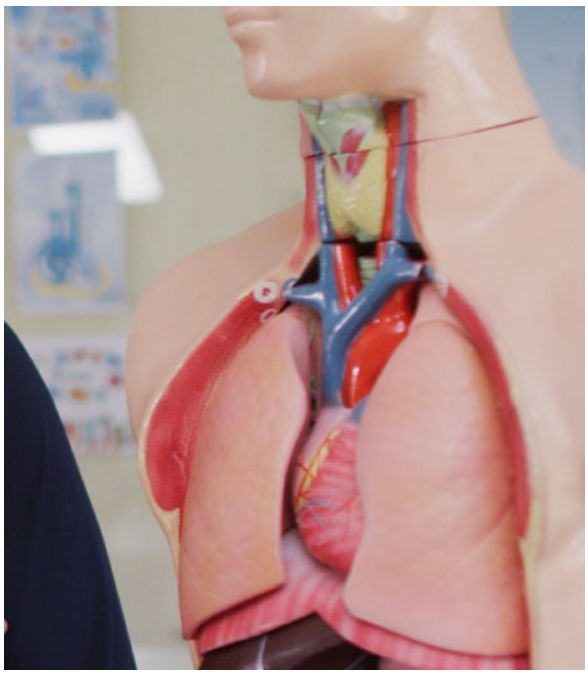
Improving venous return improves blood flow and reduces the risk of blood clots and other circulatory problems… and, importantly, it takes a lot of pressure off your heart!

Taking fewer and deeper breaths whilst breathing into the belly is the fastest way to improve venous return. If you have high blood pressure and access to a pressure cuff, you can see this for yourself. Simply take a reading before and after practicing this breathing technique for just 5 minutes. You will almost certainly be amazed by how quickly you can improve it. I’d love to hear your results!

Reinvigorate your energy levels

Oxygen is your number one source of energy. So it makes intuitive sense that breathing *more* air should lead to more oxygen in the system and therefore more energy in the cells… But this isn’t what happens!

Our blood chemistry requires *balance* for proper oxygen delivery. Carbon dioxide, far from being a waste gas, balances blood PH and controls vasodilation to ensure proper oxygen delivery. Without the correct amount of CO2 in the system, our cells are starved of oxygen.



So slower, balanced breathing leads to an increase in CO2, optimal blood PH, and with it, healthy blood pressure and increased oxygenation at the cellular level. Allowing more oxygen to reach and energize our deepest tissues and cells.

Increased oxygen delivery means better health. We can literally feel this as restored energy running through our bodies! What’s more, it begins to have these effects within just a few breaths! So, as I like to say… breathe *less*, oxygenate *more!*

Rewind your heart health

As I've already mentioned, one of the leading cardiologists who I spoke to on this research journey told me something *astounding*. He claimed that breathing slowly and rhythmically, for a short period each day, for just 6 months, *"turns back the age-related decline of the heart by ten years!"*

It sounds outrageous but it's grounded in science. What he meant was, by breathing like this, we restore a factor that doctors call "Heart Rate Variability" or "HRV" (see above!). Put simply, this is a measure of the flexibility of your heart – your heart's ability to immediately speed up and slow-down in response to microscopic changes in the body, mind, and environment.

The higher your HRV, the faster your heart can recover from stress, and the better it is at maintaining homeostasis (your body's natural equilibrium). Which in turn means less overall stress on your entire system and increased physiological resilience.

HRV naturally declines as we age and is also negatively impacted by chronic stress. (Something that almost everyone now experiences).

But by breathing slowly and rhythmically we create something that scientists call "resonance" in the cardiovascular system, and this special state allows the heart rate to increase and decrease more than usual with each breath. *When we do this daily it's like yoga training for the heart – dramatically increasing its flexibility!*

It's almost as though, when breathing at the resonance frequency, every slow breath out is like a "push up" but instead of strengthening a muscle, it strengthens your ability to relax and recover from stress.

Restore balance to your nervous system

Gasping, sighing, crying, laughing... every emotion you feel is reflected almost immediately in how you breathe. This is because your breath is deeply tied to your nervous system.

The stress levels in your system immediately affect how you breathe – more stress means faster, shallower breathing or frozen breaths... which in turn lead to... more stress.

The good news is, it works both ways. By slowing the breath down *deliberately*, we put ourselves in the driving seat and offer relief to the nervous system, giving it a chance to heal.

This doesn't just feel calming, it also means more energy and physiological resilience for you. It doesn't stop there though...

Because of neuroplasticity, by continuing to practice daily, over time we strengthen the connections in the nerves and neurons so that we literally begin to shape a healthier nervous system.

Balanced breathing quite literally balances our internal systems.

Remember how to feel good

I'll say it again... Feeling good doesn't just *feel* good... it *is* good *for* you!

Breathwork not only feels good in the moment; with regular practice it begins to increase the body's natural resilience and restore our pathways to health.

Higher levels of HRV are also associated with more positive emotions.

Multiple studies over the last ten years have shown that slow, rhythmic breathing leads to decreased symptoms of anxiety, depression, and PTSD markers in clinical settings.

Your body is being kept alive from moment to moment by a system of unconscious biorhythms called the autonomic nervous system. Heart beats, blood pressure, peristalsis... breathing. Luckily, we don't have to make any effort for this to happen.

But unlike other parts of the autonomic system, the areas of the brain that control breathing, whilst usually *automatic*, can be *voluntarily* controlled... That makes breathing pretty special.

Scientists have now shown that, by controlling the breath subtly for extended periods, we can naturally increase and entrain the parts of the brain that control emotional regulation, leading, in a very literal sense, to greater self-mastery.

Enhance personal relationships

You know how your emotions are reflected in how you breathe? Well, the way you breathe affects your feelings via the same system. Slow, rhythmic breathing activates part of your nervous system that scientists call the "ventral vagal pathway". Also known as "the *social engagement* system".

This branch of nerves is unique to mammals. Because we have evolved to care for our young, look after our elderly, and work in tight groups, we need a way to feel safe around other members of our species, a way to feel connected to other people; a built-in capacity to slow down without fear or get activated and excited without needing the "flight" response...

Enter the parts of the nervous system that connect the face, to the heart, and to our breathing. When this system is activated, it provides a sense of safety, calmness, and balance throughout the body. Naturally, this helps to minimize stress and anxiety, (reducing a common strain on our interpersonal relationships). But, *way more importantly*, it actually allows us to feel more connected to the people around us. When our "social engagement system" is online, our nervous system begins to subconsciously mirror and interact with those around us, and we start to *co-regulate.*

We become better at understanding each other and communicating our needs. Our brain begins to prime itself for deeper connection by increasing its capacity to release oxytocin; the "love" hormone. In this state, we actually get better at seeing and sensing the connections between social groups, individuals... and even ideas.

All of these effects can lead to increased trust, happiness, and even intimacy, within interpersonal relationships.

Reconnect to your intuition and insight

The skill of creativity affords us new ways of seeing, thinking, and being... whilst giving us the power to disrupt negative patterns and replace them with new ones. It allows us to see and act on new solutions to old problems or imagine and select alternative futures for ourselves.

Put simply, creativity is the capacity to notice, appreciate and act on the subtle connections between things that might otherwise go unnoticed. This makes it a unique form of *resilience*.

Children are natural creative geniuses. But as we age (and our minds become busier), the once loose conceptual world around us that was able to imagine the floor as lava and monsters under the bed solidifies; we lose the power to see new possibilities.

So how do we access our creativity on a deeper level?

In the previous section, we learned how slow breathing helps us to feel safe by activating the internal vagal pathways. Another name for this state of the nervous system is "rest and digest" – an opposite of "fight or flight". Have you noticed, one of these two states contains an inherent bias to focus on the internal world, and the other is focused on the external world?

When we feel safe our body shifts to focusing on the internal world, digesting food, mending itself, lowering heart rate, etc and our focus shifts with it. This is reflected in our nervous system, with increasing levels of activity happening in the parasympathetic branch.

Entering this state also increases our capacity to feel inside our bodies – an ability called *interoception*. It's much easier for us to focus on the perceptions of what is happening inside our body when we feel safe. An extreme, opposite example of this might be how we can accidentally cut ourselves in a stressful situation and not notice, or even feel the pain, until we see the blood. If that's one end of the scale... imagine how much more you can feel into the body when you are in a state of "exteme" safety.

What does this have to do with creativity? Well...

Consider these words... "INtuition, INspiration, INsight" ... noticing a theme? These are weird and wonderful things that happen *INside* our bodies, with very little conscious effort on our part. They are the subtle parts of ourselves that allow us to sense new ideas and feel creative.

Because the parts of our nervous systems that connect us to our innermost feelings are deeply entwined with breathing, our breath has a very real capacity to unlock them through improved vagal function. Or, as I like to put it... *"belly breathing" connects us to "gut feeling"!*

But creativity doesn't just involve embodiment. After all, it's the founding of new synaptic pathways in the brain that give us the super-highway to creative insight. But breathing helps there too...

Breathing rhythms are some of the most powerful vibrations in the brain; rippling out and impacting other patterns, parts and pathways.

Because our breathing tempo can be brought under conscious control, we can literally act as a conductor for the whole brain; creating entrainment and synchrony that allows disparate parts of ourselves to become joined in one symphony and "speak" to each other in ways they never ordinarily would.

The brain wave oscillations of slow and low breathing rhythms move further through the cortex. A bit like how you can hear the throbbing, low, bass frequencies escaping a distant night club, and none of the high, treble... The slower breathing rhythm echoes through the brain allowing the whole psyche to dance to one tune. And when the whole brain is singing from the same song sheet, it's more likely to make important perceptual connections that hit the right note (I warned you there would be an unreasonable amount of music analogies).

Meditate without even "trying"

We've all been told that meditation is good for us. We may have even attended a course or downloaded an app, but with so much on the to-do list, meditation just becomes another thing that's easy to ignore.

The Buddha called mindfulness meditation "Anapanasati", which, translated, essentially means "awareness of the sensations of the breath". When guiding our breath in time with music, we naturally become aware of our breath in each moment. And the good news is, it's much easier to stay focused when practicing with music!

By pacing our breath to music, we are subtly, but persistently, focusing on the breath... that's meditation without even trying!

The early scientists who were studying the impact of "resonance frequency breathing" on health in the nineties and noughties, each took it upon themselves to travel around the world and study advanced meditators. Although working independently, they all came across the same strange phenomenon...

From Himalayan yogis and Chinese Qigong masters to Japanese zazen monks, wherever the scientists found and studied *advanced* meditators, they realized that they were all naturally breathing at this special rhythm when meditating.

The scientists realized that a lot of the benefits of the practice likely came down to how they were breathing, rather than how they were directing their attention.

There is even a growing suspicion in the scientific community that many of the studies that have shown the benefits of mindfulness meditation need to be reviewed... because it could in fact be the effects of the slow breathing in the body, rather than the focus of the mind that caused the benefits.

Now you can gain the benefits of a master meditator... without the 30 years of training! (I'm trying to find a way of writing that without it sounding like a tacky infomercial... but a benefit that good sounds unbelievable no matter how you phrase it).

Give your brain a wash

No, I'm not trying to brainwash you, breathing like this *literally* cleans your brain!

Remember how we started this section by talking about how the diaphragm is like a second heart? Well blood isn't the only thing it pumps... it also aides the healthy movement of your cerebrospinal fluid (CSF). If that's too technical, just think "brain juice". CSF is a transparent liquid that flows around the brain and spinal cord. It does lots of useful things... helping with the movement of hormones and other wonderful molecules between the brain and the rest of the body, acting as a shock absorber when you bang your head, and even helping to prevent infections by carrying antibodies and other immune cells.

But perhaps most importantly, it provides nutrients to the brain and removes waste. Essentially an auto-wash mechanism, the CSF is constantly being produced and reabsorbed in the brain and flows much of the way down the spine. And, just like *venous return*, it relies on the body's other natural rhythms to help achieve optimal flow.

In a similar way to how the movements of the diaphragm help to pump blood... they also act to improve the flow of cerebrospinal fluid via the pressure changes inside your abdomen. Its movement helps to gently pull the CSF from the base of the brain, through the ventricular system and out into the spinal cord. This cleansing flow is important for removing waste products, providing nutrients, and maintaining pressure within the skull... there is even a study being conducted *right now* into whether this breathing technique could slow down the early signs of Alzheimer's disease!

So, when yoga teachers say, "take a deep, *cleansing* breath", they really might be on to something!

The Technique

What were we talking about again?

"It just helped me to really relax, focus on the things that are important and let everything else just roll off. It resonated so deeply inside of me and I'm just to grateful!"

Joe, Aria Breath Member

Harmonic Breathwork

a "how-to" guide

Here's the not-so-secret recipe. (It really is this simple...)

1.

Get into a comfortable, restful posture – Lie down, recline in a chair, or sit comfortably on a mat.

2.

Breathe slowly, rhythmically, and evenly, in the resonance range (around 5 or 6 breaths per minute).

3.

Softly breathe in and out through the nose (so you can barely hear the air moving).

4.

Gently breathe into the belly – just keep softening the belly with both inhale and exhale to ensure you are using the diaphragm to breathe. Take your time to let the belly relax a little more with each breath.

5.

Move less and less air in and out of the body as time goes on. (This part will happen naturally).

6.

Sprinkle in visualizations, a dash of mantra, and a pinch of intention to taste – these really help bring out the full flavor potential (more on that in the "Tips" section!)

7.

Practice for at least 10 minutes, daily. Preferably 20 minutes... and 30 minutes once you realize how good it feels after 20!

Why do I call it *"Harmonic* Breathwork"?

What's in a name?

The idea of “resonance frequency” and the scientific understanding of the ideas we have been discussing have only been around since the late 1980s in Russia and the early 2000s in the West. The truth is that this technique has many cousins from various distinct global, spiritual, and scientific backgrounds. And they all have different names depending on the lineage, creator, or scientific researcher.

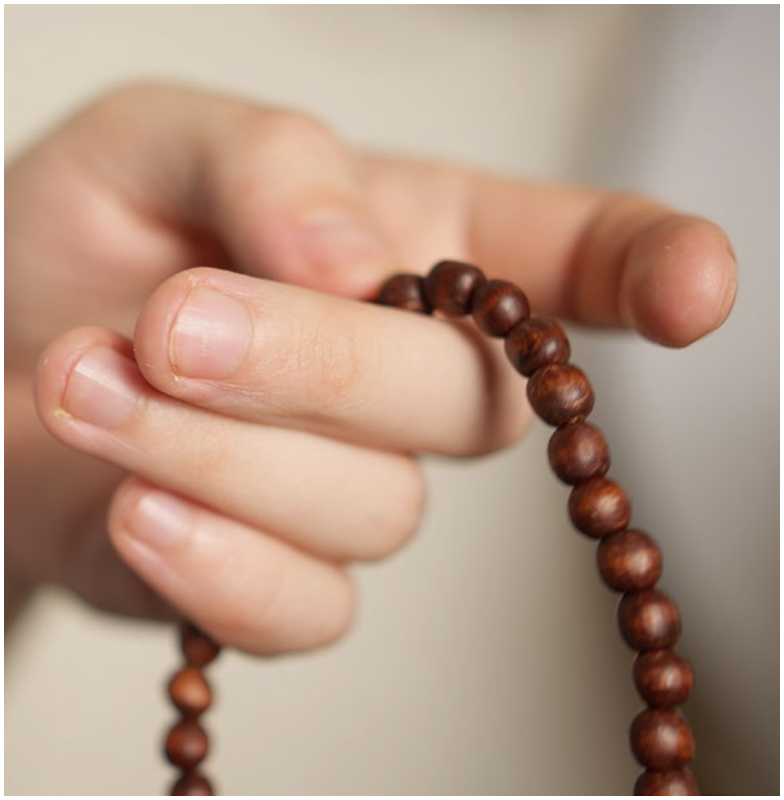
American inventor Stephen Elliott was the first to coin the phrase “*Coherent Breathing”* after he noticed the phenomenon. At the time, he was unaware of the work of a Russian scientist called Evgeny Vaschillo, who was the first to visualize and notice the strange effects on HRV and, (being an engineer as well as a physician) associate it with the concept of “resonance” (hence the now popular terms *“resonance frequency breathing”* and *“HRV breathing”).*

The problem with using any of these existing names is that the scientists/creators have very specific ideas about what constitutes breathing that can be called “Resonance Frequency” or what parts of the body we should be relaxing (and in what order) for it to be true “Coherent Breathing”, and I would not want to detract from or confuse their endeavors and definitions.

Meanwhile, studious yoga enthusiasts reading this may have noted the similarity to some descriptions of “Equal Parts Breath” or “Sama Vritti”. Here we encounter another problem. With many ancient practices like yoga and qigong (which develop organically and disperse over massive geographic regions and huge spans of time), depending on which school or lineage you research, you will find wide variances in how these practices are defined. For example, how BKS Iyengar’s definition of “Sama Vritti” includes pauses and counting… and seems much closer to the practice that is now commonly known by Westerners as “Box Breathing”.

One highlight of my research journey was finding two largely forgotten American women in New York in the late 1800s who appear to have independently discovered and written books on the technique. They both extol its health benefits and, with extraordinary insight given their lack of useful research tools, suggest that the counting of *heartbeats* would be more useful than the counting of seconds; they note that the heartbeat is unique to the individual (and the ideal breathing rate appears to be too).

I mentioned earlier that, during the interviews I conducted with scientists, one of the most remarkable stories that was shared with me came from American psychiatrist Dr Richard Gevirtz. He explained that he, and some other researchers, (Bernardi, Lehrer, and Vaschillo) were all separately researching the breathing rates of advanced meditators (minimum 30 years of practice) from varied spiritual backgrounds and in distant global locations (yogis in North India, Zazen monks in Japan, and Chinese qigong practitioners in America) and they discovered something remarkable. Each of the researchers asked their study subjects to *"do whatever you do to get calm, alert and centered"* and no matter where they were on the planet, or what lineage the meditator came from, they each would breathe at their own exact resonance frequency. When asked if they knew about HRV or what they were doing, they said they did not, and that this was just how they had learned to breathe over the years of embodied self-study to maximize their internal peace, focus, and tranquility... Mind-blowing!



The truth is that this technique crops up again and again through history in various forms, and with varying ideas about the correct way to hold your attention or to place your hands and so on...

... but the constant is always the slow speed of the breathing and the consequential equanimity that allows for personal and spiritual insight or social cohesion.

There is no correct name. No one race, religion or person owns it.

When I use the word "Harmonic Breathwork" it is not to add a fresh claim or add another "new and improved" technique, but rather to group all these practices under an umbrella term without detracting from any of them by misappropriating them, an umbrella term that essentially means... "changing the breath in such a way as to invite harmony into the circulatory system, nervous system, mind, heart, and relationships".

The BIG question...

"What if I don't know my *exact* "Resonance Frequency"?"

(You almost certainly don't!)

It's bad news & good news...

The bad news...

Here's the bad news, figuring out your *precise* "resonance frequency", (the *exact* breathing speed at which the beat of your heart changes the *most* with each breath) can be a difficult and expensive process.

It requires breathing at different speeds for extended periods whilst hooked up to a photoplethysmograph (a fancy way of saying a "heartbeat sensor") that is plugged in to software that can quantify and display the various dynamic heart frequencies... and using that data to investigate which exact breathing speed creates the greatest amplitude in heart rate.

The researchers who created Heart Rate Biofeedback Breathing (HRVB) as a health intervention recommend repeating this investigation multiple times over a number of weeks to be certain. And the exact speed for an individual may be something highly specific like 5.82 breaths per minute.

I believe this hurdle to knowing your specific frequency will become smaller over the next few years, especially as wearable biofeedback devices become more affordable, and their manufacturers begin to understand the power behind this knowledge (and inevitably start to build easy-to-use resonance tests into their devices).

The good news...

For now, whilst this exact knowledge is unattainable for all but the most dedicated, the good news is that you can still achieve incredible benefits just by being in the *region of* your resonance frequency. And, for the overwhelming majority, that means breathing around or between 5 and 6 breaths per minute.

So, here's my two key bits of advice...

1.

Experiment, and trust your own experience...

Using the *Aria Breath* music library, explore breathing at the three core speeds (5 / 5.5 / 6 breaths per minute) and ask yourself...

A. What feels *natural* for you?

B. Which speed makes your body *feel* good?

C. Which speed makes you feel the most *relaxed* during and after practice?

Remember, the advanced monks who practiced this for thousands of years never had access to photoplethysmography or HRV biofeedback equipment... They explored and trusted their own subjective, embodied experience!

2.

If in doubt, go slower...

If you are in the-region-of your resonance frequency, but not exact, you will still be greatly improving it your heart rate variability. And remember, HRV isn't the only benefit that we are chasing; so here are two main reasons why I recommend opting for *slower* rates (5 or 5.5 BPM)...

A. Your *nervous system* responds well to slower breathing...

The slower your overall breathing, the more you lengthen your exhalation. For example, at 6 breaths per minute your exhalation lasts 5 seconds, but at 5 breaths per minute, your exhalation lasts 6 seconds – an additional second longer for every breath. Each exhalation requires the diaphragm to relax and your heart rate to slow down and so it sends a subtle wave of relaxation through your whole body.

So, the slower you breathe, the more you extend your exhalation, and the more your nervous system enters a restful, restorative state (and the better it gets at doing so!)

B. Your *blood chemistry* benefits when you breathe slower...

The less breaths you take over the course of a minute; the lower your "minute volume" (the volume of air you move into and out of your body each minute). As I mentioned earlier, when you lower this metric, you retain more CO2 in the body.

This isn't just immediately beneficial for blood flow (normalizing blood PH, increasing vasodilation, and oxygenation) but over multiple days and weeks of practice, the chemo-receptors in your brain become less sensitive to CO2 and can tolerate more of it.

Because higher sensitivity to CO2 leads to anxiety, correcting this imbalance leads to less anxiety overall in your day-to-day life.

At slower breathing rates, each individual breath makes more difference to minute volume... Put it this way – taking one breath less per minute, i.e., opting for 5 breaths per minute instead of 6, reduces your volume of air by almost 17% each minute (Assuming that you take in the same amount of air with each breath). Which leads to more CO2 in the blood stream.

Tips (The juicy stuff)

Let's be honest, this part is why you downloaded the PDF.

"I have been using Aria Breath every night before I go to sleep, and now I can't be without it! It's so relaxing and peaceful that it really helps me get a deep and restful sleep. There are so many beautiful tracks to listen to, and I still have plenty to try out as there's so much choice, but I already have a couple of favorites. Such an amazing idea, and such a lovely app."

– Laura, Aria Breath Member

Here are *7 Top Tips* for getting the most out of your practice...

1. Start with the body!

If you really want to supercharge your practice, don't just jump into the breathwork – prepare your body with movement, ... shaking, tapping, stretching, dancing, self-touch, massage, exercise... or any/all of the above!

It often surprises people just how much even a little movement before breathwork can enhance their practice. After all, consider qigong, tai chi, and yoga... all of them ancient practices that center around breath itself as a movement, and all of which help the body prepare for meditative or contemplative practices. These practices are often designed to release energy blockages in the body so that the forces of qi or prana ("breath energy") can flow more easily. It might sound "woo woo" to some, but when you really think about it, breath *is* energy, in fact, it's your *primary* energy source, and it does *literally* flow throughout your body as oxygen and energizes every cell inside you.

As we improve circulation, we improve this energy flow: The gentle movements of qigong and the stretches of yoga help to improve circulation and the flow of energy throughout the body. So, by moving and stretching the body in specific ways, we can help to unblock stagnant energy and promote the smooth flow of breath.

Most of us are hoping that the stillness of our breathwork practice will help to relieve our stress levels... but sometimes the best place to start is with burning off the stress hormone cortisol that builds up in the body – and the easiest way of doing that is through movement! Cortisol lingers in the body for a long time when we are sedentary but it is quickly burned off when we move our muscles. If you experiment with going for a short work before your breathwork practice, or practice after working out to help your body enter a restorative state, you may be amazed by the difference in your experience.

It's not just our biochemistry that changes with simple movement. When we are stressed, we revert to unconscious holding patterns in the body; our posture can become defensive and restricted, and with that, so does the breath. By taking our bodies gently through calm, open movements, we begin to break through these invisible walls we are putting up around ourselves and, in doing so, remove the corresponding mental barriers.

Movement can also begin to help us to *tune into* the breath... especially when we tie the movement of our bodies to the rhythm of our breathing in some way. This kind of mindful movement not only brings us more deeply into our bodies, but it also naturally begins to slow the breath down without our conscious effort and so can be of particular help to beginners.

And finally (for now), by stretching our muscles before breathwork practice, we expand the space available for our breath to move inside us and this allows us to use different muscles when we breathe.

Many of us hold a lot of tension in our hips and our bellies, which restricts the movement of the diaphragm. But by opening up these areas prior to practice, we allow for more abdominal movement, and the calming benefits of diaphragmatic breathing naturally follow.

To try some of these movements for yourself, and learn easy, calming, self-touch practices, simply join in with this week's free Sunday Session and experience how even simple movements can help prepare your body for breathing practice!

2.
Get your head down

Touch your toes before you start and send a message to your heart...

Without getting too far into the science, I mentioned earlier in this document that some of the key players in causing cardiac resonance are your "baroreceptors" – the little pressure sensors in the blood vessels above your heart. These are triggered by the fluctuations in blood pressure caused by abdominal breathing and they send information to the brain to help it decide what speed the heart should be beating at.

Although we can trigger the baroreflex with breathing... we also do it with movement. In particular, movements where the head travels below the heart will cause rapid changes in blood pressure, which is registered by the baroreceptors, and the heart is forced to respond.

It is likely no accident that movements that create this effect often appear in spiritual practices. For example, bring to mind the rhythmic kneeling and bowing elements of Muslim prayer, or the fluid movement of "sun salutes" in yoga, even the spinning dances of whirling dervishes are causing strong fluctuations in blood pressure with blood being drawn out into the extremities...

Because these movements cause rapid changes in blood pressure, they stimulate the baroreceptors and cause them to send information from the heart to the brain and back down along the vagus nerve in a way that triggers the vagal complex. This increases heart rate variability in the short term, and, with that, it helps our ability to enter a "ventral vagal state" (a feeling of safety and connection).

Although not the express purpose of these spiritual practices, it is possible that the corresponding changes in blood pressure, trigger the nervous system in such a way as to help religious practitioners to feel more connected to the others in their community who are practicing around them... and perhaps even gain access to a sense of the divine.

So, including a few "sun salutes", or even simply gently touching your toes (or knees, depending on your mobility) a few times before beginning your practice, is an excellent way of preparing the nervous and circulatory systems for breathwork!

If that's not available to you, simply raising your arms above your head a few times in time with your breathing will begin to have a gentle effect on the baroreceptors.

Safety guidance: If you suffer from high blood pressure or dizzy spells, talk to your doctor before practicing these movements.

3.
Box it off

If you find slow breathing difficult, begin with a few minutes of "box breathing". This advice is particularly good for beginners who are not yet used to slower breathing rates – This will help your mind and body to get used to slower breathing rhythms.

Box breathing is the practice of adding short breath-holds at the end of the inhalation and

exhalation, usually of around equal amounts, hence the name *"sama vritti"* in yoga, which roughly translates as *"equal disturbance".*

Here's how it looks:

- **Breathe in for a count of four**
- **Hold for a count of four**
- **Breathe out for a count of four**
- **Hold for a count of four**
- **Repeat!**

Pretty simple right?

But there are a few things to consider if you want to get the most out of the practice...

The first tip that I like to give people about breath holds... is to stop thinking of them as "holds"!

The word "hold" can make people think that they need to "tense up". In fact, a breath hold can be more calming when thought of simply as the *suspension* or *pausing* of breathing. This is true of both holding the breath at the "top" of the inhale, and the "bottom" of the exhale.

Rather than tensing them, when holding after the *inhale*, see what it feels like to relax your belly and shoulders. You may find that this allows the abdomen to soften and drop slightly; gently stretching the muscles of the lower abdomen and creating even more space for belly breathing.

When holding after the *exhale*, notice that there is already a natural pause here, and simply rest in and extend the pause. When you feel the first urge to breathe, just continue to hold and relax for a few more seconds, notice any increase in the natural relaxation of the exhalation, and then ride that urge to breathe in like a surfer on a wave.

In both cases, see *how little effort* you can use to create the hold. And notice how this impacts the practice.

It's also good practice to keep the muscles of the face soft during holds, many of us continue the pattern of holding tension in our cheeks and lips as though we are back on the school playground and competing to see who can hold their breath the longest! Soften the muscles of the face and notice how the rest of the body responds.

One other key piece of advice I have on box breathing is... don't get hung up on the numbers!

Often people think that they should be breathing or holding for *exactly* 4 seconds... it *really* doesn't matter...

The body is receiving each of these holds as extensions of the inhalation or exhalation... and that's the important part – in this case at least, we are simply using box breathing to help prepare the body by getting it used to slower breathing rates. It may help to think of the numbers more as "beats" than "seconds".

Once you are used to this, it can be helpful to use gentle holds whilst getting used to the slow pace of the music during your Aria Breath practice. You may find that even though the music feels "too slow" at first, by pausing at the top and bottom of the breath to match your breathing to the music... within a few minutes, your body's internal systems will have calmed, and the pace will feel natural.

Safety guidance: If you are pregnant or think that you might be, it is advised that you do not hold your breath.

4.
Follow your nose

There are many reasons why nasal breathing is superior to mouth breathing most of the time. In short, the nose is designed for one purpose (breathing), whereas the mouth has many (eating, talking, smiling...).

Sure, your mouth does the job, but your nose offers a premium service ; it moisturizes, warms, and cleans the air you breathe before it hits the delicate tissues in the lungs, as well as allowing you to inhale the health-giving benefits of the nitric oxide that is naturally produced in your sinuses (see my interview with the Nobel Prize winning scientist Dr Lou Ignarro for more info on nitric oxide and how he discovered it in the body!)

But, importantly for this *particular* breathing practice, nasal breathing also creates a gentle *resistance*. This resistance not only gently stimulates the relaxation response, it also means that nasal breathing is naturally slower than mouth breathing.

It also subtly affects the muscles that we use to breathe – we are more likely to use the diaphragm when we are nasal breathing (which the body receives as a calming cue) rather than the upper intercostals or the muscles in our shoulders and back, (which the body can receive as a stress cue).

If nasal breathing is not available to you for any anatomical or health reason, don't worry, you will still create the majority of benefits of resonance frequency when using the mouth to breathe at the right rhythm... but see if you can make your life easier by creating gentle resistance with the your lips to slow down your breathing and allow the breath to be warmed and moisturized a little inside the mouth.

5.
Put down your phone...
... in the right place

OK, so we're getting pretty specific to using Aria Breath's music now but hear me out. Once you've downloaded the Aria Breath app and joined the community so that you can access the world's largest library of resonance frequency music (what do you mean you haven't already done it?!)... you'll notice that the main music libraries in Aria Breath are separate from the *animation* library. And that's for a good reason.

I've included animations because I love art, they are a visual treat, and calming visual cues designed to pace the breath are particularly helpful for beginners... But for the most part, whilst practicing this technique we should aim to close our eyes, maximize the attention we are paying *inside* the body, and minimise *external* distractions.

I guess what I'm saying is, don't just breathe to the music and simultaneously try to beat your high score on Angry Birds. Scrolling through the never-ending distractions of news, apps, and social media on our phones might just be the reason we need breathwork in the first place!

If you do give your attention to the overstimulating world on your phone whilst practicing, you're missing out on maximizing the calming benefits! But this doesn't mean that you should press play, and then immediately hurl your phone across the room so that you can practice in peace. Your phone can still be a part of the process. And here's how...

Simply hit play on the track you would like to practice with, and then place your phone on your belly – let its gentle weight be a reminder to use the belly to breathe. You can even play a different game with your phone – seeing how much you can cause it to rise and fall with each breath.

Many of the calming benefits of this practice come from using the belly to breathe. If the belly is rising and falling, then we can be certain we are using the diaphragm and getting all of the scientifically proven benefits of abdominal breathing!

6.

Do less

This one is pretty simple to understand, but it requires time and a lot of self-study to really notice and counteract.

Here's the subtle conundrum... This practice requires focus. But focus in the mind can lead to tension in the body. (I wonder if you are tensing any muscles in your face as you read and consider this?)

Because we are focusing on our breath in this practice, look out for tension in the face, neck and shoulders, especially around the eyes, mouth, and even subtle tension inside the nose.

Whenever you notice you are holding tension in the body whilst practicing, don't beat yourself up, (that will just lead to more tension!) instead, congratulate yourself for noticing it, and use it as an opportunity. Remember, every time you breathe out, there is a subtle wave of relaxation throughout the whole body. You can use this to your advantage...

Imagine breathing into the area of tension with your in-breath and feel it soften as you gently inhale, and then imagine letting go of it completely as you breathe out. You may notice a pleasant echo of gentle relaxation through the body as other muscles soften in response to this. It's almost as though the gentle tension that you spot and let go of in one area, is a keystone for releasing structures or patterns of tension that are present in other parts of your body. In releasing them you can create subtle cascades of relaxation across body-wide holding patterns.

Remember, this kind of softening should never feel difficult; it is not a "doing" thing, it is an "undoing".

Weirdly, I used to hold lots of tension in my nose for some reason whilst practicing and focusing. But now, having practiced for a long time, I find it effortless to soften throughout my whole body.

7.

Use the practice itself as a primer for other powerful meditations

Now we're getting to the really juicy stuff!

... But I'm afraid we're out of time! You'll have to wait for my upcoming book *"Breathe-In Harmony"* to find out more!

If you can't wait until then, don't worry... both *Founder* and *Forerunner* pre-launch memberships for *Aria Breath* include free access to my live, 6-week, online, mastery course – where we'll be delving deep into the last few years of research for the book and combining RF breathing with multiple meditation styles.

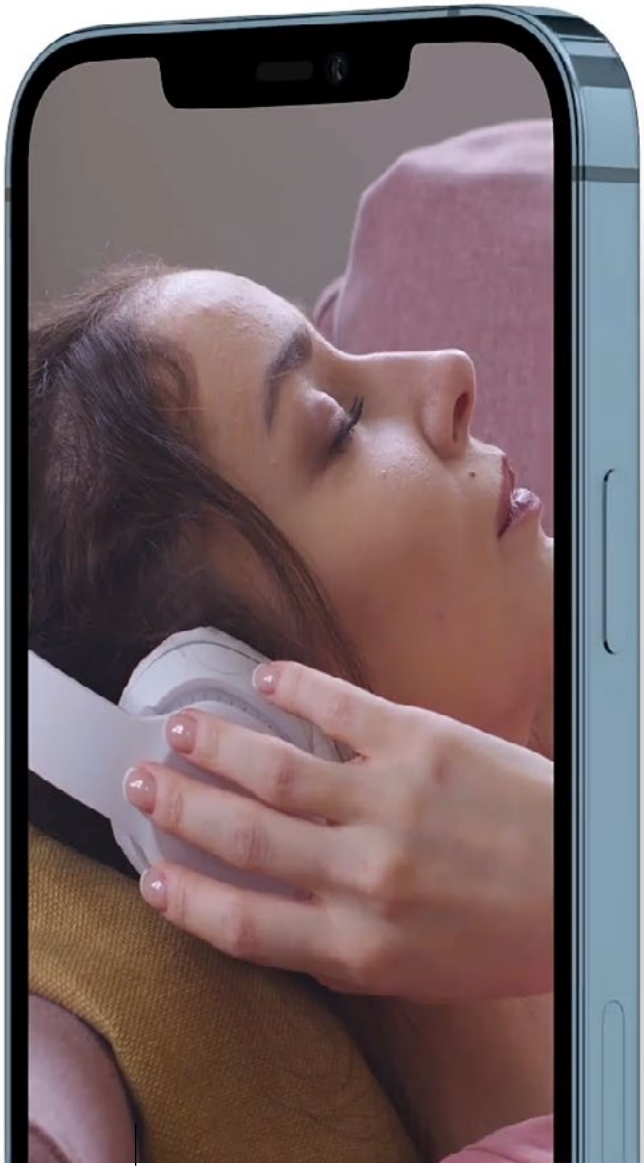
See you there!

There are *lots* more tips that I'd love to share, and if you have any questions... come to the next free Sunday Session and say hi!

I also highly recommend that you sign up for app membership to find out the *5 Most Common Mistakes to Avoid* that could be in the way of your progress.

Inside the app!

(Got time for a sneak peek?)



Find your favorite tracks...

The world's largest library of coherence music... at your fingertips. Hundreds of hours of music – with every track available in *four* different resonant speeds.

Just starting out? You can choose to have simple vocal guidance... or go straight for "Music Only".

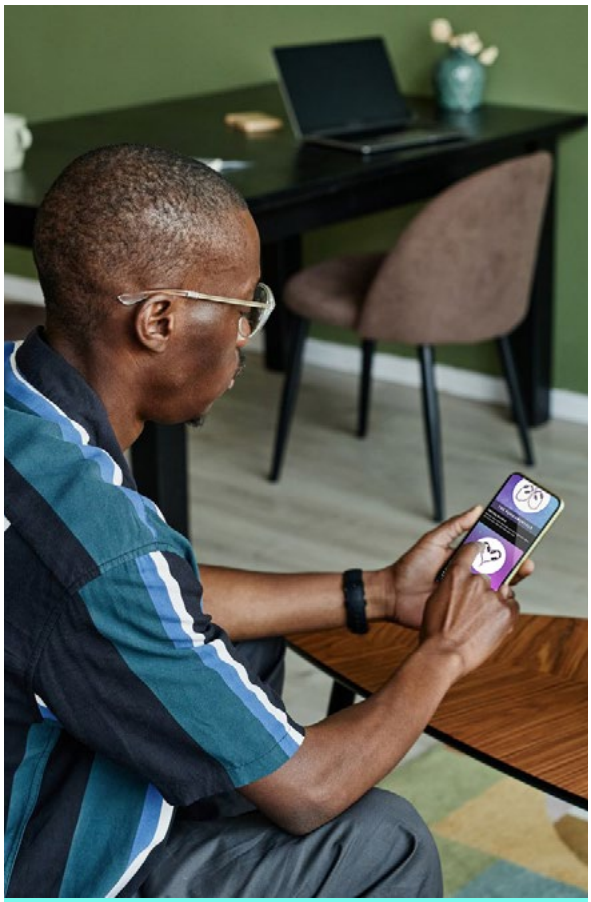
Click a simple button on each track page to mark it as a favorite for easy navigation. On the move? No problem – easily download your favorite tracks for off-line access.

(Learn more about music overleaf)

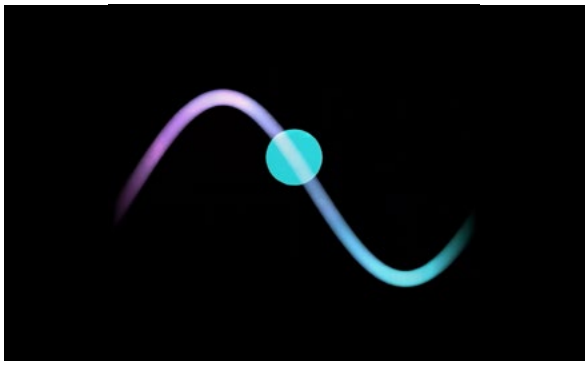
Animation *specials*

We've been working with world class animators to create unique animations that help you to pace your breath in time with the music.

Our goal is to have 50 of these mesmerizing animation specials by the end of year one! Each accompanied by a different track from the Aria library and unique vocal guidance from an Aria instructor.



Scroll through hundreds of track choices!

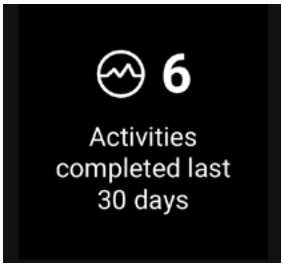


Animation Guidance

The tracks range in style and difficulty, from beginner to advanced... so, if you find a track difficult to pace your breath to, don't worry... on every track page you will find a simple 3-minute sine wave animation that guides your breathing with the track until you are used to it and comfortable practicing on your own.

Community

The app has a simple forum feature where you can recommend your favourite tracks, share tips and techniques... and request new music!... Let's help keep each other motivated!

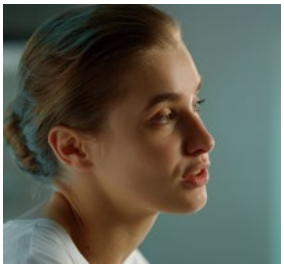


Keep score

If you need stats to stay motivated, good news!... you can keep track of your daily practice streak and your minutes spent meditating in your profile section.

Unique content

As well as the Fundamentals section... Simple exercises and training courses will be added to the app as time goes on. As well as additional content for teachers wishing to use the Aria Breath library with their clients.



Interviews with experts

Watch over 50 unique interviews with breathwork, meditation and embodiment experts from Tom's three year research journey... before anyone else!.

Grow with us...

You are here right at the start!

Pre-launch members may witness a few growing pains as the app takes shape... but the wonderful bonus is that you will have your say on future music, design features, and functions of the app as it develops and evolves over the coming years!

One thing's for sure... it's going to be a fun ride!

Why Music?

The "missing piece" in meditation...

The real benefits of slow, rhythmic breathing have been known in scientific circles for decades; so why doesn't everyone practice it?

The reason is simple – until now, there hasn't been a good collection of high-quality breath-pacing music for people to choose from, absorb themselves in, and actually enjoy.

We believe that carefully-considered music, written by real people, adds something important – something that humans have a deep unconscious need for...

Music means...

1. You're doubling your calm – calming breath-rate *PLUS* calming music!
2. It's far easier to stay focused on the breath than formal meditation – so pacing in time with music means you get the benefits of mindfulness effortlessly.
3. It's more engaging (and fun!)
4. With music as your guide, the practice itself becomes something pleasurable to look forward to.
5. You can breathe together, perfectly in time with other people and groups to feel connected.
6. But most importantly...
   ... you know that you're breathing at the right rhythm to get the benefits!

More than just sound...

Music naturally has the power to invigorate or relax us...

it has the capacity to alter mood, unlock transcendent emotional experiences, and it even offers us a safe space to explore and come to terms with our less favorable, even painful, emotional landscapes.

Combine these unique qualities with the world's most ancient and powerful breathwork techniques and you have an exceptional tool for self-exploration at your disposal.

The Aria Breath team is a global and constantly evolving roster of award-winning multi-instrumentalists.

Between them, they have created soundtracks for Hollywood movies, Bollywood movies, huge video game titles and hit Netflix TV shows as well as creating music specially for peer reviewed scientific studies.

They're creating brand new music for you as we speak!

Aria's guiding principle...

Music is magic...

but *quality* matters.

We believe finding music that resonates with you personally is of fundamental importance to breathing practice. That's why the following ideals are written into what we do...

- A team of multiple world-class musicians from around the globe: That means more depth and variety in your sound choices
- Quality AND choice: Explore 170+ unique pieces of music at launch with more coming every week
- A full spectrum: Eventually we will provide multiple styles of breathwork.
- Never get bored: The Aria Library has more than 70 hours of music in each breathing speed (with lots more on the way!)
- From ambient and classical music... to hip hop... and even a heavy metal track!

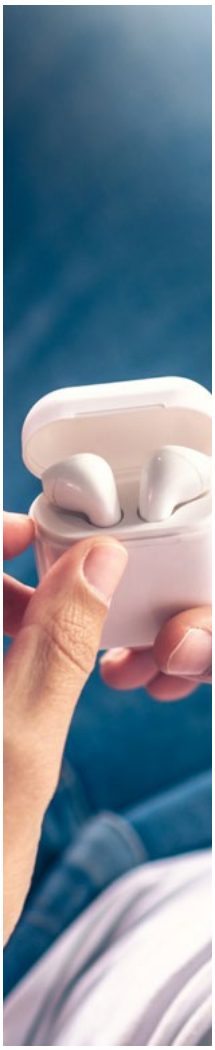
Spanning the genres gives you more to explore, fosters curiosity, and makes for *even* more enjoyment!

The power to connect...

It's been a long process...

... over a four-year development period we have been testing our music with groups of people from all walks of life... from music festivals and corporate events, to schools, yoga classes, high-end wellbeing retreats and simply working one-on-one.

So what's the one thing our listeners each have in common?...



They all feel more *connected*, not just to themselves, but to the complete strangers around them, after breathing with Aria Breath.

Many anthropologists believe that music precedes language as a form of communication and connection. When we combine the emotive power of music with its capacity to synchronize our nervous systems, we unlock new levels of capacity for connection with other people.

The applications for this are endless, whether working with teams, yoga classes, families, interpersonal disputes, business, personal, and even intimate relationships.

Where will you take it?

Learn to teach...

Using Aria Breath's music with your clients... or becoming a coach:

If you are a wellbeing professional, and you would like to use Aria Breath music in your classes or one-on-one sessions, it is *required* that you attend the basic certification course.

***Training available online OR in-person**

Certification doesn't just give you a license to use the music; it helps you to safely unlock the best possible results for your clients (... read on for the "why"!)

Who is this for?

This simple certification is ideal for...

- **Yoga professionals**
- **Breathworkers**
- **Bodyworkers**
- **Personal trainers**
- **Qigong teachers**
- **Coaches**
- **Counsellors**
- **Psychologists**
- **Health professionals**
- **Hypnotherapists**

There are two types of training provided...

1. License *Only*

Get your license to chill!

This affordable option is ideal if you are an existing health and holistic professional with prior certifications, interested in sharing the benefits of breathwork with your clients, and you wish to use the Aria Breath music library and unique techniques to enhance your offering.

2. *Full* Aria Breath Coach Training

Make it a career!

This option is ideal for anyone looking to teach breathwork and meditation as their primary income. The training we provide you with will enable you to deliver... a one-off event, a deep 6-part course, and personal one-on-one guidance... as well as the tools to continuously reinvent your sessions allowing you to offer something different and valuable every time for on-going clients.

Great news!
The cost of your pre-launch membership is redeemable against all training options!

See online for details.

Why train?

Life-time access to the Aria Breath music library included…

No subscription. Licensees & Coaches get lifetime access to Aria Breath's music library included with their training. That includes all forms of practices, and all the music that is yet to come. Those who have already purchased lifetime membership will have this amount discounted from the cost of their teacher training.

Not just breathing…

Both courses will teach you the secret imperatives that prepare your participants' bodies and minds for breathwork and help them to achieve outstanding, tangible results… as well as how to use breathwork as a primer for insight-inducing personal development tools, and mind-blowing group activities.

This framework is based on award-winning breathwork author Tom Granger's years of journalistic research in breathwork, and includes rare and wonderful insights for practice, based on his years of teaching as well as his exclusive research interviews with Nobel Prize winning scientists, Olympic Gold Medallists, successful premier league football coaches, world-renowned yoga teachers and leaders in the world of physiology, neuroscience and breath research.

Access a support network of like-minded individuals…

Join in (optional) monthly, online drop-in sessions with Tom and other active coaches, to share top tips, get advice on how to progress, and voice your queries.

Making breathwork matter…

The Coach course doesn't just cover breath practices, it includes insights into how to become a successful breathwork coach, from Tom's own personal journey… from sharing breathwork in empty yoga studios… to being invited to facilitate at huge global festivals, and being trusted to deliver events with huge Fortune 500 organizations.

The training includes guidance on how to deliver unique fast-track methods for sharing the benefits of breathwork, honed over years of trial and error – After attending, you will be able to convince even the most skeptical event participants to join and give it a try!

PLUS unlock Limited Edition tracks…

Full coaches get access to a handful of exclusive, extended tracks that are written and recorded specially for teaching.

AND earn generous commission…

We know that when you are using Aria Breath tracks with your clients and classes, participants will inevitably ask you where they can access the music for themselves.

At this point, you can give them a special 20% discount code that is unique to you and tailored to your brand. Whenever one of your students uses your special code to access the app, you get a generous commission that will likely cover your training costs within a few sessions.

Your clients get a discount, you get paid a commission, and the Aria Breath community gets a new member, everyone wins!

And finally…

This is fun!

The reason Tom has spent the last three years building Aria Breath is because teaching this is one of the fastest ways to make other people feel good… and that feels good!

Relaxation and restoration is sorely needed, now more than ever, being a licensed Aria Breath coach is one, very easy, way to help the world and your community.

What do the *experts* think of Aria Breath?

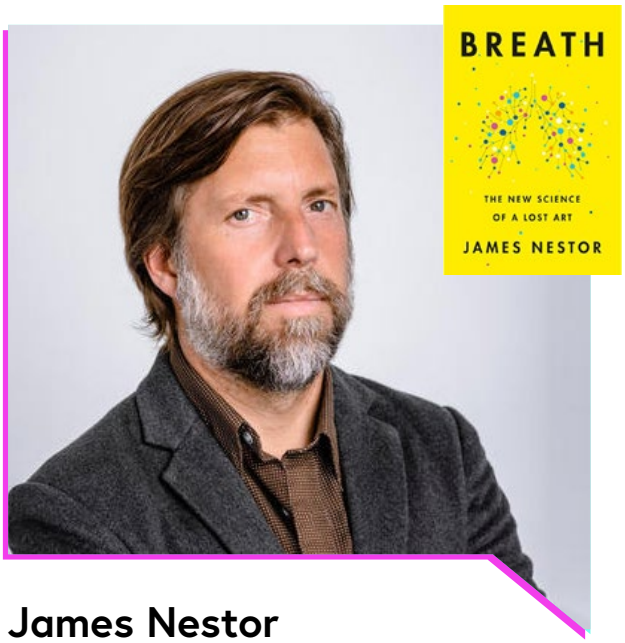
Reviews from people in the know...

These leading breathwork luminaries are amongst those who have had early access to Aria Breath. Here's what they think...

Patrick McKeown

"Aria Breath's beautiful, calming music is *perfect* for breath-pacing."

Patrick McKeown is a bestselling author, TED speaker and founder of the *Oxygen Advantage.*



James Nestor

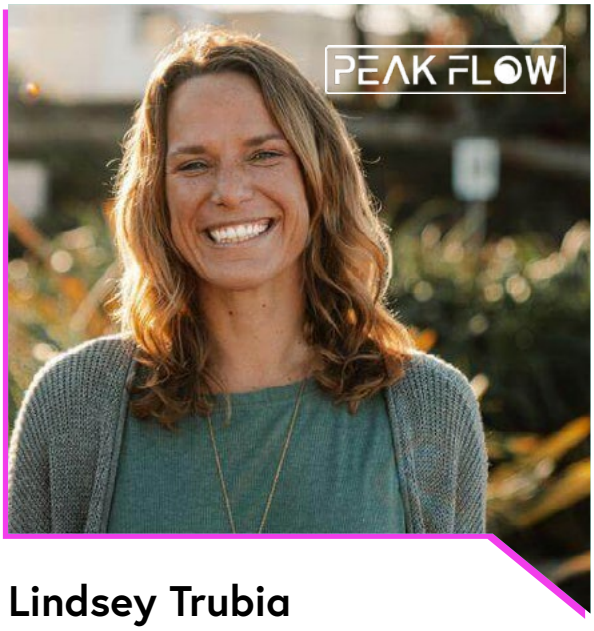
"Aria Breath is a *panoply* of symphonic earwigs designed to entrain the body, mind, and psyche into that magical, mysterious, and medicinal resonant breathing rhythm."

James Nestor is the New York Times Bestselling author of *"Breath; The New Science of a Lost Art"*

Mike Maher

"I can't believe it took this long for someone to make this app... It's such a simple, brilliant idea. And so well executed. The music is awesome!"

Mike Maher is YouTube's *most-viewed* breathwork coach and host of *The Breathcast* podcast.



Lindsey Trubia

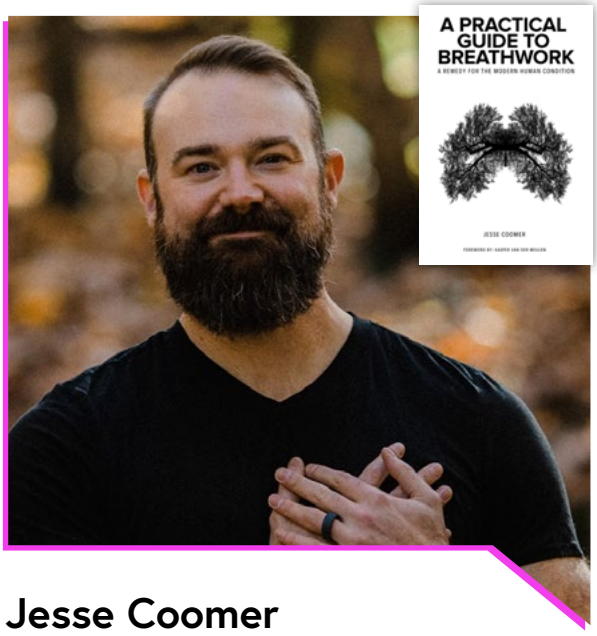
"Aria Breath is a unique "must-have" in the breath-training space. We are pleased to partner with Aria, allowing our practitioners to enhance their training within the breath ecosystem."

Lindsey is the CEO of *PeakFlow* – Inspired by Nature, optimizing Human potential, one Breath at a time.

Dr Belisa Vranich

"Aria Breath tracks are exquisite in that they support your breath pace... without being intrusive. The melodies are a perfect balance of deep and layered, but don't distract. I love them and use them in my own practice."

Dr Vranich is the author of the bestselling breathwork books *"Breathe"* and *"Breathing for Warriors"*.



Jesse Coomer

"Tom Granger has created an easy way to practice the breathing technique we all *should* do, but often *don't* do. Aria Breath makes it easy, fun... and blissful."

Jesse Coomer is the author of two fantastic books on breathwork, *"A Practical Guide to Breathwork"* and *"The Language of Breath"*

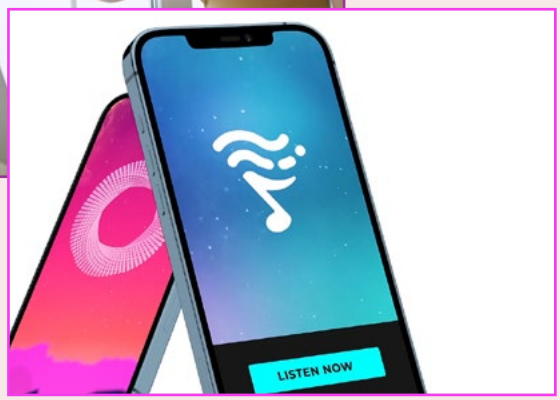
What to do next...

Learning about the science and benefits is one thing but we need to do the practice to get there... So let's get started... *right now!*

If you have access to this document, then you also have access to the Starter Pack. You can begin with the audio which features the best track for beginners — the ultra-minimal *"Aria Piano".*

You can also explore the relaxing animation specials, each of which features a different piece of music from the Aria library. If you like the music and can feel the relaxing effects... that's probably a sign that you should get an app membership and join the community!

I feel confident saying that there really is nowhere else on the planet right now that has this much choice for breathwork music than this independent, creativity-led operation!



Two ways to *supercharge* your practice:

1. Join me this week for a FREE Sunday session!

2. Get the app ASAP and start on your own!

IMPORTANT:

Membership is considerably more affordable when you join through the AriaBreath.com website (as opposed to paying inside the app).

This is because I would *much* prefer that you keep your hard-earned money rather than hand it to me, only for me to have to give it to Apple and Google via *"in-app purchase"* commissions.

The *life-time memberships* are for pre-launch and year-one adopters only.

They will not be around forever – so grab one while you can!

PLUS...

... for being a massive breath-nerd and making it to the end of this introductory PDF, here is an offer just for you...
Use the special code "BREATH_NERD_10" to redeem a tasty £10 discount on life-time membership!
(This code works on "Pre-launch Forerunner" memberships only, which are limited to 200 and selling fast)

A personal note from Tom...

Hey breath seeker! Thank you for checking out the Starter Pack and this free Quick Guide PDF!

As you may have already gathered, I am just about to launch the **world's largest library of music specially created for guiding the breath at resonance frequency.** I created the Aria Breath music library (and training courses) because it is the resource that I wish I had myself had access to four years ago at the beginning of my journey into this technique!

If you know my previous creative health projects, such as *"Draw Breath: The Art of Breathing"*, you know that it is my passion to share meaningful knowledge and ancient practices in modern, engaging, and artful ways that help us to connect deeply with ourselves and one another. I am aiming for Aria Breath to be my biggest project to date and I'd love for you to be a part of it!

I hope that you will join me on this journey right from the start.

Best wishes and breathe easy, Tom

Who is Tom Granger?

Tom is an award-winning breathwork author and globally sought-after speaker in the modern breathing revolution.

Tom is on a mission to demystify ancient breathing techniques and give you the tools and resources to effortlessly master your own health.

He creates books, events, courses, and resources that make learning easy, experiential, and science-based, whilst illuminating life-changing breathing practices.

Tom's unique and creative take on breathing and meditation has been applauded by the leading names in yoga and psychological research from Donna Farhi to Jon Kabat-Zinn. And he has been trusted to write the teacher training manuals for globally recognized breathwork organizations.

If you're just getting started on your breathwork journey, check out Tom's multi-award-winning beginner's guide; *"Draw Breath; The Art of Breathing"* *(2019)*

And look out for Tom's upcoming book **"Breathe-In Harmony; Discover the ancient magic of slow, rhythmic breathing for your head, heart, and health" (2024)** and learn about his adventures into the ancient history and contemporary use of this incredibly simple technique.

Here are just some of the incredible people you'll meet inside the pages:

- The Russian scientist whose research into breath was so powerful that it was kept strictly secret by his government.
- The Olympian who became the first ever athlete to win a gold medal for his country... using breathwork.
- The remarkable forgotten women who were the first to write the practice down (in the 1890s!)
- The pioneers using simple breathwork techniques to heal complex trauma.

... And many other fascinating characters!

If you're on the Aria mailing list, don't worry, you'll be offered a pre-release copy of *"Breathe-In Harmony"* before anyone else!