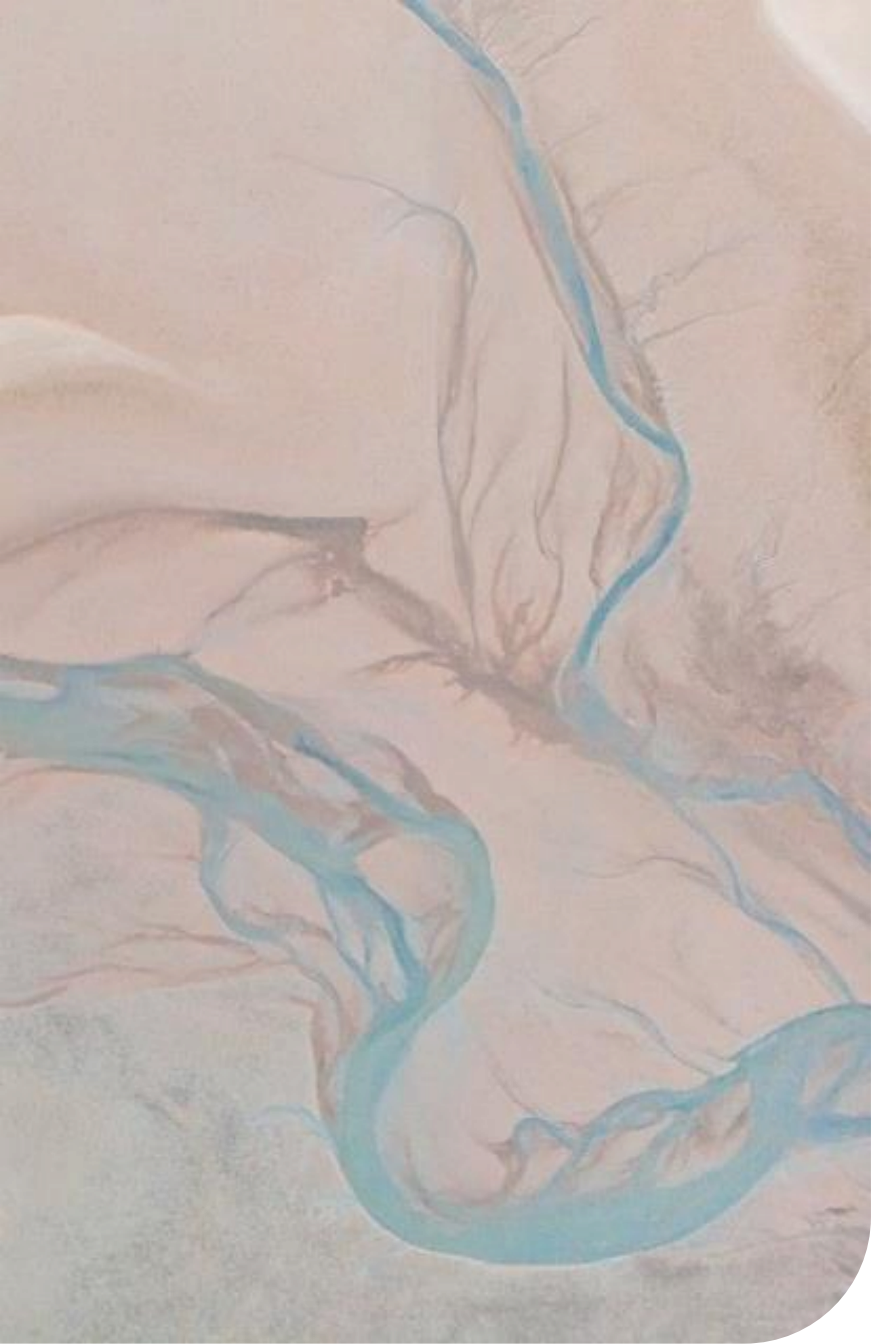


INTUITIVE BREATHWORK MASTERCLAS S

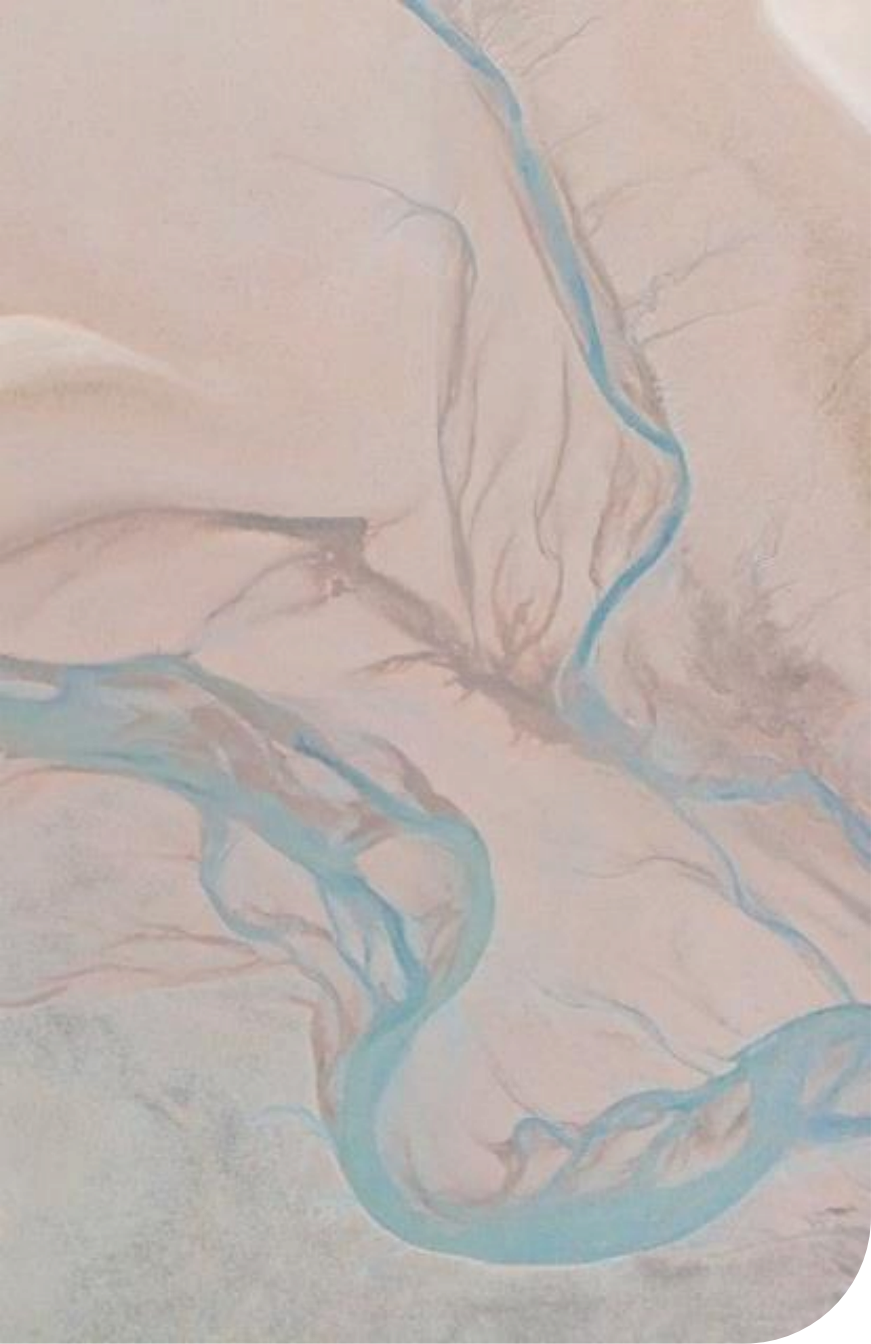
By Kia Burns





AGENDA

01	Breathwork Overview
02	History & Types
03	Benefits & Studies
04	Session Structure
05	Stored Trauma



AGENDA

06	Physical Emotions
07	The Reset
08	Demonstration
09	Q & A
10	Full Breathwork Journey

WHO AM I?

- Born & raised in Salt Lake City UT
- Dropped out of college
- Became a top Realtor in country
- Top house flipper in state
- Wake up call
- Psychedelics
- Compounded trauma & grief
- Breathwork
- Committed to Global Healing
- Survivor Advocate for The Rape Recovery Center
- Found my very own Dire Wolf (Not really a wolf)
- Created Intuitive Breathwork & Soul Retrieval Pathway



WHAT IS BREATHWORK?

BREATHWORK

A guided practice that uses intentional, deep, and circular breathing techniques to bypass the subconscious mind, stimulate the pituitary gland, and reset the autonomic nervous system (ANS)

By shifting the rhythm and depth of the breath, individuals can stimulate and experience a rebound effect dropping into their parasympathetic nervous system, bringing them back into their bodies with a new sense of peace, connection and clarity.

ENTERIC NERVOUS SYSTEM (ENS)

- Gut motility
- Digestion
- Brain and gut communication
- “Second Brain”

HOW DOES BW AFFECT THE ANS?

Different breathing patterns send signals through the nervous system that change how the brain and body respond. Slow, deep breaths activate the parasympathetic system.

This lowers heart rate, reduces blood pressure, and calms stress hormones like cortisol.

CORTISOL

Cortisol is a steroid hormone produced by the adrenal glands, often called “The Stress Hormone.” It regulates metabolism, immune response, and stress reactions.

CORTISOL CONTINUED

Effects on the Body: Cortisol is the body's main stress hormone. In short bursts, it raises blood sugar and energy while shutting down non-essential functions like digestion and immunity. But when cortisol stays high for too long, it can cause anxiety, sleep problems, weight gain, and a weaker immune system. Breathwork helps lower cortisol, bringing the nervous system back into balance.

HOW DOES BW AFFECT THE ANS?

Faster or more intense breathing can briefly activate the body's stress response. This short-term arousal isn't harmful: It can actually help build resilience to stress and improve emotional regulation. These effects are physical, not just mental, supporting better oxygen balance and stronger communication between the lungs and brain.

VAGUS NERVE STIMULATION

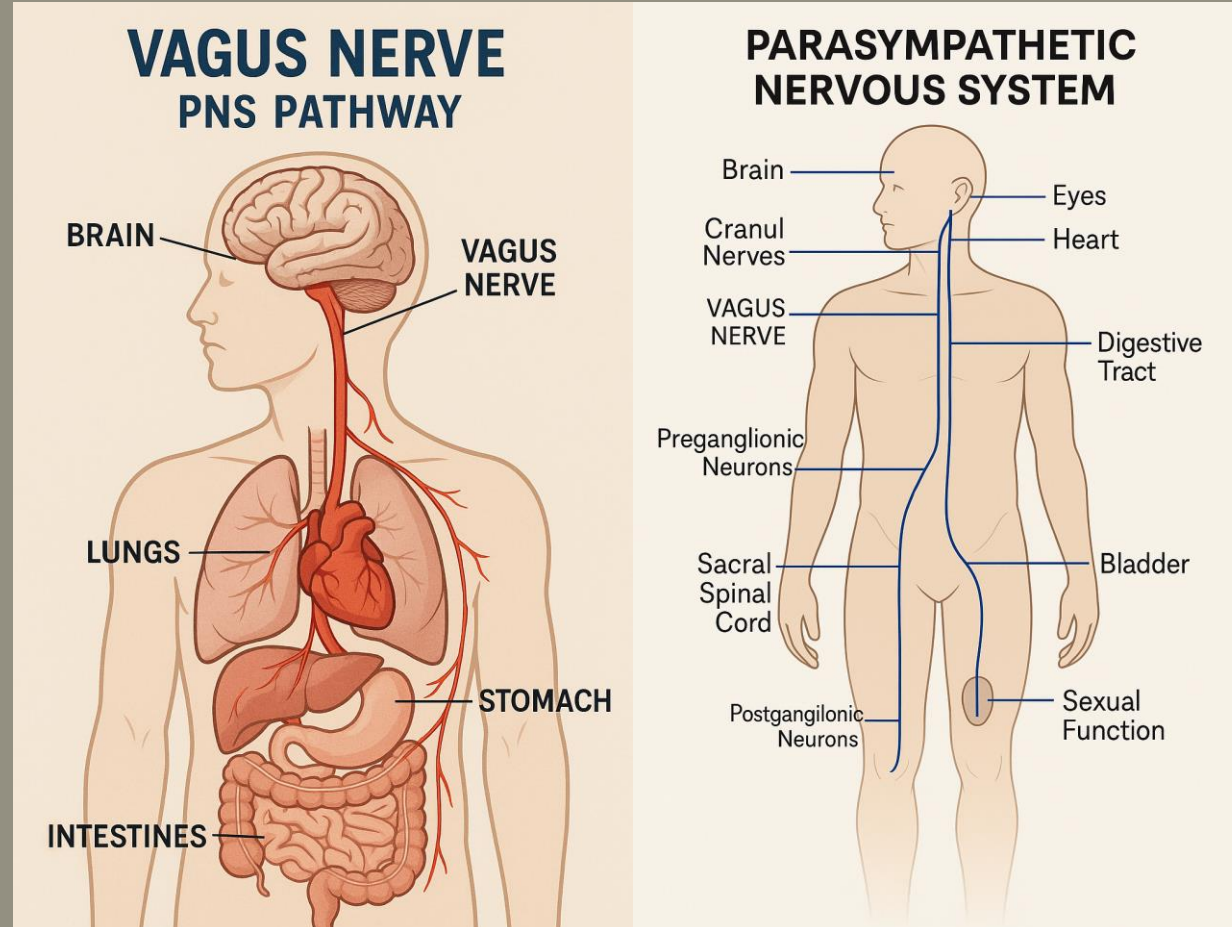
The vagus nerve is a major pathway of the parasympathetic system, carrying signals from the body to the brain. Slow breathing, especially with long exhales, activates this nerve through stretch receptors in the lungs and diaphragm. It's like pressing the body's "calm button," slowing the heart and promoting deep relaxation.

VAGUS NERVE STIMULATION

When slow, deep breathing stimulates the vagus nerve, it shifts the body into parasympathetic mode. This not only slows the heart and promotes relaxation but also signals the adrenal glands to reduce the release of cortisol levels.

In other words, activating the vagus nerve through breathwork helps lower stress hormones while calming the nervous system.

VAGUS NERVE STIMULATION

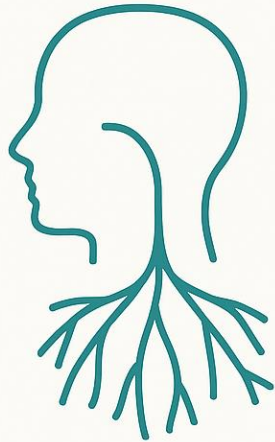


VAGAL TONE

The measure of how active and effective the vagus nerve is. Higher vagal tone means the body can shift more easily from “fight or flight” into “rest and digest,” supporting calm, healthy digestion, stress recovery, and emotional balance.

VAGAL TONE VS VAGUS NERVE:

VAGUS NERVE



the structure

VAGAL TONE



the measure of
how well that nerve
is working to
regulate your body

SUMMARY

The vagus nerve is the body's main pathway for sending relaxation signals to the brain. Slow, deep breathing, especially long exhales, strengthens this signal, which slows the heart and eases the body into a calmer state.

HEARTRATE VARIABILITY

(HRV) is the time between each heartbeat. Higher HRV means the nervous system is flexible and resilient. It can shift smoothly between stress and recovery.

Younger adults usually have higher HRV, while older adults tend to have lower HRV. One way this is measured is with rMSSD, (Root Mean Square of the Successive Differences) a method that looks at the short term variation between heartbeats.

HEARTRATE VARIABILITY

YoungAdults (20–30 yrs)

Typical range: 50–100+ ms

Average: around 75 ms

Middle Age (40–50 yrs)

Typical range: 30–60 ms

Average: around 40–50 ms

Older Adults (60+ yrs)

Typical range: 15–35 ms

Average: around 20–30 ms

IMPLICATIONS OF HEARTRATE VARIABILITY

- High HRV (more variability) strong vagal tone, good stress recovery, resilience, and overall heart and emotional health.
- Low HRV (less variability) weaker parasympathetic activity or ongoing stress. It's often linked with anxiety, poor sleep, burnout, and chronic health issues.

IMPLICATIONS OF HEARTRATE VARIABILITY

Implications of HRV

High HRV

(more variability)

- Strong parasympathetic/vagal tone
- Greater adaptability to stress
- Better recovery after exercise
- Good cardiovascular health, and emotional regulation

Low HRV

(less variability)

- Reduced parasympathetic activity
- Stress, anxiety, burnout
- Poor sleep, overtraining
- Chronic illness (e.g., heart disease, diabetes, depression)

CLINICAL USE OF HRV

HRV is used as a non-invasive biomarker of nervous system health. Low HRV is linked with higher risk of cardiovascular events and all-cause mortality, though it's not diagnostic on its own.

SUMMARY

HRV is the small variation in time between heartbeats and shows how balanced the nervous system is. Young adults usually have higher HRV, while it tends to be lower with age. Slow, deep breathing can raise HRV by activating the parasympathetic system, helping the body relax and supporting heart health.

RESPIRATORY SINUS ARRHYTHMIA

RSA is the natural rhythm where the heart speeds up a little when you inhale and slows down when you exhale. Breathing at about 5–6 breaths per minute makes this rhythm stronger. A gentle stress response on the inhale, followed by deeper relaxation on the exhale.

The Bainbridge reflex helps regulate these changes, creating a balance between mild activation on the inhale and deeper relaxation on the exhale.

THE BRAINBRIDGE

Adjusts heart rate based on how much blood is returning to the heart. By influencing vagus nerve activity, it helps improve oxygen exchange and prevent the stress system from overreacting. This reflex supports parasympathetic activity, leading to higher HRV and lower cortisol levels.

SUMMARY

HRV shows how flexible and resilient your nervous system is. At 5–6 breaths per minute, the heart speeds up slightly on the inhale and slows on the exhale. This rhythm is called respiratory sinus arrhythmia “RSA.” This balance improves oxygen flow, lowers cortisol, and helps the body adapt to stress.

BAROREFLEX

Refers to the sensors in blood vessels to track blood pressure and signal the brain to adjust heart rate. Slow breathing (around 6 breaths per minute) strengthens this reflex, reducing stress-related blood pressure spikes. Breath holds can also shift carbon dioxide levels, which further supports relaxation and quiets the stress response.

CENTRAL CHEMORECEPTORS

Located in the brainstem and monitor carbon dioxide (CO_2) and pH levels in the fluid around the brain. They signal the body to adjust breathing to keep these levels balanced.

DIAPHRAGM & MECHANICAL EFFECTS

When the diaphragm contracts during deep breaths, it creates pressure changes that move blood and spinal fluid through the body. These gentle shifts send calming signals that can “reset” the nervous system, reduce stress responses (SNS) promoting relaxation (PNS).

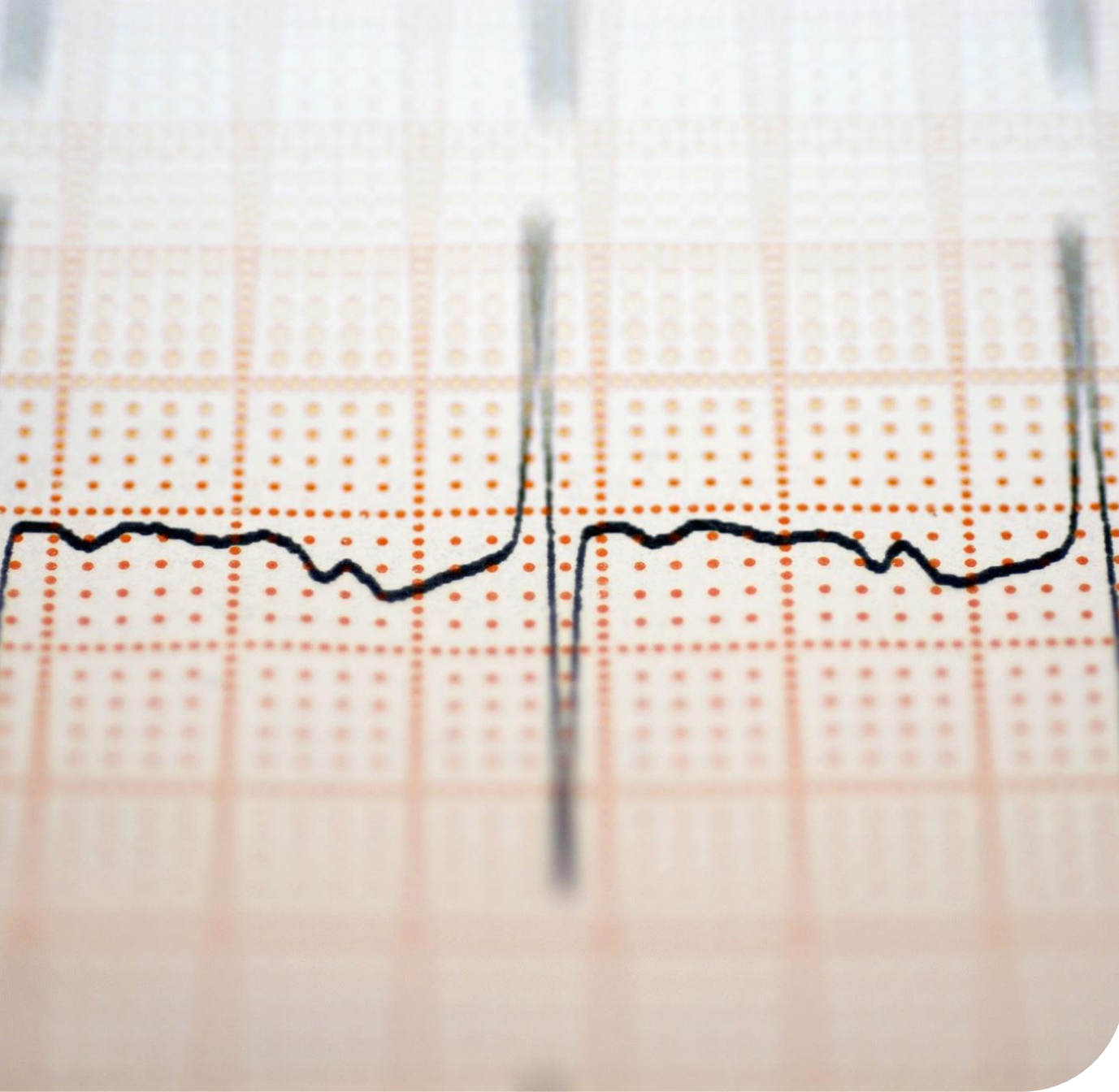
NEURAL OSCILLATIONS & CENTRAL NERVOUS SYSTEM INTEGRATION

Breathing can change brain activity by boosting calming alpha waves and moving fluid around the brain and spine through the diaphragm. This helps regulate emotions and thoughts by coordinating different brain areas. Nasal breathing makes this effect stronger by stimulating nerves in the

Think of breath as a conductor leading an orchestra, keeping the brain and body working in harmony.

WORKING TOGETHER

The baroreflex acts like a pressure gauge for blood pressure, while chemoreceptors act like a thermostat for CO₂ and pH. Slow, steady breathing supports both, helping the body stay calm and balanced.



REBOUND EFFECT

When you briefly hold your breath (retention), carbon dioxide levels rise slightly, and blood pressure shifts. Baroreceptors and chemoreceptors sense these changes and signal the body to adjust. Once normal breathing resumes, there's a rebound: the parasympathetic system activates strongly, lowering heart rate, calming blood pressure, and reducing stress signals.

SUMMARY

Slow, steady breathing engages several systems that keep the body balanced. The baroreflex adjusts heart rate with blood pressure, while chemoreceptors monitor CO₂ and pH to guide breathing. The diaphragm creates pressure shifts that move blood and spinal fluid, sending calming signals to the nervous system. Breathing also boosts alpha brain waves, supporting emotional regulation and focus, especially through nasal breathing. Together, these mechanisms reduce stress and promote relaxation. During breath holds, CO₂ and blood pressure rise slightly, and when normal breathing resumes, a rebound effect activates the parasympathetic system, lowering heart rate and easing stress.

DYSREGULATED NERVOUS SYSTEM

1

Emotional Volatility

Anxiety, irritability, or mood swings; slow to calm down

2

Imbalanced Physiology

Low HRV, racing heart, erratic blood pressure, shallow/rapid breathing

3

Poor Sleep

Trouble falling/staying asleep, non-restorative sleep

4

Chronis Stress

Persistent hypervigilance, slow recovery from stress

5

Digestive Issues

Irregular appetite, vomiting, bloating, constipation, or diarrhea

DYSREGULATED NERVOUS SYSTEM

6

Cognitive Fog

Difficulty focusing, racing thoughts, or indecision

7

Physical Tension

Chronic muscle tightness, headaches, or trembling

8

Social Withdrawal

Feeling unsafe or disconnected in social settings

9

Poor Adaptability

Overreacting to changes or feeling stuck

10

Energy Imbalance

Fatigue, energy crashes, or circadian misalignment

REGULATED NERVOUS SYSTEM

1

Emotional Stability

Calm, proportionate responses; quick recovery from stress

2

Balanced Physiology

High heart rate variability, stable heart rate, blood pressure, and breathing

3

Restful Sleep

Easy to fall/stay asleep, waking refreshed

4

Effective Stress Response

Appropriate alertness during stress, quick return to calm

5

Healthy Digestion

Regular appetite and bowel movements, minimal discomfort

REGULATED NERVOUS SYSTEM

6

Clear Thinking

Good focus, manageable decision-making

7

Physical Ease

Relaxed muscles, no chronic tension

8

Social Connection

Comfortable engagement, supported by vagal tone

9

Adaptability

Adjusts to change without excessive anxiety

10

Stable Energy

Consistent energy, aligned with daily rhythms

HISTORY ON BREATHWORK

- **Ancient Roots (~3000 BCE–500 BCE):** Originated in India with *Pranayama* (yogic breath control), China with Taoist *Qigong*, and Buddhist with *Anapanasati* meditation. Indigenous cultures also used breath in rituals.
- **Middle Ages:** Continued in Eastern traditions (yoga, martial arts) and appeared in Christian mysticism (e.g., Hesychast prayer).
- **Modern Era (19th–20th Century):** Western interest grew via yoga's spread and early psychotherapy (e.g., Reich, Schultz). In the 1970s, *Holotropic Breathwork* (Grof) and *Rebirthing* (Orr) emerged, focusing on emotional and spiritual release.

TODAY (21ST CENTURY)

Breathwork has become one of the most in demand practices in holistic health, expanding from yoga studios into apps, corporate programs, and mainstream healthcare.

TYPES OF BREATHWORK REVIEWED TODAY

- **Box Breathing**
- **Nadi Shodhana (Pranayama)**
- **Holotropic**
- **Wim Hof Method**



BOX BREATHING

- Box breathing, also referred to as square breathing, four-square breathing, or tactical breathing. It is a structured breathing technique that involves a deliberate, rhythmic pattern where each part; inhalation, breath retention, exhalation, and a second retention, is held for an equal duration.
- 4 – 4 – 4 – 4 Rule
- This can be adjusted based on individual comfort level. The method is visualized as a square due to the symmetry of its four equal parts, making it both a practical and easy to remember tool for practitioners and patients

BOX BREATHING BENEFITS

1. Stress and Anxiety Reduction

- **Use Case:** Helps calm the nervous system by activating the parasympathetic response, reducing cortisol levels, and lowering heart rate.
- **Context:** Ideal for individuals experiencing acute stress, such as before a high-pressure event (e.g., public speaking, exams) or during moments of overwhelm.

2. Improved Focus and Mental Clarity

- **Use Case:** Enhances concentration by regulating breathing and oxygen flow to the brain, often used by athletes, performers, or professionals needing mental sharpness.
- **Context:** Useful before tasks requiring focus, such as studying, decision-making, or creative work.

3. Emotional Regulation

- **Use Case:** Helps individuals manage intense emotions (e.g., anger, frustration) by providing a structured way to pause and regain control.
- **Context:** Effective in group settings, such as team-building workshops or community gatherings, to create a calm, centered atmosphere.

BOX BREATHING BENEFITS CONTINUED...

4. Mindfulness and Meditation Support

- **Use Case:** Serves as an entry point to mindfulness, helping participants stay present through rhythmic breathing and counting.
- **Context:** Can be integrated into meditation classes, yoga sessions, or wellness workshops as a foundational practice.

5. Physical Relaxation and Recovery

- **Use Case:** Reduces physical tension and promotes recovery by slowing the heart rate and relaxing muscles.
- **Context:** Useful for athletes and post-workout, individuals with insomnia, or anyone needing to unwind physically.

6. High-Stress Professions

- **Use Case:** Widely used by military personnel, first responders, and healthcare workers to stay calm under pressure.
- **Context:** Effective in high-stakes environments where quick stress management is critical (e.g., before emergency response or during intense situations).

BOX BREATHING BENEFITS CONTINUED...

- **Accessibility:** Requires no equipment and can be done anywhere (sitting, standing, or lying down).
- **Quick Impact:** Even 1–2 minutes can produce noticeable calming effects.
- **Scalability:** Suitable for individuals or groups, in-person or virtual settings.
- **Science-Backed:** Research supports its ability to lower stress and improve focus by regulating the autonomic nervous system

RELEVANT STUDIES

- **Study 1: Brief Structured Respiration Practices Enhance Mood and Reduce Physiological Arousal**
- **Source:** Cell Reports Medicine, 2023
- **Findings:** This randomized controlled study compared box breathing (equal 4-second phases) with other breathwork techniques and mindfulness meditation. Box breathing significantly improved mood and reduced respiratory rate, with effects linked to increased vagal tone via heart rate variability (HRV). This supports its efficacy for stress reduction in your program's medical and productivity-focused applications.

Study 2: Slow Breathing Improves Cardiac Vagal Tone and Reduces Stress

- **Source:** *Scientific Reports* (2020)
- **Findings:** This randomized controlled trial examined the effects of slow diaphragmatic breathing (6 breaths per minute for 10 minutes) on vagal tone and stress in healthy adults. The study found a significant increase in heart rate variability (HRV), a marker of vagal tone, and a reduction in subjective stress levels. The researchers concluded that slow breathing, similar to the pattern used in box breathing, enhances vagus nerve activity, promoting parasympathetic dominance and emotional regulation.

RELEVANT STUDIES CONTINUED

Study 3: Diaphragmatic Breathing Enhances Heart Rate Variability and Stress Reduction

- **Source:** *Frontiers in Physiology* (2018)
- **Findings:** This study investigated slow diaphragmatic breathing (6–10 breaths per minute) and found that 5 minutes of practice significantly increased HRV, indicating improved vagal tone, and reduced perceived stress in healthy adults. The results suggest that the rhythmic breathing used in techniques like box breathing supports relaxation by enhancing vagus nerve activity.

Study 4: Diaphragmatic Breathing Reduces Cortisol and Improves Vagal Tone

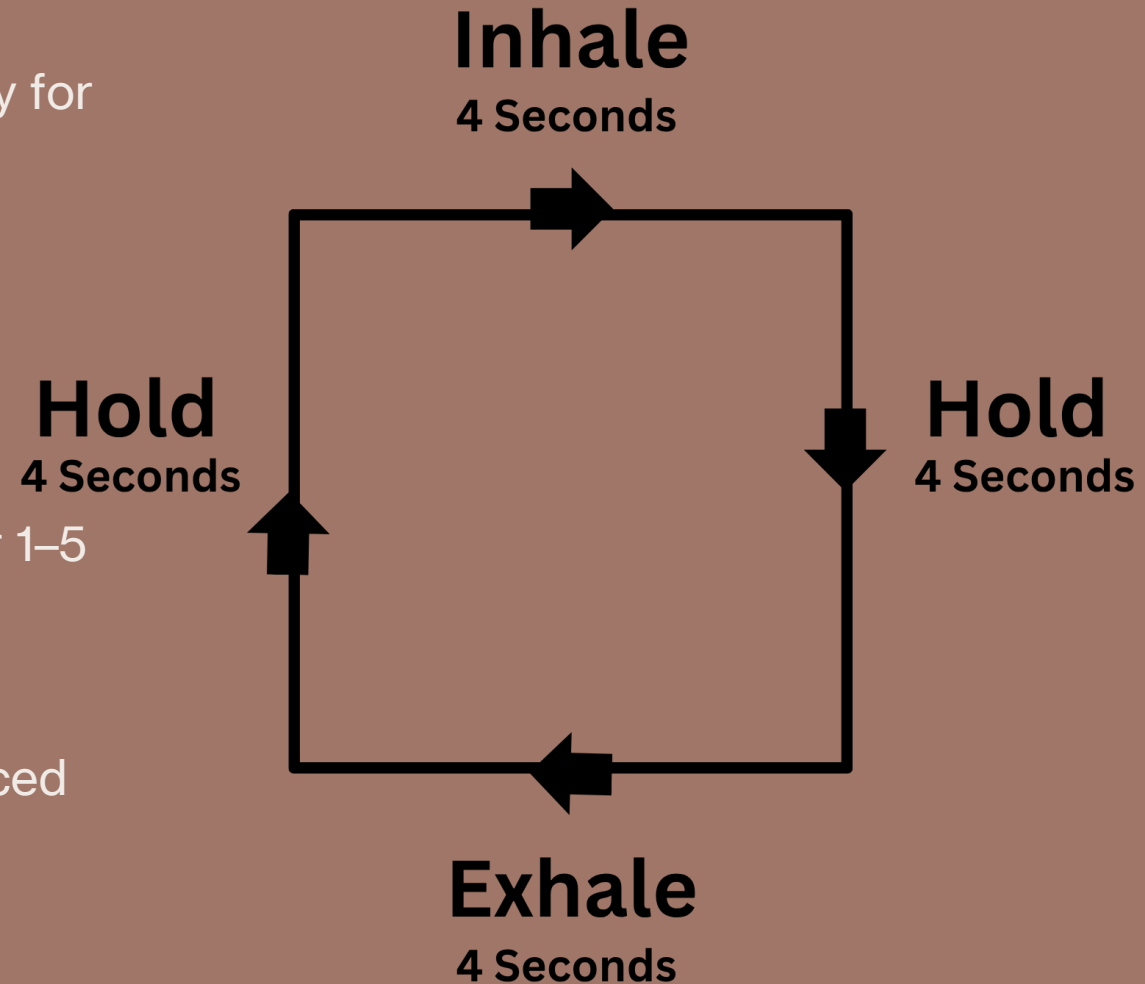
- **Source:** *Journal of Clinical Medicine* (2017)
- **Findings:** This study found that diaphragmatic breathing interventions lowered cortisol levels (a stress hormone) and increased HRV, indicating improved vagal tone, in participants under stress. The results support the use of structured breathing practices, like box breathing, for stress reduction and nervous system regulation.

APPLICATION – PNS ACTIVATION EXERCISE

Box breathing consists of four equal phases:

1. **Inhale:** Breathe in deeply through the nose into the belly for a count of 4 seconds.
2. **Hold:** Hold your breath for 4 seconds.
3. **Exhale:** Exhale slowly through the nose for 4 seconds.
4. **Hold:** Hold your breath again for 4 seconds.
5. Repeat the cycle for several rounds (e.g., 4–8 cycles or 1–5 minutes).

The consistent rhythm and focus on counting make it accessible and calming, suitable for beginners and advanced practitioners alike.



NADI SHODHANA [NA-DEE-SHO-DUH-NUH]

Nadi Shodhana, also known as **alternate nostril breathing**, is a yogic breathing technique (pranayama) rooted in ancient Indian practices, particularly within the traditions of yoga. The term “Nadi Shodhana” comes from Sanskrit, where *nadi* means “channel” or “flow” and *shodhana* means “purification.” This practice is designed to balance and purify the energy channels (nadis) in the body, promoting physical, mental, and emotional well-being.

NADI SHODHANA [NA-DEE-SHO-DUH-NUH]

Nadi Shodhana involves alternating the breath through one nostril at a time while closing the other nostril with the fingers. It is typically performed in a seated, meditative posture and is believed to harmonize the left and right hemispheres of the brain, balance the sympathetic and parasympathetic nervous systems, and clear blockages in the body's subtle energy channels.

NADI SHODHANA [NA-DEE-SHO-DUH-NUH]

According to yogic philosophy, the body has thousands of nadis, but the primary ones involved in this practice are the **Ida** (left nostril, associated with lunar, cooling, and *feminine* energy) and **Pingala** (right nostril, associated with solar, warming, and *masculine* energy). Nadi Shodhana aims to balance these energies to awaken the central channel, **Sushumna**, fostering a state of equilibrium and clarity.

NADI SHODHANA BENEFITS

- 1. Balances the Nervous System:** Nadi Shodhana is believed to balance the sympathetic and parasympathetic nervous systems, promoting a state of calm alertness. It may help reduce stress and anxiety by activating the parasympathetic response.
- 2. Improves Respiratory Function:** The practice enhances lung capacity and efficiency by encouraging slow, controlled breathing. It can improve oxygen flow and clear nasal passages, supporting better respiratory health.
- 3. Enhances Mental Clarity and Focus:** By harmonizing the left and right brain hemispheres, Nadi Shodhana may improve concentration, cognitive function, and mental clarity, making it useful for tasks requiring focus.
- 4. Reduces Stress and Anxiety:** The slow, rhythmic breathing pattern can lower cortisol levels, calm the mind, and alleviate feelings of stress or overwhelm, promoting emotional balance.

NADI SHODHANA BENEFITS CONTINUED

5. **Improves Cardiovascular Health:** Some studies suggest that Nadi Shodhana may lower heart rate and blood pressure, support heart health and improving circulation.
6. **Promotes Emotional Balance:** The practice is thought to balance energy channels (nadis) in the body, fostering emotional stability and reducing mood swings.
7. **Enhances Sleep Quality:** By calming the nervous system, Nadi Shodhana can help with insomnia or poor sleep, promoting relaxation and better rest.
8. **Supports Detoxification:** The controlled breathing may aid in clearing out carbon dioxide and toxins from the body, supporting overall physical health.

RELEVANT STUDIES

- **Study 1. Stress in Pregnant Survivors of Intimate Partner Violence**
- **Source:** Referenced in Cleveland Clinic (2022).
- **Findings:** This study found that alternate nostril breathing helped lower stress levels in pregnant survivors of intimate partner violence, indicating its potential to support emotional regulation and stress reduction in specific populations.

- **Study 2. 2020 Study on Cardiovascular Benefits**
- **Source:** Referenced in Healthline (2023) and Shvasa (2024).
- **Findings:** This study involved 100 healthy medical students practicing alternate nostril breathing for four weeks. Participants showed improvements in pulse and blood pressure biomarkers, indicating potential benefits in reducing risk factors associated with cardiovascular disease, such as stress.

RELEVANT STUDIES CONTINUED

- **Study 3. 2018 Study on Stress Levels**
- **Source:** Referenced in Healthline (2023).
- **Findings:** A 2018 study showed that men who practiced alternate nostril breathing for 30 minutes daily over three months had significantly lower perceived stress levels compared to a control group that did not perform breathing exercises. This suggests a reduction in stress-related biomarkers with regular practice.

- **Study 4. 2025 Study on Hypertension and Autonomic Function**
- **Source:** AllMS Rishikesh (2025).
- **Findings:** In hypertensive participants, 10 minutes of daily Nadi Shodhana for six weeks significantly reduced systolic and diastolic blood pressure, lowered heart rate, and increased heart rate variability measures (SDNN, RMSSD, total power), suggesting improved autonomic balance and cardiovascular health.

APPLICATION – PNS ACTIVATION EXERCISE

1. Place pointer and middle finger on your forehead. Close the nostril closest to your thumb, inhaling deeply and slowly through the opposite nostril.
2. Shift the hand position plugging the other nostril with the ring and pinky fingers. Exhaling through the nostril that was just unplugged
3. Inhale through that same nostril
4. Shift the hand position to plug the nostril closest to the thumb and exhale. This completes one cycle.
5. Continue alternating for 5–10 cycles maintaining slow, even, and controlled **belly** breaths.

HOTOTROPIC

Holotropic breathwork is a psychotherapeutic technique involving controlled, rapid, and deep breathing patterns, typically accompanied by evocative music, to induce altered states of consciousness for psychological, emotional and spiritual exploration.

Developed by Stanislav and Christina Grof, it aims to facilitate access to heightened states of consciousness, activating the autonomic nervous system and altering brainwave activity, leading to heightened emotional release, memory processing, or transpersonal experiences.

HOLOTROPIC

Sessions typically last **2 to 3 hours** for the core breathing component, with additional time for preparation and integration often making the entire experience span 4 to 8 hours, depending on the setting and group size.

Trained facilitators monitor the room, offering support if participants experience distress or need encouragement. Sitters remain attentive to their breather's needs, providing water, tissues, or a reassuring presence.

HOLOTROPIC BENEFITS

- **Emotional Release and Healing:**
- Facilitates the release of suppressed emotions (e.g., grief, anger, fear), helping process unresolved traumas or life experiences.
- **Increased Self-Awareness:**
- Enhances insight into personal patterns, behaviors, or beliefs through altered states, as shown in a 2015 study (*Journal of Alternative and Complementary Medicine*), which reported improved temperament and character traits.
- **Improved Life Satisfaction:**
- A 2021 study (*Journal of Psychedelic Studies*) found significant increases in life satisfaction 4 weeks post-session, with participants reporting a sense of renewal or clarity.
- **Stress and Anxiety Reduction:**
- Reduces symptoms of stress or anxiety by activating the autonomic nervous system and promoting relaxation post-session, though evidence is less robust than for slower breathwork techniques.

HOLOTROPIC BENEFITS CONTINUED

- **Spiritual Connection:** Facilitates mystical or spiritual experiences, such as feelings of unity or transcendence.
- **Enhanced Mindfulness:** Increases present-moment awareness and focus.
- **Physical Tension Relief:** Releases physical tension through somatic sensations like tremors or warmth.
- **Psychological Integration:** Supports processing insights for emotional grounding and growth.
- **Trauma Resolution:** May help process traumatic memories in a safe, facilitated setting.
- **Creative Inspiration:** Sparks creativity or new perspectives through altered states and expressive activities.

RELEVANT STUDIES

- **Study 1: An experience with Holotropic Breathwork (2021)**
- **Source:** Frontiers in Psychology / ResearchGate
- **Findings:** A single HBW session led to significant reductions in self-reported stress, with effects lasting up to 4 weeks.

- **Study 2: Scoping Review of Breathwork for Anxiety Disorders 2023**
- **Source:** Banushi et al. (2023), scoping review in Brain Sciences.
- **Findings:** Breathwork interventions – including hyperventilation-based techniques like holotropic – demonstrated significant improvements in anxiety symptoms among adults with clinically diagnosed anxiety disorders. The role of hyperventilation remained inconsistently linked to outcomes.

RELEVANT STUDIES CONTINUED

- **Study 4: Anxiety and Self-Esteem 1996**
- Source: Holmes et al. (1996), referenced within evaluations of Holotropic Breathwork effectiveness.
- Findings: Participants undergoing holotropic breathwork showed significantly reduced death anxiety and increased self-esteem compared to a therapy-only control group.
- **Study 6: Review of high ventilation breathwork practices including Holotropic Breathwork (2023)**
- **Source:** Neuroscience & Biobehavioral Reviews
- **Findings:** HBW can induce deep emotional purging and release of stored trauma or somatic memory through high-intensity breathing.

APPLICATION

1. Preparation:

- Facilitator explains process, sets safe environment.
- Participants set intentions, pair as “breathers” and “sitters.”
- Comfortable setting: mats, dim lights (sensory deprivation), music system.

2 Breathing Phase:

- Continuous, rapid, deep mouth breathing (no breath holds) for 2–3 hours.
- Evocative music (e.g., tribal drums, choral tracks) drives emotional intensity.
- Induces altered states: emotional release, imagery, and or spiritual experiences.
- Facilitators monitor; sitters support; optional bodywork for tension release.

3. Integration:

- Return to normal breathing, rest.
- Creative expression (e.g. journaling).
- Group sharing (optional) for processing

WIM HOFF METHOD (WHM)

- The Wim Hof Method is a wellness practice developed by Dutch extreme athlete Wim Hof, known as “The Iceman,” that combines specific breathing techniques, cold exposure, and mental focus to enhance physical and mental health.
- Hof holds multiple Guinness World Records, showcasing his ability to withstand extreme cold and control his physiology:
- Longest ice bath (1 hour, 53 minutes, 12 seconds in 2011).
- Climbing Mount Everest to 6,700 meters (22,000 feet) in shorts and sandals (2007).
- Swimming 57.5 meters under ice on a single breath (2000).



BENEFITS

- **Reduced Inflammation:** The breathing technique increases epinephrine and anti-inflammatory cytokines (e.g., IL-10) while reducing pro-inflammatory markers (e.g., TNF- α , IL-6), as shown in a 2014 study (Kox et al., PNAS). This may help manage chronic inflammation.
- **Enhanced Immune Function:** Practitioners showed a suppressed inflammatory response to endotoxin in the 2014 study, suggesting voluntary influence over the innate immune system, potentially improving resilience to infections or stress.
- **Improved Cold Tolerance:** Cold exposure activates brown adipose tissue (BAT), enhancing thermoregulation and heat production (Muzik et al., 2018, NeuroImage). This improves the body's ability to adapt to cold environments.
- **Better Cardiovascular Health:** Cold exposure may improve vascular tone and endothelial function through repeated vasoconstriction and vasodilation, potentially reducing cardiovascular risk (hypothesized but not fully validated).

BENEFITS CONTINUED

- **Increased Energy and Metabolism:** Breathing exercises oxygenate tissues, and cold exposure stimulates BAT, which burns calories for heat, potentially boosting metabolism and energy levels (preliminary evidence).
- **Enhanced Circulation:** Cold-induced vasoconstriction followed by vasodilation may improve blood flow and oxygen delivery, supporting muscle recovery and overall cardiovascular efficiency.
- **Improved Sleep Quality:** Anecdotal reports suggest WHM reduces stress and promotes relaxation, potentially leading to better sleep, possibly via autonomic nervous system modulation.
- **Potential Pain Reduction:** Cold exposure and breathing may increase endorphin release, reducing pain perception, as seen in cryotherapy and mindfulness research (not WHM-specific).

RELEVANT STUDIES

- **Study 1:** Voluntary Activation of the Sympathetic Nervous System and Attenuation of the Innate Immune Response in Humans
- **Source:** Kox M, van Eijk LT, Zwaag J, van den Wildenberg J, Sweep F, van der Hoeven JG, Pickkers P. Proceedings of the National Academy of Sciences (PNAS), 2014;111(20):7379–84. DOI: 10.1073/pnas.1322174111
- **Findings:** WHM-trained volunteers showed ~200% higher anti-inflammatory IL-10 and ~50% lower pro-inflammatory cytokines (e.g., TNF- α , IL-6) during endotoxin challenge compared to controls. Increased epinephrine levels correlated with fewer flu-like symptoms and faster recovery.
- **Study 2:** The Effects of the Wim Hof Method on Immune Response and Mental Health
- **Source:** Zwaag J, et al. Brain, Behavior, and Immunity, 2022;100:191–201. DOI: 10.1016/j.bbi.2021.11.015
- **Findings:** WHM practice (breathing, cold exposure, meditation) significantly reduced pro-inflammatory cytokines (e.g., IL-6, TNF- α) and increased anti-inflammatory IL-10 in healthy participants during an endotoxin challenge. Participants also reported improved mood and reduced anxiety, indicating positive mental health effects alongside immune modulation.

RELEVANT STUDIES CONTINUED

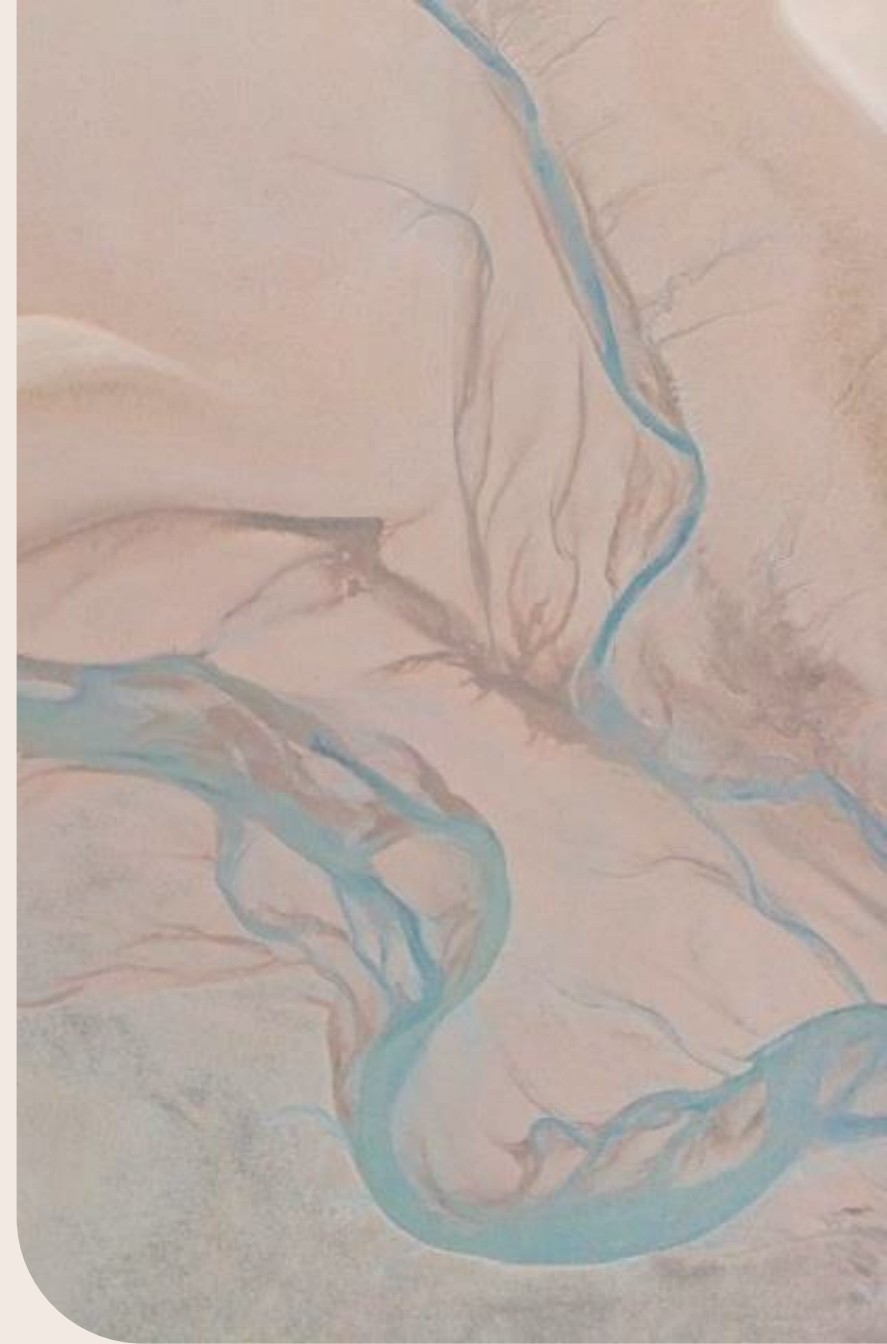
- **Study 3:** A Supplementary Training Program Integrating Cold Exposure, Breathing Exercises, and Mindfulness as a Complementary Treatment for Neuropsychological Aspects of Multiple Sclerosis
- **Source:** Not specified in provided data, referenced on wimhofmethod.com, 2024 (study from Comenius University, Slovakia).
- **Findings:** Participants with multiple sclerosis (MS) practicing WHM showed significant improvements in fatigue, mood, and cognitive function after a 12-week program. The study reported enhanced quality of life and reduced perceived stress, suggesting WHM as a promising complementary therapy for MS.
- **Study 4:** Effects of the Wim Hof Method on Cardiac Autonomic Function and Psychological Well-Being
- **Source:** Ketelhut S, et al. European Journal of Applied Physiology, 2024;124(3):893–901. DOI: [10.1007/s00421-023-05347-8](https://doi.org/10.1007/s00421-023-05347-8)
- **Findings:** A 10-day WHM intervention improved heart rate variability (HRV), indicating enhanced parasympathetic activity and cardiovascular health. Participants reported increased subjective vitality and reduced stress, suggesting WHM supports overall physical and mental well-being.

APPLICATION

1. Take 30–40 deep breaths, inhale fully into belly then chest.
2. Exhale without any force.
3. After the last exhale hold your breath on empty lungs. (Long hold)
4. When you need to breathe take one deep inhale.
5. Hold for 10–15 seconds (Short recovery hold)
6. Exhale and rest for 15–30 seconds, breathing normally.
7. Repeat for 3–4 rounds total.
8. Finish with mindful meditation and or voluntary cold exposure.

WHAT TO EXPECT DURING A BREATHWORK SESSION

- Preparations and intentions
- Activation phase
- Physiological responses
- Surfacing emotions
- Breath Retention
- The Rebound Effect
- Regulation phase
- Integration



PREPARATIONS AND INTENTIONS

- Get comfortable, sitting up or laying down
- Turn down lights
- Turn on mediation music
- Drop into the moment
- Create an intention

ACTIVATION PHASE

- Inhale fully through the mouth into the belly without pausing between exhales and inhales
- Rapid circular breathing increases heart rate, adrenaline, and induces hyperventilation triggering the sympathetic nervous system
- This shifts the bodies biochemistry, and bi passes the subconscious mind, to access stored emotions and trauma
- This can be very intense but controlled by the speed and depth of breath
- Physical tingles and sensations can present itself: Tetany

TETANY

- During rapid circular breathing CO₂ levels in the blood drop
- Lower CO₂ means less carbonic acid in the blood
- Less acid raises the blood PH
- Shifting to a more alkaline state
- The alkalinity changes how calcium binds in the blood
- Reducing ionized calcium
- Makes nerves and muscles activated
- Spasms and cramps (Lobster claws)

THERMOREGULATION

- **Evaporative Heat Loss:** Rapid or mouth-based breathing increases moisture evaporation from lungs, cooling the body via convection and conduction.
- **Respiratory Alkalosis:** Hyperventilation reduces CO₂, raising blood pH, causing vasoconstriction and a cooling sensation, despite stable core temperature.
- **Parasympathetic Activation:** Slow diaphragmatic breathing promotes relaxation and vasodilation, allowing heat to escape through the skin.

METABOLIC AND SYMPATHETIC RESPONSES

- **Increased Metabolic Rate:** Rapid breathing boosts oxygen consumption by 10-14%, raising body temperature by 1.8-3.6°F.
- **Respiratory Muscle Work:** Intense diaphragm and intercostal activity generates heat, similar to exercise, triggering sweating to cool the body.
- **Sympathetic Activation:** High-ventilation techniques stimulate the fight-or-flight response, increasing heart rate, metabolism, and thermogenesis.

TREMORS AND EMOTIONAL RELEASE

- **Tremors as Stress Release:** In somatic experiencing, trembling completes interrupted stress cycles, moving the body from freeze to safety.
- **Neurogenic Tremors:** Involuntary shaking (e.g., psoas muscle) discharges pent-up energy, reducing cortisol and restoring nervous system balance.
- **Emotional and Sweating Response:** Emotional release in breathwork activates the ANS, causing tremors and sweating as energy is released.

BREATH RETENTION & SQUEEZING

- Holding activates the parasympathetic nervous system, shifting the body from fight flight or freeze ect to rest and digest
- The higher the activation the deeper the shift
- This shift creates a moment of heightened awareness, allowing you to feel sensations, emotions, and insights that surfaced during the active breathing phase
- Extended holds can shift brainwave patterns, increase nitric oxide levels, creating deep meditative or transcendental experiences.

BREATH HOLD & SQUEEZING CONTINUED

- Squeezing momentarily limits blood flow to the brain and slightly increases CO_2 , deepening the temporary hypoxic–hypercapnic state.
- Hypoxic = Low oxygen in blood or tissues
- Hypercapnic = High carbon dioxide (CO_2 levels)
- Muscle contraction engages the sympathetic system fully, and when released, there's a strong parasympathetic rebound, which can heighten altered-state sensations.

THE REBOUND EFFECT

A physiological process where intentional breathing techniques temporarily activate the SNS of the autonomic nervous system before eliciting a compensatory surge in PSN activity, often resulting in a much deeper relaxation and emotional release.

THE REBOUND EFFECT CONTINUED

- **Mental Clarity and Altered States:** Prolonged holds with full lungs can induce euphoria or meditative states due to sustained oxygen levels and sympathetic activation, useful in practices like Holotropic Breathwork for emotional release.
- **Strengthening Respiratory Muscles:** Holding with lungs full of air engages the diaphragm and intercostal muscles, potentially improving respiratory strength over time, which may benefit mild asthma cases.
- **Reduced Hyperventilation:** Helps asthmatics by normalizing breathing patterns, potentially decreasing reliance on reliever inhalers and preventing airway irritation from over-breathing.
- **Calming Effect:** Post hold recovery often shifts to parasympathetic activation, reducing stress and anxiety, which are also asthma triggers. Safer for asthmatics than top of breath holds are bottom of breath holds. This avoids lung overextension and focuses on gentle, controlled breathing to stabilize airways.
- Allows CO2 levels to restore balance - Tetany should* subside

DEEPENING THE REBOUND EFFECT

- **Sensory deprivation:** Blocking visual input removes a huge amount of sensory processing from the brain. This shifts neural activity inward and heightens internal imagery, making altered states more noticeable.
- Darkness stimulates the pineal gland to release melatonin, Eg turning off the lights
- Without external light, your brain may more easily transition into dream-like imagery, often enhanced by the altered neurochemistry during breathwork.

REGULATION PHASE

- Nasal breathing enhances parasympathetic activation
- Gentle and grounding technique that aligns with the body's natural physiology promoting sustained benefits
- Reduces HRV stress
- Promotes relaxation

INTEGRATION

Integration is a vital part of breathwork because it allows the insights, emotions, and physiological shifts that surface during the practice to be processed and grounded into daily life. Without integration, the experience may remain overwhelming or fleeting, but with reflection, journaling, movement, or stillness afterward, the body and mind can fully absorb the release and wisdom gained. This step transforms breathwork from a temporary state into lasting change.

INTEGRATION

- What did they experience?
- What did they feel, hear, see, taste, smell ect?
- Imagery, symbolism, people ect
- How will they move forward?

CONSIDERATIONS

Asthma is a chronic lung condition where the airways become inflamed, narrowed, and overly sensitive, making breathing difficult. It's caused by a mix of genetic and environmental factors, like allergens (pollen, dust mites), irritants (smoke, pollution), exercise, cold air, or stress, which trigger symptoms. These include wheezing, shortness of breath, chest tightness, and coughing, often worse at night or early morning. During an asthma attack, the airway muscles tighten, mucus production increases, and inflammation worsens, severely restricting airflow.

CONSIDERATIONS

Asthma varies in severity, mild cases may cause occasional discomfort, while severe cases can be life-threatening if untreated. It's managed with medications like inhalers (bronchodilators for quick relief, corticosteroids for long-term control) and by avoiding triggers. About 1 in 13 people in the U.S. have asthma, with higher rates in children and certain groups like African Americans. It's not curable but can be controlled with proper treatment. Always consult a healthcare provider for diagnosis and management.

CONSIDERATIONS

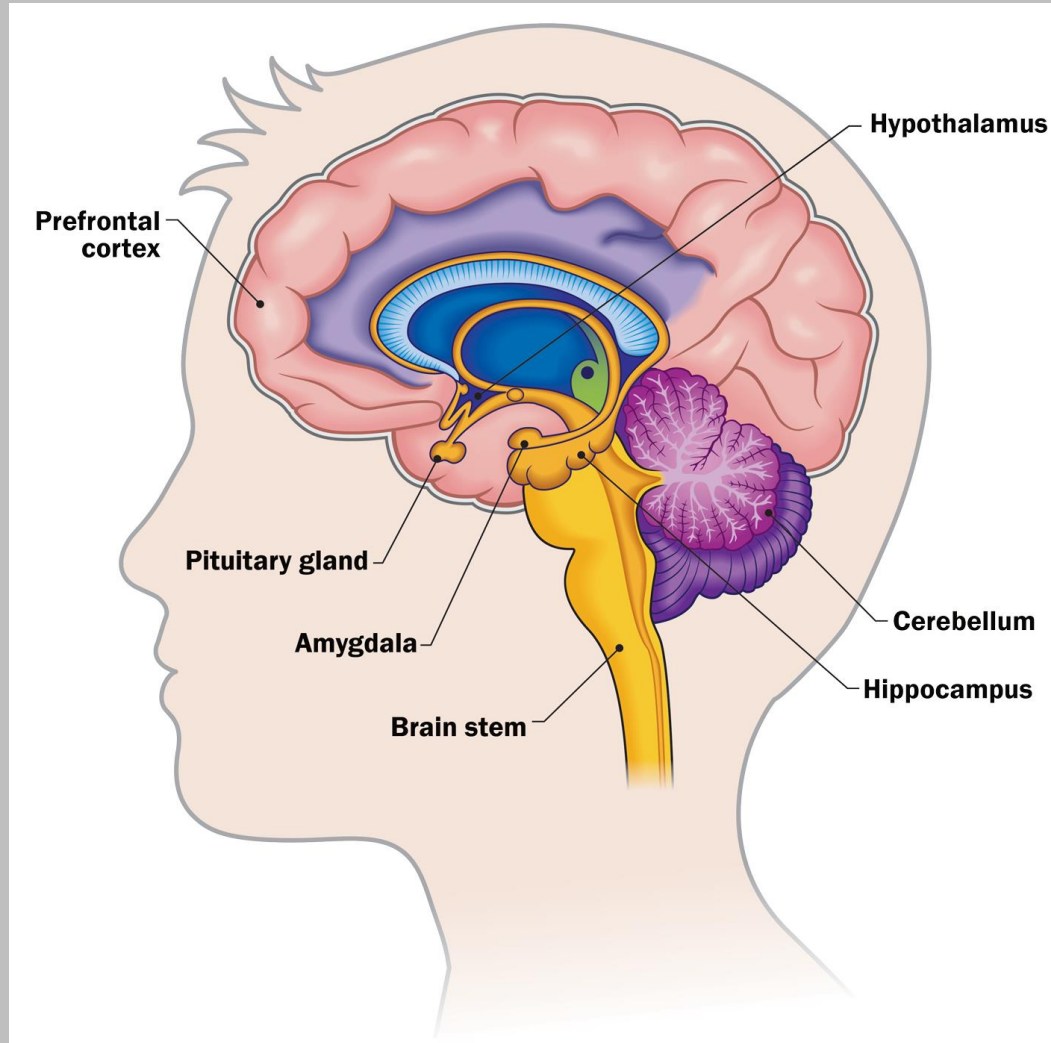
High-ventilation or forceful breathing techniques (e.g., holotropic breathwork or certain pranayama practices) can cause bronchospasm, wheezing, or attacks by overworking the airways or inducing hyperventilation.

Gentle breathwork can help manage asthma by improving breathing control and reducing stress, but intense techniques risk triggering attacks, especially in severe cases. Tailor the practice to your condition with medical guidance.

PRECAUTIONS

- Start with gentle, supervised techniques (e.g., diaphragmatic) or under a qualified instructor.
- Keep an inhaler nearby and stop if symptoms like wheezing occur.
- Breath holds at top of breath are also asthma triggers. Safer for asthmatics are at bottom of the breath.
- This avoids lung overextension and focuses on gentle, controlled breathing to stabilize airways.
- Consult a doctor to ensure breathwork suits your asthma severity and overall health.

STORED TRAUMA



The prefrontal cortex, which manages reasoning and emotional control, weakens under trauma, reducing its ability to regulate stress and stabilize emotions.

SURFACING EMOTIONS

ANGER

- **Physical Sensations:** Heat or warmth in the face, neck, or chest (e.g., feeling “hot-headed”); tightness or clenching in the jaw, fists, or shoulders; racing heart or increased pulse; muscle tension in the upper body; tingling or restlessness in the limbs.
- **Respiratory/Vocal:** Rapid, forceful breathing or panting; raised voice, growling, or sharp vocalizations; feeling “choked” or unable to articulate clearly.
- **Movement/Posture:** Urge to move, pace, or clench fists; stiff, rigid posture or squared shoulders; spontaneous gestures like stomping, shaking, or pushing motions.
- **Observable Signs:** Flushed face, furrowed brows, or narrowed eyes; sweating or trembling; tense facial muscles or a “hardened” expression.

FEAR

- **Physical Sensations:** Racing heart, palpitations, or pounding chest; butterflies, nausea, or churning in the stomach; cold sweats, chills, or clammy hands; tingling or numbness in extremities; tightness in chest or throat.
- **Respiratory/Vocal:** Shallow, rapid breathing or holding breath; high-pitched or trembling voice; gasping or hyperventilating.
- **Movement/Posture:** Restlessness, fidgeting, or urge to flee; frozen posture or feeling “paralyzed”; hunched shoulders or curled-in stance.
- **Observable Signs:** Wide eyes, dilated pupils, or “deer-in-headlights” look; trembling lips, hands, or legs; pale skin or sweating.

GRIEF

- **Physical Sensations:** Heaviness or aching in the chest (e.g., “heartbreak”); lump or tightness in throat; deep fatigue or lethargy; hollow or empty feeling in stomach or chest; coldness or numbness in extremities.
- **Respiratory/Vocal:** Shallow, irregular breathing or difficulty taking full breath; spontaneous sighing, gasping, or deep exhalations; uncontrollable crying or sobbing; trembling or cracking voice.
- **Movement/Posture:** Slumped shoulders, hunched back, or curled-in posture; slowed movements or feeling “stuck”; clenching fists or holding objects tightly.
- **Observable Signs:** Teary eyes, downturned mouth, or heavy facial expression; pale skin, flushing, or sweating; spontaneous tears.

GUILT

- **Physical Sensations:** Heaviness or tightness in chest or stomach (e.g., “knot”); aching or tension in shoulders or neck; warmth or discomfort in face; restlessness or unease.
- **Respiratory/Vocal:** Sighing or slow, heavy breathing; hesitant or low voice; throat tightness.
- **Movement/Posture:** Slumped or weighed-down posture; fidgeting or self-soothing gestures (e.g., rubbing hands); avoiding movements.
- **Observable Signs:** Downcast eyes or furrowed brow; subtle grimacing or tense facial muscles; slow, deliberate movements.

LONELINESS

- **Physical Sensations:** Hollow or aching in chest or stomach (e.g., “empty space”); heaviness in limbs; coldness or numbness in extremities; subtle tightness in throat.
- **Respiratory/Vocal:** Slow, shallow breathing or frequent sighing; soft or hesitant voice; occasional quiet whimpering or muted crying.
- **Movement/Posture:** Curled-in posture with arms wrapped around body; slumped shoulders or bowed head; slow, minimal movements.
- **Observable Signs:** Downcast eyes or distant, vacant expression; pale skin or subtle trembling in lips or hands; self-soothing gestures like rubbing arms

REGRET

- **Physical Sensations:** Heaviness or aching in chest or stomach (e.g., “sinking”); tightness in throat; muscle tension in shoulders or neck; coldness or numbness in extremities.
- **Respiratory/Vocal:** Slow, heavy breaths or frequent sighing; soft or trembling voice; quiet muttering or vocalized self-reflection (e.g., “if only”).
- **Movement/Posture:** Slumped or curled-in posture; slow, deliberate movements or feeling “stuck”; self-soothing gestures like rubbing hands.
- **Observable Signs:** Downcast eyes or furrowed, pained expression; pale skin or subtle trembling in lips or hands; heavy, subdued body language.

BETRAYAL

- **Physical Sensations:** Sharp pain or heaviness in the chest, nausea or sinking in the stomach, coldness in hands or feet, tightness in the throat.
- **Respiratory/Vocal:** Shallow, irregular breaths, sometimes with a gasp or holding the breath.
- **Movement/Posture:** Withdrawing, crossing arms, turning away, or curling inward protectively.
- **Observable Signs:** Downcast eyes, furrowed brow, pursed lips, or a guarded posture.

DESPAIR

- **Physical Sensations:** Heaviness or sinking in the chest, stomach, or entire body (e.g., “collapsing”); fatigue or weakness; coldness or numbness in the extremities; tightness in the throat or chest.
- **Respiratory/Vocal:** Slow, shallow breathing or long, heavy sighs; weak, trembling voice or complete silence; quiet sobbing or muted vocalizations.
- **Movement/Posture:** Collapsed or curled-in posture with shoulders slumped and head bowed; minimal movement (e.g., “frozen”); covering the face or body.
- **Observable Signs:** Vacant or teary eyes with a distant or defeated expression; pale skin or subtle trembling in the lips or hands; slow, heavy body language.

RESENTMENT

- **Physical Sensations:** Tightness or clenching in jaw, chest, or fists; heat or warmth in face or upper body; knot or heaviness in stomach; muscle tension in shoulders or neck.
- **Respiratory/Vocal:** Short, forceful breaths or sighing with irritation; sharp or biting tone in voice; throat tightness.
- **Movement/Posture:** Stiff, rigid posture; clenched fists or crossed arms; subtle shaking or twitching.
- **Observable Signs:** Furrowed brows, pursed lips, or tense facial expression; flushed cheeks or “hardened” look in eyes; abrupt or jerky movements.

SHAME

- **Physical Sensations:** Heat or flushing in face, neck, or chest (e.g., blushing); heavy or sinking in stomach or chest; tingling or prickling in skin; tightness in throat or chest; coldness or numbness in extremities.
- **Respiratory/Vocal:** Shallow or held breath; soft or hesitant voice; sighing or small vocalizations.
- **Movement/Posture:** Slumped or curled-in posture with shoulders forward; head lowered or turned away; covering face or body with hands.
- **Observable Signs:** Reddened face or ears; downcast eyes or averted gaze; fidgeting or self-soothing gestures.

AWE

- **Physical Sensations:** Tingling or warmth in the chest, like a “swelling” of wonder; lightness or buoyancy in the body; relaxed yet energized muscles in the face and shoulders; goosebumps or chills on the arms or neck.
- **Respiratory/Vocal:** Slow, deep breaths or a slight gasp of amazement; soft, breathy voice or spontaneous exclamations (e.g., “wow”); occasional silence.
- **Movement/Posture:** Open, expansive posture with chest lifted and arms slightly spread; stillness or gentle leaning forward; subtle head tilting or gazing upward.
- **Observable Signs:** Wide, sparkling eyes or an open-mouthed expression; softened facial features with a hint of a smile; calm yet animated body language.

GRATITUDE

- **Physical Sensations:** Warmth in the chest or heart, lightness in the body, tingling in the hands or face, relaxed muscles.
- **Respiratory/Vocal:** Deep, slow inhales with long, soft exhales; feels expansive and easy.
- **Movement/Posture:** Open gestures, hands on heart, slight nodding, or reaching out subtly.
- **Observable Signs:** Bright eyes, warm smile, relaxed posture, or a gentle glow in the face.

JOY

- **Physical Sensations:** Warmth or buzzing in the chest, lightness or buoyancy in the body, tingling in the cheeks or hands, relaxed muscles.
- **Respiratory/Vocal:** Full, deep breaths, often with spontaneous laughter or quick, excited inhales.
- **Movement/Posture:** Bouncing, clapping, swaying, or expansive gestures like arms opening wide.
- **Observable Signs:** Bright smile, sparkling eyes, flushed cheeks, or an upright, open posture.

HOPE

- **Physical Sensations:** Warmth or lightness in the chest, tingling in the hands or feet, relaxed yet alert muscles, or a subtle lift in the heart.
- **Respiratory/Vocal:** Deep, steady breaths with long exhales; feels open and expansive.
- **Movement/Posture:** Slight leaning forward, open hands, or subtle nodding; posture feels uplifted.
- **Observable Signs:** Bright eyes, slight smile, raised eyebrows, or an open, forward-leaning posture.

PEACE

- **Physical Sensations:** Warmth or softness in the chest, relaxed muscles in shoulders and face, lightness in the body, and subtle tingling in limbs.
- **Respiratory/Vocal:** Deep, steady breaths or soft sighs, warm voice or quiet hums, with occasional trembling if vulnerable.
- **Movement/Posture:** Open, upright posture with chest lifted, gentle flowing movements like stretching, and subtle swaying or stepping.
- **Observable Signs:** Bright, steady eyes or soft smile, relaxed facial muscles, and open, animated gestures.

FORGIVENESS

- **Physical Sensations:** Warmth or softening in the chest, relaxed muscles in shoulders and jaw, lightness in the body, and subtle tingling in hands or heart.
- **Respiratory/Vocal:** Deep, smooth breaths or soft sighs, warm voice or quiet murmurs, with occasional trembling if emotional.
- **Movement/Posture:** Open, relaxed posture with shoulders dropping, gentle flowing movements like extending arms, and subtle swaying or steady standing.
- **Observable Signs:** Bright, softened eyes or gentle smile, relaxed facial muscles, and open, welcoming gestures.

RESOURCES

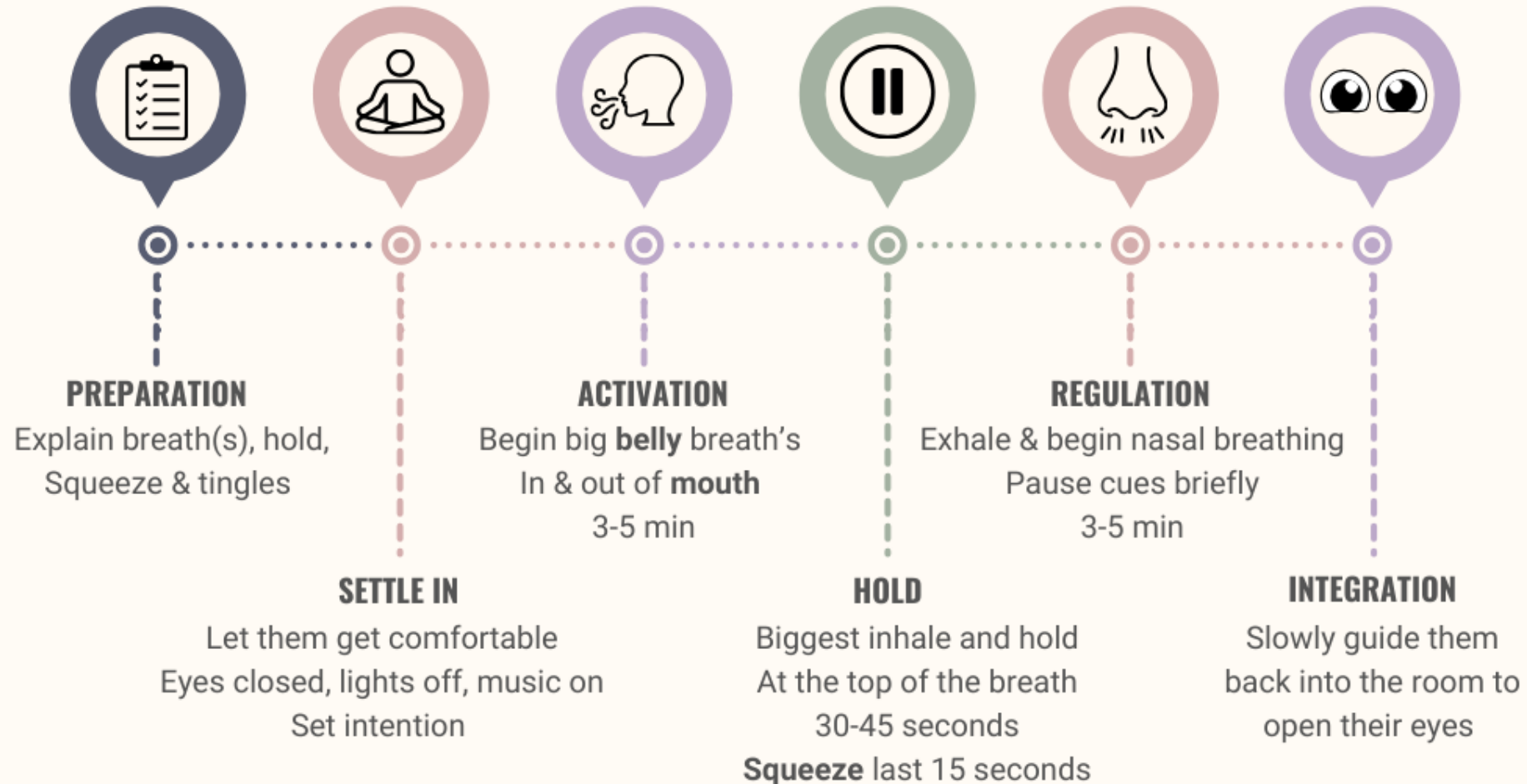
- **Peter Levine's Somatic Experiencing** - Concepts from *Waking the Tiger: Healing Trauma* (1997), which describes how emotions and trauma are stored and released as physical sensations in the body.
- **Stephen Porges' Polyvagal Theory** - Insights from *The Polyvagal Theory: Neurophysiological Foundations of Emotions, Attachment, Communication, and Self-Regulation* (2011), linking emotions to autonomic nervous system states (fight/flight, freeze/shutdown, social engagement).
- **Bessel van der Kolk's Psychosomatic Research** - Findings from *The Body Keeps the Score: Brain, Mind, and Body in the Healing of Trauma* (2014), detailing how emotions manifest in specific bodily regions like the chest, throat, or gut.
- **Clinical Observations from Somatic Practices** - General patterns from somatic therapy, EMDR, yoga, and body-focused mindfulness, as documented in psychological and therapeutic literature, reflecting how emotions surface in therapeutic settings.

THE RESET

- A 15-minute guided breathwork practice designed to reset the nervous system and return the body to a state of calm awareness.
- The practice begins with 3-5 minutes of deep diaphragmatic breathing to stimulate the SNS and become aware of stored tension.
- This is followed by a 30-45 second breath hold, allowing for a moment of nervous system recalibration creating small rebound effect.
- The session concludes with 3-5 minutes of slow, controlled nasal breathing to restore balance, presence, and a grounded sense of safety in the body dropping into the PNS.

THE RESET

Time: 10-15 min



For questions contact Kia@intuitive-breathwork.com

Subscription: www.soulretrievalpathway.com

DEMONSTRATION TIME

Would you like to be my neighbor volunteer?

YOUR TURN!

Pick a partner!

Q&A

My question for you?

Whose ready

For a breathwork journey?

