

F O R E S T A I R F O R E V E R Y W H E R E ' S

H R V G U I D E

FOR CLINICS
AND PRACTITIONERS

This study aims to explore how **Forest Air technology** influences **Heart Rate Variability (HRV)**—both immediately after a **15-minute session** and over an extended period of **3 months**. Our goal is to calculate the **average HRV changes** in adult females and males.

HRV is a key marker of **autonomic nervous system function**, reflecting the body's ability to adapt to stress and maintain physiological balance. Since breathing patterns and oxygen utilization directly influence HRV, this study will provide valuable insights into how ***activated oxygen therapy can enhance recovery, resilience, and overall well-being.***

While we recommend **Polar devices** for HRV tracking, participation is not limited to Polar users. If you use another HRV measurement system, please inform us so we can ensure accurate data collection and consistency across participants.

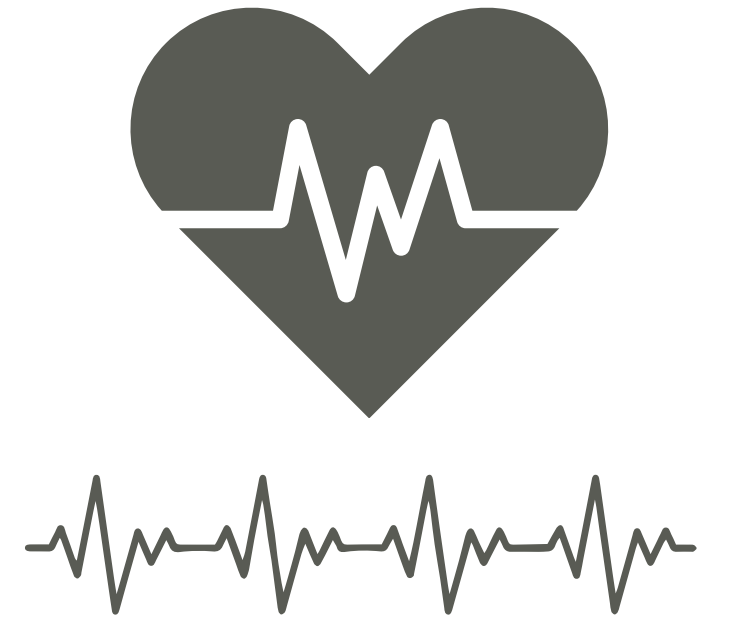
By tracking HRV changes with Forest Air, both practitioners and individuals will have the opportunity to see **real-time shifts** in their nervous system state. This direct feedback can help guide therapeutic applications, recovery strategies, and stress management techniques.

We appreciate your participation in this collaborative research effort, as your data contributes to a growing body of knowledge on the intersection of activated oxygen therapy, HRV, and human resilience.

Understanding HRV, Physical Recovery, and Stress Management

What is HRV?

Heart Rate Variability (HRV) refers to the variation in time between each heartbeat, also known as the inter-beat interval. A healthy heart does not beat at a perfectly constant rate. Instead, it naturally speeds up and slows down in response to internal and external stimuli. This variation is regulated by the autonomic nervous system and reflects the body's ability to adapt to stress and maintain balance.



Why is HRV Important?

HRV is a powerful indicator of nervous system health and adaptability. It reflects the dynamic balance between the sympathetic (fight-or-flight) and parasympathetic (rest-and-digest) nervous systems. High HRV is associated with better stress resilience, emotional balance, cognitive function, and overall well-being. Conversely, low HRV suggests chronic stress, reduced adaptability, and an increased risk of health complications.

Factors That Disrupt HRV

Several lifestyle and environmental factors can negatively impact HRV by increasing sympathetic nervous system activity and reducing vagal tone.

These include:

- **Chronic Stress:** Emotional, mental, or physical stress can suppress HRV by overactivating the fight-or-flight response.
- **Environmental Toxins:** Exposure to air pollution, mold, heavy metals, and chemicals can create oxidative stress, reducing HRV.
- **Poor Sleep Quality:** Sleep deprivation or irregular sleep patterns disrupt the body's ability to regulate stress and recovery.
- **Excessive Technology Use:** EMF exposure, screen time, and blue light at night suppress melatonin and disrupt circadian rhythms, impacting HRV.
- **Unhealthy Diet:** Processed foods, excessive sugar, alcohol, and dehydration negatively affect autonomic nervous system function.
- **Sedentary Lifestyle:** Lack of movement reduces cardiovascular fitness, which can lower HRV.
- **Overtraining & Physical Exhaustion:** Excessive exercise without proper recovery can cause HRV suppression and lead to chronic fatigue.

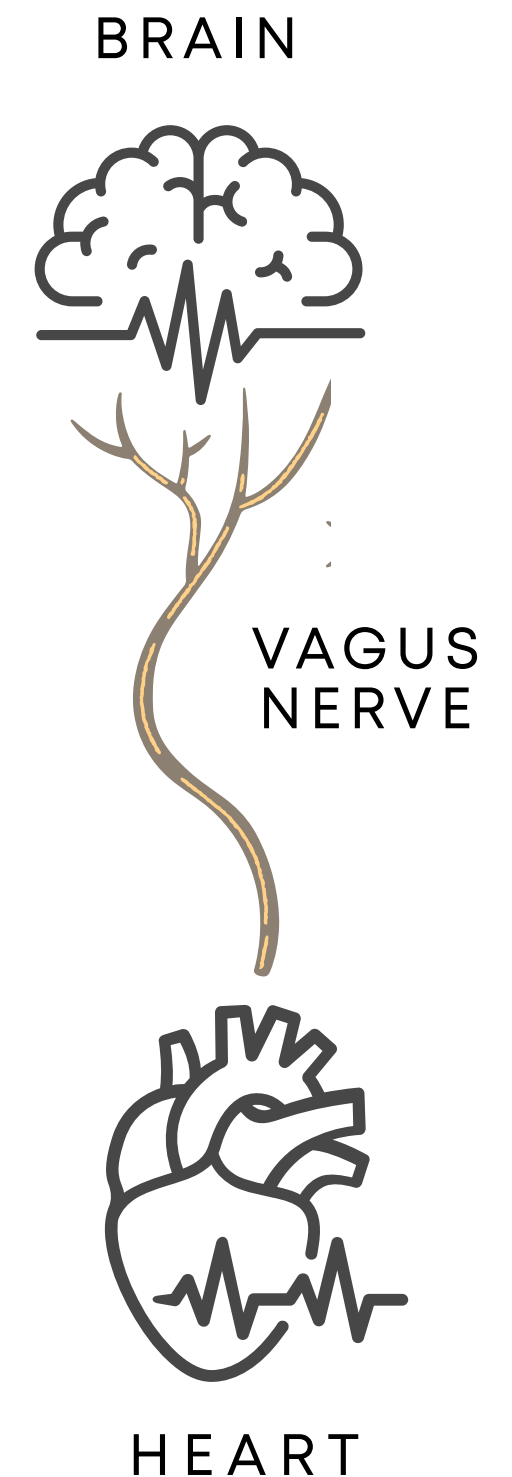
How HRV, the Vagus Nerve, and Heart-Brain Coherence Work Together

The Role of the Vagus Nerve:

- The vagus nerve (cranial nerve X) is the primary pathway connecting the brain and heart, extending through the neck, lungs, and digestive system.
- It acts as a communication highway between the brain and body, regulating heart rate, digestion, inflammation, and relaxation.
- When vagal tone is high, the body can efficiently shift into a **parasympathetic state, supporting recovery and reducing stress.**

HRV as an Indicator of Nervous System Health:

- HRV reflects how well the vagus nerve is functioning.
- **High HRV** indicates strong vagal tone and an adaptive nervous system.
- **Low HRV** suggests chronic stress, poor recovery, and a dominance of the sympathetic nervous system.



Heart-Brain Coherence and Emotional Regulation:

- Heart-brain coherence occurs when the heart and brain work in a synchronized, balanced rhythm, optimizing emotional regulation and cognitive function.
- When in coherence, HRV follows a smooth, wave-like pattern, signaling a well-regulated nervous system.
- Positive emotions (love, joy, gratitude) promote coherence, while negative emotions (fear, stress, frustration) create chaotic HRV patterns.

Benefits of High HRV & Heart-Brain Coherence:



- ✓ Emotional regulation & resilience
- ✓ Cognitive function & decision-making
- ✓ Reduced stress & improved well-being
- ✓ Enhanced adaptability to environmental stressors

Steps For Using Polar H10 for HRV Measurement



Download the Elite HRV App and follow the instructions

SAFETY ADVICE: DO NOT WEAR ANY OTHER ELECTRONICS ON YOUR BODY.



Setting Up the Polar H10

1. **Attach the Sensor:** Snap the Polar EKG sensor into the chest strap.
2. **Moisten the Strap:** Lightly spray the strap's electrodes with water using a spray bottle. This helps improve signal accuracy and comfort.
3. **Position the Strap Correctly:** Place the strap snugly around your chest, just below the chest muscles and under your heart. Make sure it's secure but comfortable.
4. **Connect to the App:** Open Polar Beat or any compatible HRV app (like Elite HRV). Make sure Bluetooth is turned on.
5. **Start Your HRV Reading:** Begin an open HRV reading. The session should be at least 2 minutes and 30 seconds long for accurate results.

Best Practices for Accurate HRV Measurement

1. **Ensure a calm state:** Take 5 minutes to relax before measuring.
2. **Stay still:** Movement can create artifacts and lead to inaccurate readings.
3. **Measure in a quiet, distraction-free environment:** External stimuli can influence readings.
4. **For home users:** Try to measure at the same time each day, preferably in the morning before consuming caffeine or engaging in stressful activities.
5. **For clinics & practitioners:** HRV measurements will be taken before and after Forest Air therapy sessions to observe real-time changes and effects.
6. **Breathe naturally:** Allow your breath to flow without forcing deep inhalations or exhalations.



Forest Air Benefits for Improving HRV

Using Forest Air supports HRV improvement by enhancing the body's ability to utilize oxygen efficiently. Proper oxygenation aids cellular function, reduces stress, and promotes vagal tone, leading to increased HRV and improved overall well-being.

Steps for Measuring HRV with Forest Air

1. Take a **baseline** HRV measurement of 2:30 minutes using the Polar H10 **before** breathing Forest Air.
2. Set up the **Forest Air Home or Pro device** and breathe it for **15 minutes without any distraction**.
3. Take **another HRV measurement of 2:30 minutes after** the session and compare the difference.

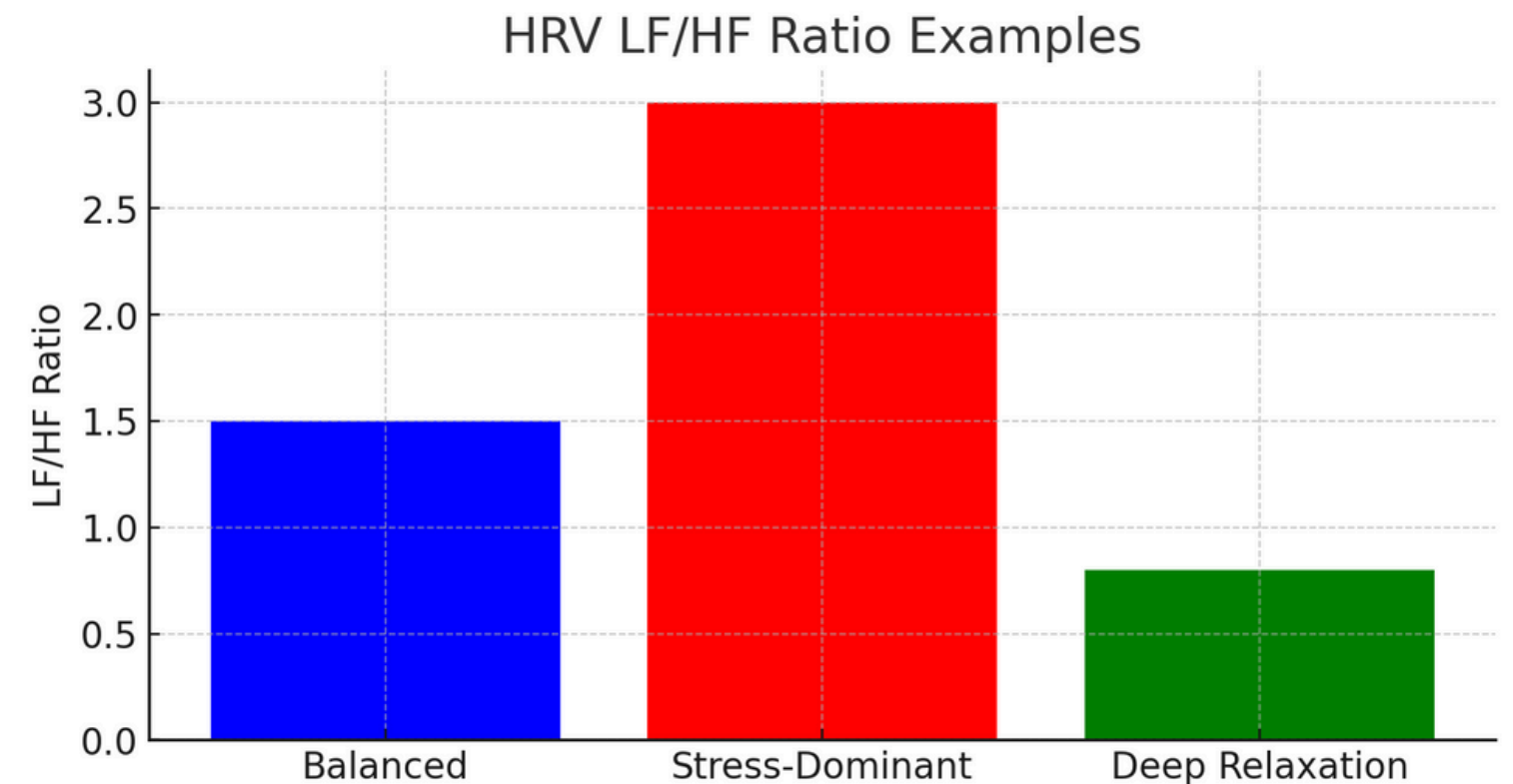
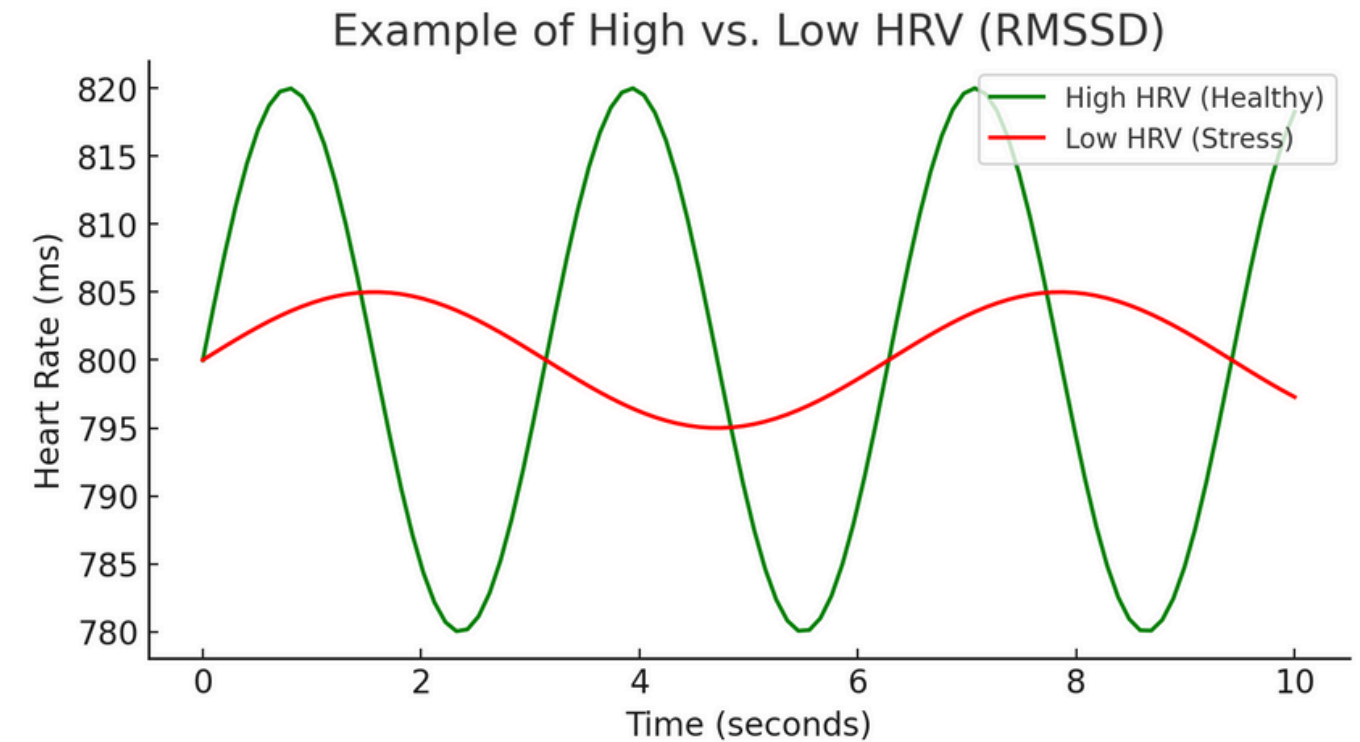


How the Polar H10 HRV Measurement Works

The Polar H10 uses **electrocardiogram (ECG) technology** to detect the heart's electrical activity and measure HRV accurately.

The key HRV metrics provided include:

- **RMSSD (Root Mean Square of Successive Differences):** Measures short-term HRV fluctuations. Higher values indicate better parasympathetic activity and relaxation.
- **LF/HF Ratio (Low Frequency/High Frequency):** Evaluates the balance between sympathetic and parasympathetic activity.
- **Baseline HRV Trends:** Tracking changes over time helps identify improvements or stress patterns.



Tracking and Interpreting HRV with Forest Air Breathing

1. Baseline Measurement:

Measure HRV before using Forest Air.

2. During Forest Air Session:

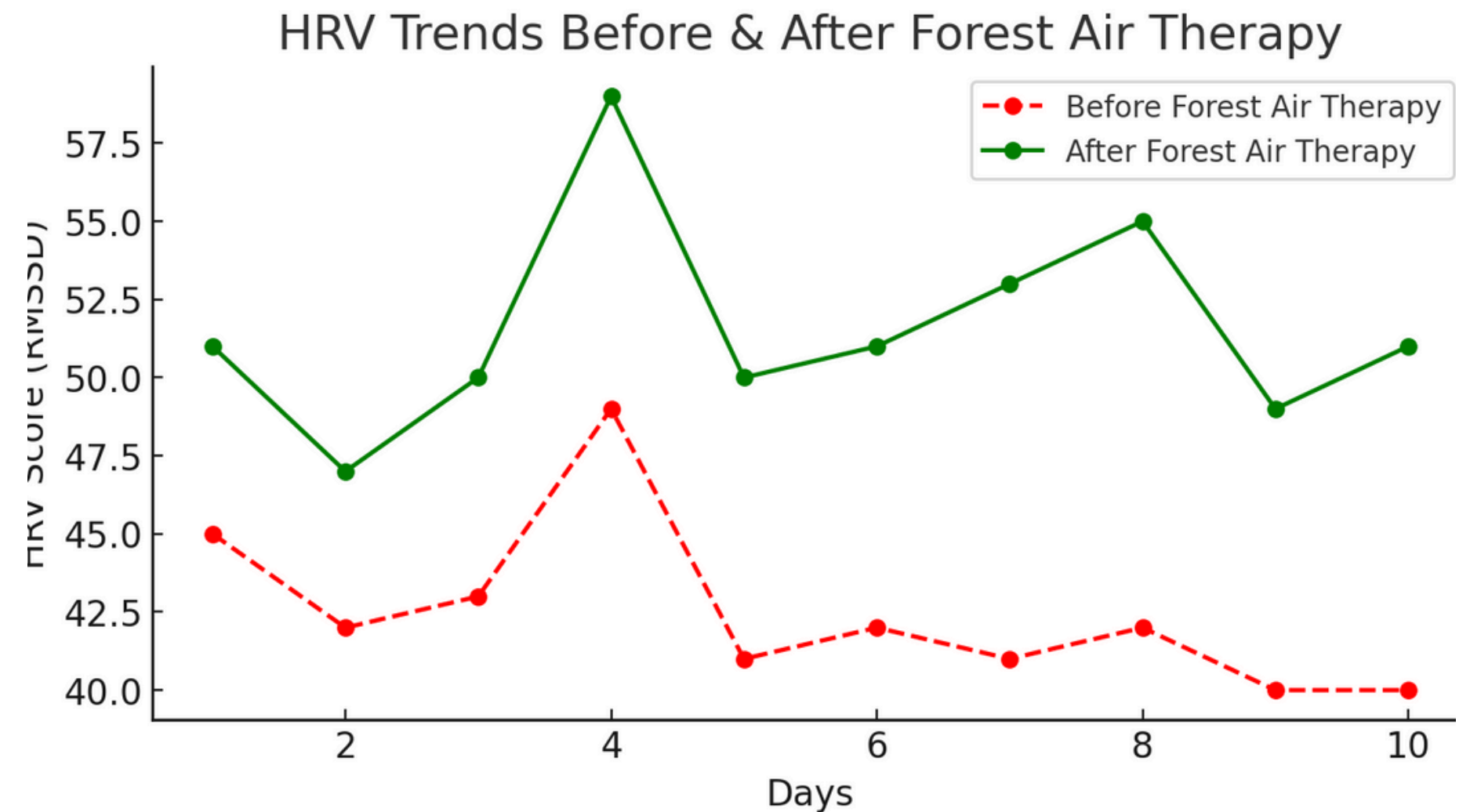
Observe changes in real-time.

3. Post-Session Reflection:

Measure HRV again and compare results.

4. Long-Term Monitoring:

Keep a log to track progress and patterns over weeks.



Enhancing HRV & Heart-Brain Coherence

Heart-Brain Coherence Meditation

Step 1: Diaphragmatic Breathing

- Inhale deeply through your nose for 5 seconds, expanding the abdomen.
- Exhale slowly through your mouth for 5 seconds.
- Repeat for 2–3 minutes.

Step 2: Recall Positive Emotions

- Think of a memory filled with love, joy, or gratitude.
- Visualize it vividly, engaging all senses.
- Allow the positive emotions to expand and create a feeling of coherence.

By integrating HRV tracking with Forest Air breathing, individuals can cultivate greater awareness, manage stress effectively, and improve overall well-being.

Additional Tools For Physical Recovery and Stress Management

Provide clients or patients with resources from **Forest Air For Everywhere's Wellness Guide**, including:

- ✓ Regular Forest Air usage
- ✓ Detoxing from environmental toxins
- ✓ Improving sleep quality
- ✓ Integrating Holistic lifestyle habits
- ✓ Using mindfulness & heart-brain coherence exercises
- ✓ Receiving bodywork for stress and pain management

Contact Info:

info@forestair.life

Forestairforeverywhere.com



FOREST AIR FOR EVERYWHERE'S
WELLNESS GUIDE

Empowering Self-Care with Natural Solutions