The Mindfulness Practices That Actually Lower Stress Hormones

5 MIN READ

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A major meta-analysis reveals which practices shift cortisol and which mostly change perception.

You've probably been told that mindfulness lowers stress. But here's the quieter, more useful question: *which practices actually change your stress hormones—and which just make stress feel more manageable?*

A large 2024 meta-analysis published in ***Psychoneuroendocrinology*** reviewed 58 randomized controlled trials to find out. The results don't just validate mindfulness, they clarify where your effort pays off most.

Which Mindfulness Practices Really Lower Cortisol (Backed by Science)

The researchers looked at changes in cortisol before and after various stress-reduction interventions. The tests used saliva, blood, or hair, measuring both **Cortisol Awakening Response (CAR)**, or how quickly cortisol spikes after waking, and diurnal cortisol, or cortisol changes throughout the day. The types of interventions were grouped into four categories:

1. Mindfulness and Meditation

These interventions center on cultivating **present-moment awareness** through structured practices such as mindfulness-based stress reduction (MBSR), mindfulness-

based cognitive therapy (MBCT), and guided meditations. The meta-analysis found this category to be one of the most effective at reducing cortisol, particularly when morning (awakening) cortisol levels were measured.

2. Relaxation Techniques
This category includes strategies like progressive muscle relaxation, **breathwork**, and biofeedback-assisted relaxation. These methods focus on calming the nervous system and were shown to reduce cortisol significantly, with similar effectiveness to mindfulness-based approaches.

3. Mind-Body Practices
These combine physical movement with internal awareness; examples include **yoga, tai chi**, and certain forms of biofeedback that involve tuning into bodily signals. While these practices have many health benefits, the review found them to have smaller effects on cortisol reduction in healthy populations.

4. Talking Therapies
This group includes traditional psychological approaches like cognitive behavioral therapy (CBT) and group-based stress counseling. Though widely used for managing stress and anxiety, talking therapies in this review showed minimal impact on cortisol levels, suggesting they may affect stress perception more than physiological stress markers.

Mindfulness and Relaxation: The Most Effective Stress Hormone Reducers

When researchers compared interventions head-to-head, a clear pattern emerged. Practices that directly downshift the nervous system consistently outperformed those focused on movement or conversation alone. Here’s how the interventions stacked up:

Mindfulness and relaxation practices, including focused breathwork, body scans, and guided imagery, consistently outperformed both mind-body movement and talk therapy in reducing cortisol levels.

One of the most striking findings: the biggest cortisol shifts showed up first thing in the morning. This suggests mindfulness may be especially effective at restoring a healthier cortisol rhythm, not just reducing stress in the moment, but resetting how the day begins.

4 Mindfulness Practices Proven to Decrease Stress

You don’t need a silent retreat or a year-long course to get the benefits of stress-reducing practices. These four research-backed techniques are accessible, effective, and easy to try at home:

1) Mindfulness Meditation

Spend 10–20 minutes a day sitting quietly and focusing on your breath, bodily sensations, or a simple anchor like sound. The goal isn’t to “clear your mind” but to observe your thoughts non-judgmentally as they come and go. Over time, this practice strengthens attention, emotional regulation, and resilience.

Try this: Tara Brach’s free guided meditations, or explore one of our **top meditation apps for 2025.**

2. Progressive Muscle Relaxation (PMR)

This technique involves slowly tensing and relaxing each muscle group in your

body—from your toes to your forehead—while focusing on the contrast between tension and ease. PMR has been shown to reduce cortisol, improve sleep, and ease physical symptoms of anxiety.

Try this: **Progressive Muscle Relaxation** from Johns Hopkins, or explore PMR on the **Insight Timer app**.

3. Guided Imagery

Guided imagery uses visualization to tap into calming emotional states—like picturing a peaceful forest, ocean waves, or a warm sunlit meadow. It works by activating the parasympathetic nervous system, helping regulate stress hormones and shift your brain into rest-and-digest mode.

Try this: **Belleruth Naparstek's guided imagery meditations** are considered gold-standard in the clinical world, or browse visualization tracks on **Calm**.

4. Box Breathing

This simple practice can switch your body out of fight or flight mode, and is even **used by Navy Seals** (they call it tactical breathing) to stay calm and focused.

Here's how:

- **Breathe out fully,** emptying your lungs.
- **Then, inhale through your nose for a slow count of four**, feeling your lungs and stomach expand.
- **Hold for four**, allowing your body to rest in the pause.
- **Exhale through your mouth for four**, releasing tension and emptying the lungs.
- **Hold again for four**, pausing in the release.

Repeat this cycle for three to four rounds to reset and refocus. It works by directly engaging the vagus nerve and lowering your heart rate.

You can also try the **4-7-8 breathing practice** from Live, Love, Laugh Foundation, or explore structured breathwork practices in one of the **top meditation apps**.

You don’t need to do all of these. Pick one that fits your nervous system and your life, and stay with it for a week. Even a few minutes a day can begin to restore a healthier stress rhythm, one you can build on over time.

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