Cortisol Reset Guide

Understanding and rebalancing the HPA axis — evidence-based protocol

WHAT CORTISOL ACTUALLY DOES

Cortisol is a glucocorticoid hormone produced by the adrenal cortex in response to signals from the HPA axis (hypothalamus > pituitary > adrenal glands). It regulates blood sugar, modulates immune function, controls inflammation, and governs the sleep-wake cycle. Cortisol is not inherently harmful — dysregulated cortisol is.

A healthy cortisol pattern peaks 30-45 minutes after waking (the Cortisol Awakening Response, or CAR), then declines steadily across the day, reaching its lowest point near midnight. Chronic stress disrupts this rhythm, blunting the morning peak and elevating baseline levels throughout the day and night.

SIGNS OF HPA AXIS DYSREGULATION

- Difficulty waking — low morning cortisol
- Afternoon energy crash (2-4 pm)
- Anxiety without clear cause
- Poor recovery from exercise
- Frequent illness — immune suppression
- Craving salt or sugar
- Sleep onset fine, but waking at 3-4 am
- Feeling "wired but tired" at night
- Reduced stress tolerance over time
- Brain fog, poor working memory

THE MORNING PROTOCOL (FIRST 60 MINUTES)

Do not check your phone for 30 minutes.
The CAR is already running. Adding perceived social threat amplifies and extends cortisol elevation.

Get outdoor light within 30 minutes of waking.
Light exposure sets the circadian clock and anchors the cortisol rhythm. 5-10 min of direct outdoor light is sufficient.

Delay caffeine 90-120 minutes after waking.
Cortisol and caffeine both block adenosine. Stacking them blunts caffeine's later effectiveness and disrupts the natural alerting curve.

Cold water face immersion (optional).
Triggers the dive reflex — a rapid parasympathetic response that slows heart rate and counters the cortisol spike. 30 seconds in cold water is sufficient.

EVIDENCE-BASED INTERVENTIONS

Aerobic Exercise (20-40 min, moderate intensity)

Acutely raises cortisol but produces a robust post-exercise decline and improves HPA feedback sensitivity over weeks. A 2010 meta-analysis in Psychosomatic Medicine found exercise to be the most consistent physiological cortisol regulator across 59 studies.

Target: 4-5 sessions/week, 65-75% max heart rate.

Ashwagandha (KSM-66 extract, 300mg x2/day)

A 2019 RCT in Medicine (Chandrasekhar et al.) found 600mg/day of KSM-66 ashwagandha reduced serum cortisol by 27.9% vs placebo over 60 days. This is the most replicated adaptogen result in the literature.

Take with food. Effects build over 4-8 weeks. Look for KSM-66 or Sensoril on the label.

Mindfulness-Based Stress Reduction (MBSR)

The 8-week protocol developed by Kabat-Zinn at UMass. A 2013 meta-analysis in Health Psychology Review found significant salivary cortisol reductions persisting at 3-month follow-up across multiple RCTs.

Formal MBSR courses available via UMass CFM and Palouse Mindfulness (free online).

Sleep Consistency (not just duration)

Irregular sleep timing disrupts circadian cortisol rhythmicity regardless of total hours. A consistent wake time — even on weekends — is more important than sleeping in to compensate.

Anchor your wake time. Variation of more than 1 hour across days degrades the CAR.

WHAT TO AVOID

Alcohol as a stress reliever

Alcohol disrupts HPA feedback, elevates cortisol in the second half of the night, and produces rebound anxiety the following day. It is an acute anxiolytic with a deferred cortisol cost.

High-caffeine intake after 1 pm

Caffeine's 5-7 hour half-life means afternoon coffee is still active at bedtime. It elevates cortisol at night, reducing sleep quality and impairing HPA recovery.

Skipping meals for extended periods

Fasting beyond 14-16 hours elevates cortisol as the body increases gluconeogenesis to maintain blood sugar. This is adaptive short-term; chronic undereating compounds HPA stress.