



SLEEP OPTIMIZATION GUIDE

Practical Strategies for Deep, Restorative Sleep

Informed by Andrew Huberman's Sleep Toolkit

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Medical Disclaimer

Everything in this guide is not a substitute for professional medical care. If you have a medical diagnosis or condition, it is your responsibility to seek appropriate care from a qualified healthcare provider. These are general tips, tricks, and strategies to promote restful sleep and optimize overall health.



Introduction: Why Sleep is the Foundation

Sleep is arguably the most powerful performance-enhancing, health-promoting activity available to us — and it is free. Yet many of us spend much of our lives with dysregulated sleep, running a deficit without realizing its cumulative toll on mood, focus, metabolism, and resilience.

This guide draws on the work of **Dr. Andrew Huberman**, neuroscientist and professor at Stanford University, and host of the Huberman Lab Podcast. His evidence-based *Sleep Toolkit* brings together decades of research into actionable habits anyone can start today.



Recommended Huberman Lab Podcast Episodes

- **"Master Your Sleep & Be More Alert When Awake"** — Episode 2
- **"Sleep Toolkit: Tools for Optimizing Sleep & Sleep-Wake Timing"** — Episode 84
- **"Find Your Exact Temperature Minimum to Defeat Jetlag, Shift Work & Sleeplessness"** — Episode 39



Full Sleep Toolkit: hubermanlab.com/toolkit-for-sleep



Part 1: Light — Your Master Sleep Signal

Light is the single most powerful signal your brain uses to set your internal clock (circadian rhythm). Getting light exposure right is the highest-leverage action you can take for sleep.



Morning: Sunrise Light

Goal: 10 Minutes of Outdoor Light Within 30–60 Minutes of Waking

When you view sunlight early in the morning, specialized retinal cells send a signal to your brain's master clock (the suprachiasmatic nucleus). This triggers a cortisol pulse that promotes alertness throughout the day, and sets a timer that will release melatonin 12–16 hours later — preparing you for sleep.



Sunrise Light Protocol

- Go outside within 30-60 minutes of waking — non-negotiable on clear days
- Aim for at least **10 minutes** of outdoor exposure — do not look directly at the sun
- On overcast days, aim for 20-30 minutes; cloud cover reduces light intensity significantly
- Do **not** use sunglasses for this; windows also block the critical UV and blue wavelengths
- Pair it with a walk, coffee, or light stretching to make it an easy habit



Midday: Noon Light

A second round of outdoor light exposure around midday helps maintain your circadian rhythm and reduces the negative impact of accidental bright light exposure in the evening — especially useful on days you miss the sunrise window.

- Aim for another **10 minutes** of outdoor time around noon
- Particularly helpful if you work indoors all day



Evening: Sunset Light — As Important as Sunrise

Goal: 10 Minutes of Outdoor Light at Sunset

Viewing the low-angle orange and red light of sunset tells your brain that the day is ending. This calibrates your circadian clock and buffers against the negative effects of artificial light later in the evening.

- Step outside for 10 minutes as the sun sets — **this is as important as morning light**
- Even watching the sunset through a window provides some benefit

- The warm hues signal your nervous system to begin transitioning toward sleep

Key Insight

Sunrise and sunset are the two most important light exposures of the day. Think of them as bookends that regulate your entire sleep-wake cycle. Start with just these two habits and build from there.

Part 2: Darkness & Evening Wind-Down

Just as morning light wakes you up, darkness signals your brain to release melatonin and prepare for sleep. Modern life floods us with artificial light — especially blue and green wavelengths from screens and overhead LEDs — that confuses this system.

Electronics & Night Mode

- When the sun sets, switch all devices to **Night Mode** immediately
- Night Mode reduces the blue-wavelength light that suppresses melatonin production
- Dim screens as low as comfortable; reduce ambient overhead lighting
- Switch to lamps with warm-toned (amber/orange) bulbs in the evening if possible

Blue Light Blocking Glasses

If you regularly use screens in the 2–3 hours before bed, blue light blocking glasses are an effective tool. Look for amber or red-tinted lenses for maximum effect — clear lenses block far less light.

- Wear after sunset when using screens, watching TV, or under bright overhead lights

- Not a substitute for dimming screens — use both strategies together

Consider Turning Off Wi-Fi at Night

Many people report improved sleep quality when reducing wireless signal exposure overnight. This is a low-cost, low-effort option worth experimenting with.

- Use your router's built-in scheduler to auto-shutoff at bedtime
- Or simply unplug the router before sleep and plug it in when you wake up
- Bonus: reduces unconscious late-night screen-checking behavior

Part 3: Caffeine Timing

Caffeine works by blocking adenosine receptors — adenosine is the "sleepiness molecule" that builds up throughout the day. With a half-life of 5–7 hours, that afternoon coffee can still be circulating in your system at midnight.

Caffeine Cutoff Window

- Stop all caffeine intake between
12:00 PM and 2:00 PM
- If you're sensitive to caffeine or struggle with sleep onset, lean toward the 12:00 PM cutoff
- This includes coffee, tea, pre-workouts, energy drinks, and some sodas
- Dr. Huberman also recommends delaying your first coffee
90–120 minutes after waking
to let your natural cortisol peak do its job first

Part 4: Stress & the Mind-Body Connection

Stress and sleep exist in a deeply interdependent relationship. Chronic stress elevates cortisol, raises heart rate, and keeps the nervous system in a sympathetic (fight-or-flight) state — all of which make restful sleep nearly impossible.

Before bed, check in with yourself:

- What is your current stress level on a scale of 1-10?
- Are you carrying unresolved emotional weight from the day?
- Is your body physically tense or relaxed?

See Your Stress Guide

For a comprehensive set of strategies to reduce and manage stress, refer to your

Stress Guide

. Many of the tools below intersect with stress reduction — building both practices together creates a powerful compounding effect on sleep quality and wellbeing.

Calming Music

Intentionally curated music can shift your nervous system toward a parasympathetic (rest-and-digest) state. Opt for slow tempo, minimal lyrics, and soft instrumentation — ambient, classical, or nature sounds work well.

Journaling

A brief 5-10 minute journaling session before bed can "offload" the mental chatter that often prevents sleep onset. Try:

- A brain dump of everything on your mind
- Writing tomorrow's top 3 priorities (removes mental rumination)
- A gratitude list — 3 specific things you appreciated today

Meditation

Even 5–10 minutes of breath-focused meditation activates the parasympathetic nervous system, lowers heart rate, and can significantly improve how quickly you fall asleep. Apps like Insight Timer, Calm, or Waking Up are excellent starting points.

Binaural Beats

Binaural beats use slightly different audio frequencies in each ear to guide your brain waves into desired states — theta for relaxation, delta for deep sleep. Use headphones for best effect.

★ Recommended Channel

Good Vibes — Binaural Beats

on YouTube is an excellent, free resource with a wide variety of tracks for sleep, relaxation, and focus.

- Search YouTube: "*Good Vibes Binaural Beats sleep*"
- Delta wave tracks (0.5–4 Hz) for deep sleep support
- Theta wave tracks (4–8 Hz) are ideal for winding down

Brain.fm — Scientifically Engineered Music

Brain.fm is a subscription-based app that uses scientifically engineered audio to modulate brain states. Unlike standard music or simple binaural beats, Brain.fm uses neural phase locking technology designed specifically for focus, relaxation, and sleep.

- Use their **De-stress** and **Sleep** modes in your evening wind-down
- Visit **brain.fm** to explore subscription options

Budget Alternative

If a subscription isn't right for you right now, the Good Vibes Binaural Beats channel on YouTube provides similar benefits completely free. Lots of other excellent channels exist there too — explore and find what resonates with you.



Part 5: Magnesium — The Relaxation Mineral

Magnesium plays a critical role in over 300 enzymatic processes in the body, including those that regulate the neurotransmitters involved in sleep (particularly GABA). Studies suggest that a significant portion of the population is deficient — often without knowing it.

Magnesium Deficiency Rates

Research suggests that up to 50–80% of people in Western countries may not be getting adequate magnesium through diet alone. Symptoms of deficiency include poor sleep, muscle cramps, anxiety, irritability, and fatigue — all of which also worsen sleep quality.



The Cost-Effective Solution: Epsom Salt Baths

Magnesium supplements can be expensive and vary widely in bioavailability. One of the most cost-effective and enjoyable ways to increase magnesium is through **transdermal absorption** — directly through the skin. Epsom salt is magnesium sulfate, widely available and inexpensive.

- Add 1–2 cups to a warm evening bath for 20 minutes
- The warm water also helps lower core body temperature post-bath, which is another powerful sleep trigger

No Bathtub? Try a Foot Soak

A foot bath with Epsom salts is an accessible alternative that still allows for meaningful magnesium absorption through the skin of the feet — and it doubles as a wonderful wind-down ritual.

- Add ½ cup Epsom salts to a basin of warm water
- Soak for 15–20 minutes while journaling, listening to calming music, or dimming the lights
- Easy, affordable, and deeply relaxing — the combination effect is powerful

Part 6: Essential Oils for Calm & Sleep

Aromatherapy is one of the oldest relaxation tools in human history, and modern research is beginning to validate what traditional medicine has long known: certain aromatic compounds can meaningfully influence the nervous system. The easiest delivery method is a **diffuser**.

Lavender

Lavender is among the most well-studied essential oils for sleep. Its primary active compound, linalool, has been shown to reduce anxiety, lower heart rate, and improve sleep quality and duration. Diffuse in your bedroom 30–60 minutes before sleep.

Frankincense

Frankincense has deep roots in mindfulness and spiritual traditions. Its earthy, grounding scent promotes calm and has been studied for potential anxiolytic (anti-anxiety) properties. Pair with lavender for a powerful relaxation blend.

Eucalyptus — For Airways & Tension

If stress tends to manifest in your chest, breathing, or upper respiratory system, add eucalyptus to your blend. It opens the airways, supports easier breathing, and has a cooling, clarifying effect that can break physical tension patterns.

- Especially useful during high-stress periods, allergy season, or congestion
- Add a few drops alongside lavender and frankincense

Simple Diffuser Protocol

3 drops Lavender + 2 drops Frankincense (+ 2 drops Eucalyptus if needed)

Diffuse in your bedroom 30–60 minutes before sleep.

You can also apply diluted oils to the soles of feet or wrists as an alternative.

Part 7: Red Light Therapy

Red light therapy (photobiomodulation) uses specific wavelengths of red and near-infrared light to support cellular energy production, reduce inflammation, and may support melatonin production at night. Devices range from small panels to full-body units.

Perspective Check

Red light devices can be a meaningful investment. Before purchasing, consider:

full-spectrum sunlight — morning, midday, and evening

— delivers all of these wavelengths and more, completely free. If you're consistently getting 3× daily outdoor light exposure, that will likely be more impactful than any device.

Red light therapy is a useful complement for those who want to go deeper, but it's not a replacement for foundational outdoor light habits.

Start with the sun.

Part 8: Building Your Night Routine

The most important word in any health journey is **consistency**. A complicated, perfect routine you abandon in a week is far less valuable than a simple, imperfect routine you practice every night.

Start Small — Pick 3 or 4 Things

Choose 3–4 practices from this guide that feel most accessible and relevant to you right now. Commit to those for 2–4 weeks before adding more.

✓ HIGH IMPACT STARTERS

- ✓ Sunrise light (10 min)
- ✓ Sunset light (10 min)
- ✓ Night mode on devices at sunset
- ✓ Caffeine cutoff by 12–2 PM
- ✓ Epsom salt foot soak
- ✓ Lavender in a diffuser

↑ LEVEL UP (ADD LATER)

- ↑ Blue light blocking glasses
- ↑ Wi-Fi off at night
- ↑ Journaling practice
- ↑ Binaural beats / Brain.fm
- ↑ Meditation
- ↑ Full Epsom salt bath

Be Patient — This Takes Time

Many of us have spent years — or even decades — with dysregulated sleep. The body and nervous system do not reset overnight. Give any new practice at least 2–4 weeks of consistent use before evaluating its effect.

A Word of Encouragement

It will get better. Trust the process. Build your routine piece by piece — as you feel the improvements, let that motivate you to add more. Add what serves you. Subtract what doesn't.

As you build the puzzle of your night routine, your sleep will get dialed in. Be patient with yourself. This is one of the most generous gifts you can give your body, your mind, and the people around you.

Quick Reference Summary

Morning

- Outdoor light within 30–60 min of waking — 10+ minutes
- Delay coffee 90–120 minutes after waking if possible
- Last caffeine by 12:00 PM – 2:00 PM

Midday

- Second outdoor light exposure ~10 minutes around noon

Evening

- Outdoor sunset light — 10 minutes (as important as sunrise)
- Switch all devices to Night Mode at sunset
- Dim overhead lights; use warm-toned lamps
- Consider blue light blocking glasses
- Consider turning Wi-Fi off for the night

Wind-Down Routine (Choose 3–4)

- Epsom salt bath or foot soak (magnesium + warm water reset)
- Diffuse lavender + frankincense (+ eucalyptus if needed)
- 5–10 min journaling or brain dump
- Calming / binaural beat music — try **Good Vibes** on YouTube
- Brain.fm — 'Sleep' or 'De-stress' mode
- 5–10 min meditation
- Stress check-in — refer to your Stress Guide for tools

Further Resources

- Huberman Lab Podcast — Episode 2: Master Your Sleep
- Huberman Lab Podcast — Episode 84: Sleep Toolkit
- hubermanlab.com/toolkit-for-sleep
- YouTube: Good Vibes — Binaural Beats (free sleep music)
- App: Brain.fm (subscription — scientifically engineered audio)

Sleep well. Rise well. Live well. 