HERITAGE HAVENS

NUTRITION & PEPTIDE WELLNESS COHORT

Sleep Optimization Protocol

A comprehensive framework for deep, restorative sleep — the foundation of hormonal health and GH peptide efficacy

Nutrition & Peptide Wellness Cohort · Month 4

Sleep is not passive rest — it is active biological repair. Your largest pulse of growth hormone occurs in the first 2 hours of deep sleep. Every hormonal system in your body depends on adequate sleep architecture. This protocol gives you the exact framework to optimize it.

Why Sleep Is Your Most Powerful Health Intervention

- Growth hormone (GH): largest daily pulse occurs during Stage 3 (deep) sleep — missing this pulse accelerates aging
- Cortisol regulation: poor sleep raises cortisol the next day, driving insulin resistance and belly fat storage
- Leptin and ghrelin: disrupted sleep breaks hunger/satiety hormones — you overeat because your hormones demand it
- Brain detoxification: the glymphatic system clears metabolic waste (including amyloid) only during deep sleep
- Immune function: most immune repair and cytokine production occurs during slow-wave sleep
- Testosterone and estrogen: both are primarily synthesized during sleep — poor sleep = low hormones

SLEEP ARCHITECTURE

Understanding Your Sleep Cycles

Stage 1 — Light Sleep

Transition state. 1–7 minutes. Easily disrupted. Body temperature begins to drop. This is where you 'fall asleep.'

Stage 2 — Core Sleep

~50% of total sleep. Sleep spindles and K-complexes consolidate memories. Heart rate slows. Core body temperature drops further.

Stage 3 — Slow-Wave Deep Sleep (SWS)

THE most important stage. Largest GH pulse. Physical tissue repair. Immune restoration. Detoxification. Aim for 1.5–2 hours per night.

REM — Rapid Eye Movement

~25% of sleep. Emotional processing, memory consolidation, creativity. First REM period at ~90 min. Lengthens in later cycles.

Your body completes 4–5 of these 90-minute cycles per night. Each cycle shifts the balance — more deep sleep early, more REM late. Alcohol, stress, blood sugar spikes, and blue light all specifically suppress Stage 3 deep sleep — your GH pulse window.

THE PROTOCOL

Your Complete Sleep Optimization System

2–3 HOURS BEFORE BED

Environment & Light Management

Light & Environment

- No overhead bright lighting after sunset — use lamps and warm bulbs only
- Blue-light blocking glasses if using screens (65–70% reduction in melatonin suppression)
- Begin lowering room temperature to 65–68°F — the core temperature drop initiates sleep
- Dim all displays to minimum brightness or use night mode
- Avoid news, social media, and emotionally activating content — cortisol spike delay

Eating & Drinking

- No food within 2–3 hours of bed — blood sugar processing during deep sleep disrupts GH release
- No alcohol — even 1–2 drinks fragment sleep architecture and suppress Stage 3 specifically
- Limit liquids in final hour to prevent night waking for the bathroom
- Herbal teas are fine: chamomile (GABA), passionflower, valerian, ashwagandha blended teas
- Magnesium glycinate 300–400mg with a small snack if needed

60 MINUTES BEFORE BED

Wind-Down Routine

A consistent pre-sleep routine signals your nervous system to shift from sympathetic (fight-or-flight) to parasympathetic (rest-and-digest). The routine matters less than its consistency.

Time	Activity	Note
7:30–8:30pm	Finish all food and alcohol (if any) — begin the 2-hour window	
9:00pm	Lower lights throughout the home — amber/red light only	
9:30pm	Magnesium glycinate + any sleep-supportive supplements	Mag glycinate, L-theanine 200mg, ashwagandha

Time	Activity	Note
9:45pm	Light movement: stretching, yoga nidra, or 10 min walk	Lowers core temp, reduces cortisol
10:00pm	GH peptide injection if prescribed (CJC-1295 + Ipamorelin)	30 min before target sleep time — fasted
10:00pm	Screens off or blue-light glasses — reading, journaling, prayer	Stimulates parasympathetic state
10:20pm	Brief breathing or prayer practice — 4-7-8 breathing, box breathing	Activates vagus nerve
10:30pm	Sleep — consistent target time every night	Circadian rhythm stabilization

SLEEP ENVIRONMENT

The Non-Negotiables

Element	Optimal Setting	Why It Matters	Common Mistake
Temperature	65–68°F (18–20°C)	Core temp must drop 1–3°F for sleep onset and deep sleep maintenance	Room too warm = less deep sleep, more waking
Darkness	Complete — 100% blackout	Even dim light suppresses melatonin and shifts circadian rhythm	Phone charging in room, LED indicators, nightlights
Noise	Silent or white/brown noise	REM and Stage 3 are disrupted by intermittent sounds	Silence preferred; consistent sound tolerated better than intermittent
Mattress & Pillow	Neutral spine alignment	Spinal misalignment activates pain pathways, increasing arousal	Old/sagging mattresses — commonly ignored contributor
EMF	Low — devices off or in another room	Preliminary evidence for disruption — precautionary principle applies	Phone on nightstand with WiFi/5G active
Air Quality	Fresh/filtered air, 40–60% humidity	Dry air irritates airways; poor air quality increases arousal	Closed windows in urban areas; no air filtration

SUPPLEMENTS

Sleep-Supportive Supplements

Supplement	Dose	Timing	Mechanism
Magnesium Glycinate	300–400mg	30–60 min before bed	GABA-A agonist; muscle relaxation; cortisol reduction
L-Theanine	200–400mg	30–60 min before bed	Increases alpha brain waves; reduces anxiety without sedation
Ashwagandha	300–600mg	With dinner or before bed	Adaptogen; reduces cortisol; supports deep sleep duration
Melatonin	0.3–1mg (low dose)	30 min before bed (not nightly)	Circadian rhythm signal — low doses more effective than high
Glycine	3g	30 min before bed	Lowers core body temperature; improves sleep quality and next-day alertness
Phosphatidylserine	100–300mg	With dinner	Blunts evening cortisol spike — especially for high-stress individuals
Tart Cherry Extract	480mg or 8oz juice	With dinner	Natural melatonin precursor + antioxidant; improves sleep duration

Note: Do not take all of these simultaneously. Start with magnesium glycinate and add one at a time. Discuss with your practitioner before combining with any prescription sleep medication.

TROUBLESHOOTING

Common Sleep Disruption Patterns & Solutions

Pattern	Likely Cause	Evidence-Based Response
Waking 1–3am	Liver detoxification peak; blood sugar drop; adrenal surge	Support liver before bed: milk thistle, B vitamins. Stable blood sugar: small protein snack at 9pm.
Difficulty falling asleep	Elevated evening cortisol; racing mind; blue light exposure	Strict screen cutoff; L-theanine; breathing practice; earlier exercise
Waking unrefreshed after 8hrs	Sleep apnea; poor sleep architecture; low deep sleep %	Rule out apnea with sleep study; reduce alcohol; optimize sleep environment
Early morning waking (4–5am)	Cortisol peak too early; depression; adrenal dysfunction	Cortisol testing; ashwagandha; blackout curtains; rule out mood disorder
Night sweats	Hormonal (perimenopause); cortisol; blood sugar dysregulation; infection	Hormone panel; room temperature; blood sugar management; thyroid panel

Month 4 Action Step — Sleep Tracking

- Track sleep for 14 consecutive nights using a journal or wearable (Oura Ring, Whoop, or Garmin preferred)
- Record: bedtime, wake time, night wakings, dreams (REM indicator), morning energy rating (1–10)
- Identify your top 2 sleep disruptors by pattern
- Implement 1 environmental change and 1 supplement from this protocol and track the difference
- Bring your 14-day sleep log to Session 5