

BIOHACKERS

LIFESPANNING

MAGAZINE



BIOHACK YOUR SLEEP

**SLEEP & REST WITH
A BUSY BRAIN ON A
SPINNING PLANET**



GARNET DUPUIS

**UNVEILING THE
SECRETS OF
SUPER SLEEP**



MICHAEL J.
BREUS, PH.D.

**UNLOCKING
RESTORATIVE SLEEP
WITH SMR**



DR. PATRICK
PORTER

**SLEEP WAS
BIPHASIC UNTIL
THE 1750s**



VALÉRIE ORSONI

RECIPES FOR DEEP SLEEP,
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SLEEP - GROW - REPEAT

What's the longest a human being can go without sleep? How long should a human being sleep on average? What are the best sleep preparation tactics? We've all heard these questions, and they are obviously important, and we'll cover many, if not all, in this edition. But knowing the importance and frequency of these questions, we must deduce that sleep is one, if not the most significant factor when it comes to our overall health.

We all know what it feels like to function on little to no sleep. We all know how much better we function throughout the day after a good night's rest. We'll get into the details later but isn't it ironic that no matter how hard we believe we can push our bodies and energy to the edge, there's no beating the need to recover and rest. That's how we were made. Think about it, if all we did was actionable energy-exertions throughout our lives with no breaks, we'd be essentially robots, with little-to-no time to step back and reflect, absorb the day, and refill our mind and spirits via the unique unconscious processing of everything that goes on in our busy life.

Without Sleep being necessary, even if it was possible, are we

sure we'd want to live in that world? How many of the best ideas come to those who are just drifting off to sleep? Where else would we go to experience the boundless possibilities of the human mind offered by our dreams? Who and what subliminal messages would be able to reach us if our minds are not quiet and fully ready to listen? Sleep is vital to our survival and not just physically. Philosophically speaking, sleep is integral to our human existence. Everyone needs it and you could argue that it's our most vulnerable state of existence, and yet it's also our super power in a sense. It restores us. It cleanses us. It enables us to keep going farther by slowing down to take in all the reality of life that there is to be experienced.

Because we understand the importance of sleep on our health and longevity, we also should understand why its important for our wisdom and perception of life. When we combine these two purposes together, we offer a greater intention of prioritizing our sleep and rest routines. We're properly seizing the Day, by properly snoozing the night.

About Dallas McClain

Born in the USA, Dallas is a passionate reader of theological and personal development books. He holds a bachelor's degree in Biological Sciences. Teaching English abroad, Dallas has been immersed in various cultures and backgrounds while making friends all over the world. He is a Catholic Christian and enjoys time outdoors while being a tennis enthusiast. He is the Co-founder and Editor of Biohackers Update Magazine. He is currently living in Orlando, Florida with his wife & children, where he enjoys writing, sports, and nature hikes in his free time.

dallas@lifespawning.com
[@gates.of.growth](https://www.instagram.com/gates.of.growth)



INTRODUCING LIFESPANNING MAGAZINE

Change is the essence of growth, and with that spirit, we are thrilled to announce that Biohackers Magazine is now Lifespanning Magazine. This transformation is more than a rebrand; it's an evolution of our mission to empower individuals to live longer, healthier, and more vibrant lives.

The term "biohacking" has served us well, capturing the innovative and experimental approach to health optimization that defined our early journey. But as we expanded our scope, we realized that our vision was no longer just about "hacking" the body; it was about creating a holistic, sustainable framework for living a full, enriched, and extended life. Lifespanning embodies that vision, combining cutting-edge science with timeless principles of wellness and vitality.

This new name reflects a shift toward the bigger picture: helping you thrive in every dimension of your life, from cellular health to mental resilience, from personal growth to collective well-being. It's about more than optimizing; it's about flourishing across the lifespan.

In Lifespanning Magazine, you'll continue to find the same groundbreaking insights, expert interviews, and actionable strategies you've come to expect. But you'll also discover a broader perspective, one that integrates longevity science, lifestyle innovation, and the art of living well.

Thank you for being part of our journey as we take this exciting step

forward. This edition starts with one of the most important things we can do for our health: The Lifespanning Power of Sleep

During those quiet, restorative hours, our bodies repair, our minds reorganize, and our cells rejuvenate. In my book *Neuroscience Calisthenics*, I explored the transformative effects of sleep on neuroplasticity and physical recovery, emphasizing how quality rest is as critical as the most ambitious biohacking protocols. Now, in this special edition, we're building on those insights to show how optimizing sleep and recovery can become a cornerstone for lifespanning.

Recent research highlights just how essential sleep is in regulating the body's circadian rhythm, enhancing cognitive function, and supporting cellular repair. Deep sleep, in particular, plays a critical role in detoxifying the brain, reducing the risk of neurodegenerative diseases, and promoting overall resilience.

Sleep and recovery are not just important; they are foundational. They fuel our physical and cognitive performance, unlocking the full potential of what it means to be a Lifespanner. By prioritizing rest and repair, we strengthen our resilience and synchronize with the natural rhythms of a longer, more vibrant life.

This edition is your ultimate guide to mastering the art and science of sleep; because thriving tomorrow starts with how you rest today.

About Jean Fallacara

Jean, a visionary entrepreneur and neuroscientist, is a pioneering biohacker and founder passionate about merging science, art, and technology. With a remarkable IQ of 167 and an MIT background in AI, VR, XR, Biochemistry, Genetics, and Biotechnology, he's earned numerous awards and distinctions. Having founded ventures like Z-Sciences, he strategically led its acquisition by inTEST Corp in 2021. As the Founder of Lifespanning Media, Jean aims to mainstream human longevity, emphasizing well-being and longevity exploration. His mission involves social connection, life-science education, and multimedia content to redefine lifespan boundaries. Beyond technology, Jean embraces a holistic lifestyle in Miami Beach, prioritizing family, self-optimization, and gratitude.

Jean@lifespanning.com

[@cyborggainz](https://www.instagram.com/cyborggainz)

Jeanfallacara.com



UNVEILING THE SECRETS OF SUPER SLEEP

THE DOS AND DON'TS FOR HEALTHY SLEEP
WITH DR. MICHAEL BREUS, THE SLEEP DOCTOR



Introduction: The Science Behind Sleep

Dr. Michael Breus, also known as The Sleep Doctor, is a clinical psychologist and a world-renowned sleep specialist. He's the author of groundbreaking books such as *The Power of When and Energize!* that focus on understanding biological chronotypes and optimizing performance through better sleep practices. He also just wrote a new book called *Sleep Drink Breathe* that focuses on the fundamentals when it comes to wellness and better living. In this interview, Dr. Breus shares his expert insights into the do's and don'ts of achieving "super sleep."



The Golden Rules: Sleep Do's for Optimal Health

Dallas: Dr. Breus, what are the top three sleep habits you recommend for better health?

Dr. Breus: Number one, wake up at the same time every day, seven days a week. No sleeping in on weekends! When you wake up, sunlight hits your eye and sends a signal to your brain to turn off melatonin production. This regulates your internal clock, making it easier to fall asleep at the right time. If you're inconsistent with wake times, your body's natural sleep rhythm gets thrown off. That's why Mondays feel so tough after a weekend of late mornings.

Number two, know your chronotype. Whether you're an early bird or a night owl, your chronotype is genetic and determines the ideal time for sleep. I encourage everyone to take the free quiz on my website, chronotype.com, to understand their optimal sleep-wake

schedule. Sleeping in alignment with your chronotype can actually reduce the total sleep you need because it improves sleep quality.

Finally, recognize that sleep is flexible. You don't need exactly eight

hours every night—your body naturally adjusts based on daily demands. The key is to give yourself the space to sleep when needed and avoid obsessing over hitting a specific number of hours.



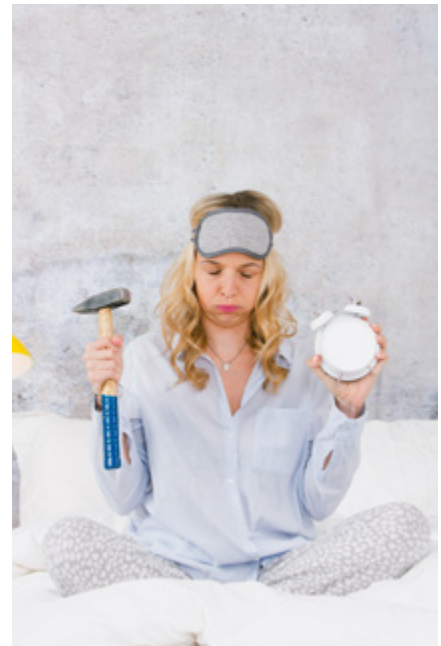
Breaking Myths: The Don'ts of Sleep

Dallas: That's great advice. Now, what should we avoid doing when it comes to sleep?

Dr. Breus: First and foremost, don't force yourself into eight hours of sleep every night. Sleep needs vary from person to person and even day to day. Your body will tell you what it needs if you're attuned to it.

Another big "don't" is consuming alcohol or caffeine too late. Alcohol may help you fall asleep initially, but it disrupts deep sleep and raises your core body temperature, causing poor-quality rest. If you drink, have it earlier in the evening. Similarly, caffeine's effects can linger for hours, so I recommend cutting off coffee by 2 PM at the latest.

Lastly, avoid chugging water late in the day. This habit can lead to multiple bathroom trips at night, disrupting your sleep. Aim to drink 60-80% of your daily water intake before 2 PM.



Practical Sleep Hacks

Dallas: What are some actionable hacks for better sleep?

Dr. Breus: Temperature control is crucial. Sleep follows your core body temperature cycle, which needs to drop for you to fall asleep. Avoid heavy pajamas, electric blankets, or other items that may trap heat. A simple trick is to stick a foot out from under the covers to help dissipate heat.

Another effective technique is the "Napa Latte," which I often recommend to busy executives. Drink a cup of cold black coffee, then immediately take a 25-minute nap. The caffeine kicks in just as you wake up, giving you a refreshed boost.

Lastly, for those who wake up in the middle of the night, try 4-7-8 breathing. Breathe in for four seconds, hold for seven, and exhale for eight. This method lowers your heart rate and distracts your mind, making it easier to fall back asleep.

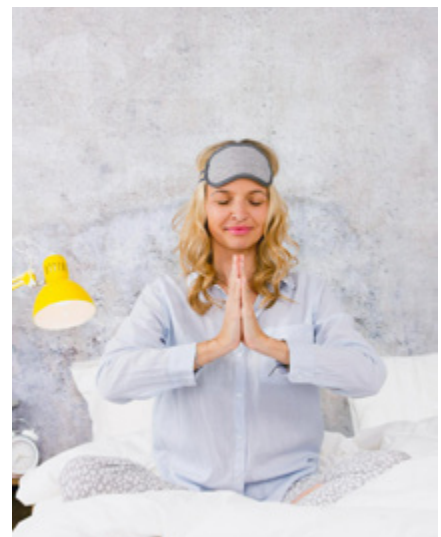


Light, Diet, and Sleep

Dallas: How do light and diet influence sleep?

Dr. Breus: Light exposure is often misunderstood. Blue light from devices isn't as harmful as many think, especially if you've had adequate natural light during the day. However, engaging activities, like playing games on your phone, can keep your mind too active for sleep. Avoid screens at least an hour before bed.

As for diet, I suggest following the "3-2-1 Rule": stop drinking alcohol three hours before bed, stop eating two hours before bed, and stop drinking fluids one hour before bed. Eating earlier in the day generally improves sleep quality, as your body isn't focused on digestion at night. Avoid processed sugar in the evening, as it can suppress melatonin production. Stick to whole foods rich in tryptophan, omega-3s, and vitamin D for the best results.



Simplifying Wellness with "Sleep, Drink, Breathe"

Dallas: Your new book, *Sleep, Drink, Breathe*, takes a straightforward approach to wellness. Can you tell us about it?

Dr. Breus: Wellness has become overly complicated. People often don't know where to start. My book breaks it down to the basics: sleep, hydration, and breathing. These are things we already do, but we can do them better. Small, incremental improvements in these areas can have exponential effects on overall health.

For example, breathwork can be transformative. Techniques like nostril breathing or 4-7-8 breathing are simple but powerful tools to manage stress and improve sleep. The book provides practical tips for incorporating these habits into daily life, making wellness more accessible.



Conclusion: Sleep as the Foundation of Health

Dallas: Where can people learn more about your work?

Dr. Breus: Visit my website, thesleepdoctor.com, for resources, including chronotype quizzes and virtual appointments. You can also find my books on Amazon and follow me on social media for evidence-based sleep tips presented in a fun, practical way. Sleep is the foundation of health, and my goal is to help people become better sleepers and, by extension, healthier individuals.



Dr. Michael Breus' practical advice highlights how small changes in sleep habits can lead to significant improvements in overall health and productivity. By simplifying wellness and focusing on the fundamentals, we can all unlock the benefits of "super sleep."



MICHAEL J. BREUS, PH.D.




[@thesleepdoctor](https://www.instagram.com/thesleepdoctor)

Michael J. Breus, Ph.D., is a double board-certified Clinical Psychologist and Clinical Sleep Specialist. He is one of only 168 psychologists in the world to have taken and passed the Sleep Medicine Boards without going to Medical School. He is also the founder of [sleepdoctor.com](https://www.sleepdoctor.com).

Dr. Breus is the author of four books with the newest book (2021) *Energize! Go from dragging Ass to kicking it in 30 days*, adds the concepts of Movement (not exercise), and Intermittent Fasting to his already famous Sleep Chronotypes. And it was recently named one of the top books of 2021 by The Today Show. In his 3rd book (2017) *The Power of When*, which is a groundbreaking biohacking book proving that there is a perfect time to do everything, based on your biological chronotype (early bird or night owl). Dr. Breus gives the reader the exact time to have sex, run, a mile, eat a cheeseburger, buy, sell, ask your boss for a raise and much more based on over 200 research studies.

He is an expert resource for most major publications doing more than 400 interviews per year (Oprah, Dr. Oz, The Doctors, NY Times, Wall Street Journal, and more). Dr. Breus has been in private practice for 23 years and recently relocated to and was named the Top Sleep Doctor of Los Angeles by Reader's Digest.



A hand in a grey sweater sleeve points from the left towards the text.

SLEEP WAS BIPHASIC UNTIL THE 1750S

WHAT HAPPENED AND WHY IT MATTERS

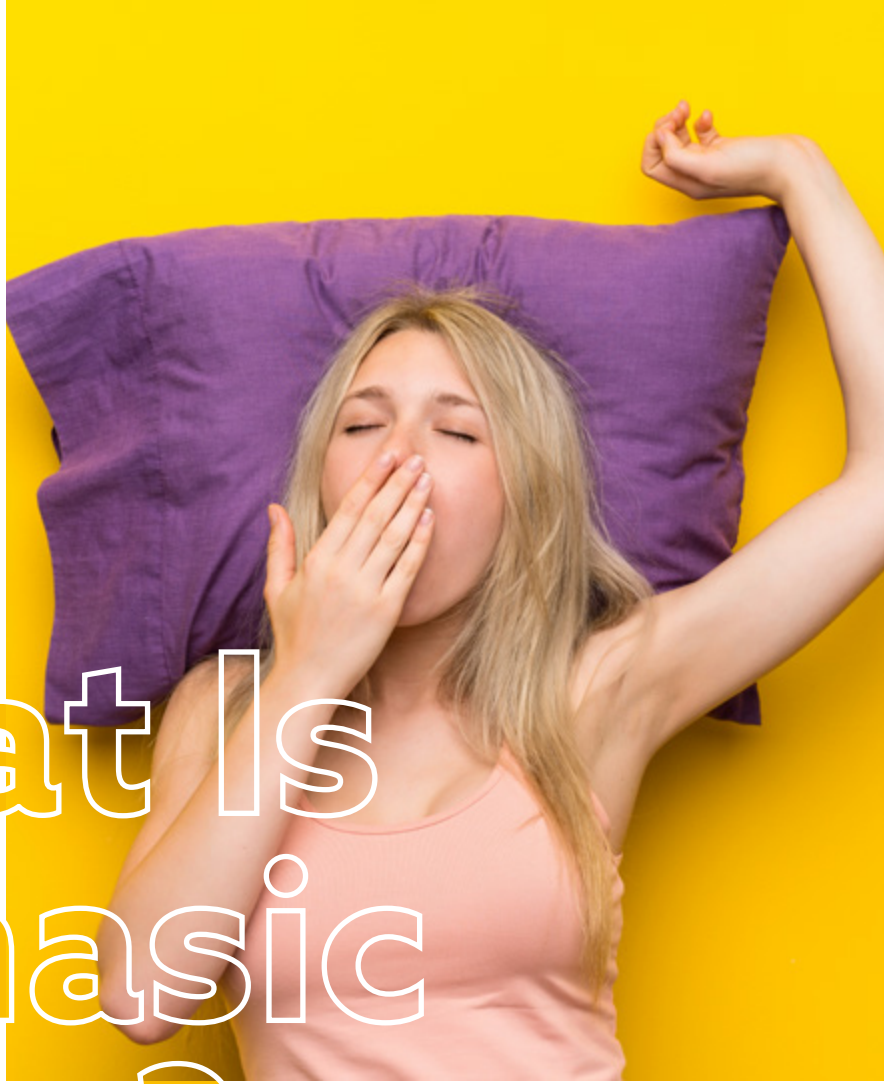
For most of human history, our ancestors didn't sleep in a single consolidated block as we do today. Instead, sleep was bi-phasic, meaning it occurred in two distinct segments with a period of wakefulness in between. This natural sleep pattern was prevalent across cultures and persisted for centuries, but it began to disappear around the 18th century.

What Is Biphasic Sleep?

Biphasic sleep refers to a sleep pattern where people sleep in two intervals, often referred to as "first sleep" and "second sleep." This was a common practice until the advent of industrialization.

Typical Biphasic Sleep Cycle:

1. First Sleep: People would go to bed shortly after sunset, sleep for about 3-4 hours, and then wake up for 1-2 hours during the middle of the night.
2. Wakeful Period: This time was often used for quiet activities such as prayer, reflection, reading, writing, or even intimacy.
3. Second Sleep: After this wakeful period, people would return to bed and sleep for another 3-4 hours until dawn.



Historical Evidence of Biphasic Sleep

- Medieval Texts: Literature from the Middle Ages frequently references “first sleep” (primo somno) and “second sleep” (secundo somno). These terms were commonly used and well understood by people at the time.
- Diaries and Letters: Historical records, including personal journals and correspondence, often describe waking in the middle of the night as a natural part of life.
- Medical Advice: Physicians of the era recommended using the wakeful period for contemplation, creative pursuits, or even light exercise to aid digestion.

Why Did Biphasic Sleep Disappear?

1. The Rise of Artificial Lighting:

- The invention of the first streetlights in the 17th century and the widespread adoption of gas and electric lighting in the 18th and 19th centuries extended daytime activities into the night.
- Artificial light suppressed melatonin production, reducing the natural inclination for biphasic sleep.

2. Industrial Revolution:

- With the rise of industrial work schedules, sleep patterns shifted to align with fixed working hours.
- The notion of a consolidated 8-hour sleep period emerged as a necessity for accommodating longer workdays.

3. Cultural Shifts:

- As urbanization spread, the quiet, dark conditions conducive to a biphasic sleep pattern became less common.
- Social norms began favoring a single block of sleep, aligning with the emerging ideals of productivity and efficiency.



Scientific Evidence for Biphasic Sleep

1. Thomas Wehr's Study (1992):

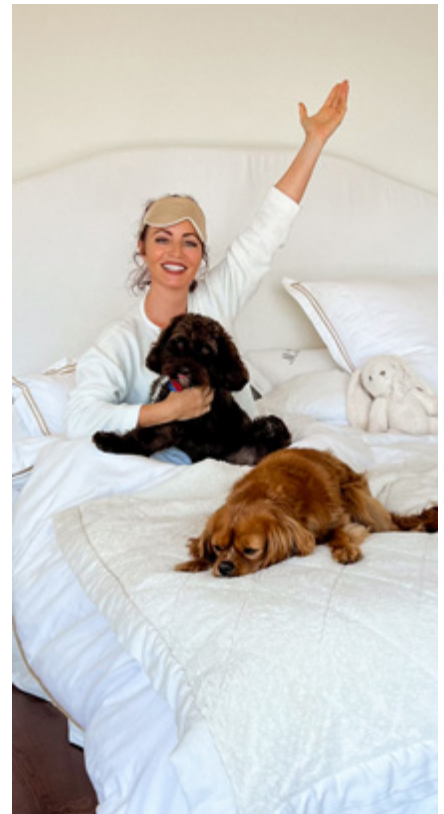
- Sleep scientist Thomas Wehr conducted a groundbreaking study in which participants were deprived of artificial light.
- After several weeks, participants naturally adopted a biphasic sleep pattern, confirming its biological basis.

2. Anthropological Studies:

- Traditional societies without access to artificial light, such as the !Kung in Africa and the Hadza in Tanzania, still exhibit biphasic or polyphasic sleep patterns.

3. Circadian Rhythms and Sleep Cycles:

- Human circadian rhythms naturally support a period of wakefulness during the night, as evidenced by changes in hormonal activity, such as increased prolactin levels during this time.



Benefits of Biphasic Sleep

1. Enhanced Creativity:

- The wakeful period was historically used for problem-solving and creative pursuits, a time when the mind was calm and reflective.

2. Stress Reduction:

- The break between sleep segments may help reduce the stress of trying to achieve uninterrupted sleep, a common source of anxiety for modern insomniacs.

3. Optimized Hormonal Balance:

- Biphasic sleep aligns with natural hormonal cycles, supporting better overall health and well-being.

4. Adaptability:

- Biphasic sleep could be particularly beneficial for individuals with irregular schedules, such as shift workers or new parents.

Should We Return to Biphasic Sleep?

While modern society makes it challenging to adopt a fully biphasic schedule, there are ways to incorporate its principles for better sleep health:

1. Embrace Napping:

- A short afternoon nap can mimic the second phase of biphasic sleep, helping you recharge and enhance cognitive function.

2. Prioritize Sleep Hygiene:

- Reduce exposure to artificial light in the evening, creating conditions more conducive to natural sleep patterns.

3. Experiment with Biphasic Sleep:

- If your schedule allows, try going to bed earlier and allowing yourself to wake naturally in the night without the pressure to fall back asleep immediately.

4. Leverage the Wakeful Period:

- Use any middle-of-the-night wakefulness productively or for relaxation instead of stressing about insomnia.



The Future of Sleep

Understanding the history of biphasic sleep sheds light on how far we've strayed from our natural rhythms. While a return to pre-industrial sleep patterns may not be feasible for everyone, small adjustments can bring us closer to optimal rest and overall health. As the biohacking movement contin-

ues to explore innovative ways to improve sleep quality, the lessons from biphasic sleep could offer valuable insights for unlocking your peak potential.

Also, this knowledge will show you, dear reader, that what "they" call insomnia is just you being NORMAL.



[@valerieorsoni and @liliwarrioroff](#)

VALÉRIE ORSONI

Valérie Orsoni has been a biohacker since 1998, living the talk and walking the walk long before the term existed (peptides, red light therapy, cold plunges and more? She has been doing it for over 25 years).

An avid explorer and mountain climber, she has conquered over 40 peaks above 15,000 ft in the past seven years and skied to the South Pole.

As a successful entrepreneur, she founded LiliWarrior, a 100% inclusive and sustainable athleisure brand, celebrated in Vogue as a favorite green sports brand among celebrities.

Valérie is the prolific author of 55 books, translated into five languages, and a best-seller in the USA, UK, Italy, France, Portugal, and Serbia.

In 2023, she was inducted into the Hall of Fame at her alma mater, the University of Hartford.

You can follow her on instagram [@valerieorsoni](#) and [@liliwarrioroff](#)

BIOHACKING SLEEP

**Unlocking Restorative Sleep
with SMR Sessions and More**

By Dr. Patrick K. Porter, Ph.D.



Achieving restorative sleep is essential for optimal brain function, memory consolidation, and overall well-being. Yet, many approaches to “biohacking” sleep focus narrowly on blue-light blockers. While these tools have their place, effective sleep optimization requires a comprehensive strategy.



Understanding the Science of Sleep

Restorative sleep is not merely about the number of hours spent in bed, but the quality and composition of the sleep cycles achieved. Two critical stages—deep sleep and REM sleep—serve distinct and essential purposes for both brain and body health.

Deep sleep, characterized by delta brainwaves (0.5–4 Hz), is the body’s most restorative phase. During this time, the glymphatic system, a waste-clearing mechanism unique to the brain, becomes active. This system flushes out toxins, including beta-amyloid and other proteins linked to neurodegenerative diseases such as Alzheimer’s. Deep sleep also promotes physical recovery by

aiding cellular repair, bolstering the immune system, and maintaining cardiovascular health.

REM (rapid eye movement) sleep, on the other hand, is the brain’s processing hub. During REM sleep, memories from the day are consolidated, emotions are processed, and neural connections are strengthened. This stage is essential for creativity, problem-solving, and emotional resilience. Neurotransmitters like acetylcholine and dopamine are activated, enhancing cognitive flexibility and preparing the brain for future learning.

Balanced sleep cycles, with sufficient deep sleep and REM sleep, ensure optimal brain detoxification, memory integration, and emotional stability. A lack of either stage can impair cognitive function, emotional regulation, and long-term brain health, underscoring the critical need for restorative sleep.



The Role of Blue Light

Blue light is often viewed as a sleep disruptor, with blue-light blocking glasses promoted as a solution for improving rest. While these glasses are effective at reducing blue light exposure, especially from screens, they are not a one-size-fits-all remedy and must be used in context. Blue light itself is not the enemy—it plays an essential role in our biology. During the day, exposure to blue light helps regulate circadian rhythms, our internal clocks that govern sleep-wake cycles. It stimulates alertness, boosts mood, and supports serotonin production, which later converts to melatonin to aid sleep.

Insufficient exposure to natural blue light during the day can disrupt these rhythms, leading to sluggishness, poor sleep, and conditions like Seasonal Affective Disorder (SAD). SAD is especially prevalent during winter months when natural light is limited, underscoring the importance of balanced exposure.

Blue-light blocking glasses are most beneficial in the evening when artificial lighting and screen use can suppress melatonin and delay sleep onset. For daytime use, glasses with progressive lenses that allow variable blocking—low during the day and high at night—offer a more balanced approach. This strategy ensures you gain the benefits of blue light for mood and energy while protecting your sleep at night.



Australian Sleep Study: A Wake-Up Call

Dr. Nicholas Keown's groundbreaking Australian sleep study involving coal miners revealed the alarming extent of modern sleep deficiencies. During a washout period, participants spent an average of 10 hours in bed nightly, yet shockingly achieved less than ten minutes of deep sleep on average. This disconnect between time spent in bed and actual restorative sleep underscores the critical need to address sleep quality, not just quantity.

Deep sleep, the stage dominated by delta brainwaves, is essential for activating the glymphatic system. This system clears toxins and metabolic waste from the brain, including beta-amyloid proteins linked to neurodegenerative diseases like Alzheimer's. Additionally, deep sleep supports cellular repair, immune

function, and overall physical recovery. Without sufficient deep sleep, the brain cannot adequately detoxify, setting the stage for cognitive decline and systemic health issues.

Equally important is REM sleep, which facilitates emotional processing and memory consolidation. This phase strengthens neural connections and integrates experiences from the day, enhancing learning, creativity, and resilience.

To achieve a restorative sleep profile, aim for at least one hour of deep sleep and two hours of REM sleep nightly. These benchmarks are key for physical recovery, mental clarity, and emotional stability, demonstrating that the quality of your sleep truly defines its value.

Enhancing Sleep with Neurotechnology

Neurotechnology is redefining how we approach sleep optimization, with brainwave entrainment tools like BrainTap® leading the way. These devices leverage the brain's natural ability to synchronize with external rhythmic stimuli, such as light and sound, to guide it into specific states conducive to relaxation and restorative sleep. This process, known as brainwave entrainment, aligns the brain's electrical activity to targeted frequencies, effectively supporting transitions into deeper and more restorative sleep stages.

Deep sleep, characterized by delta brainwaves, is crucial for brain detoxification, cellular repair, and immune system maintenance. However, achieving this state can be challenging in today's stress-laden environment. Neurotechnology addresses this by providing consistent and reliable stimuli that encourage the brain to shift into delta frequencies. Similarly, REM sleep, which is essential for memory consolidation and emotional processing, can also benefit from entrainment techniques that optimize theta and alpha wave activity.



Studies have shown that tools like BrainTap can significantly reduce sleep onset latency and improve sleep quality for individuals suffering from conditions like insomnia. Sessions designed to promote delta and theta activity prepare the brain for deep and REM sleep, while daytime sessions using beta or alpha waves can improve daytime alertness and indirectly enhance sleep quality. Neurotechnology offers a proactive, science-backed approach to reclaiming restorative sleep.

Natural Energy Without Coffee

Morning sensory-motor rhythm (SMR) sessions (12–15 Hz) are a powerful biohacking tool to naturally energize your brain and body. This frequency range fosters a state of physical relaxation coupled with mental alertness, helping to establish a clear boundary between the active daytime and restorative nighttime states. By optimizing neurochemical balances, SMR sessions provide a sustainable way to boost alertness, productivity, and focus throughout the day.

In the morning, your brain is naturally primed to produce key neurotransmitters and hormones—dopamine, cortisol, and norepinephrine—that deliver the “wake-up” effects many seek from coffee. Dopamine enhances motivation and reward, cortisol regulates energy release, and norepinephrine sharpens focus and cognitive performance. Leveraging these natural neurochemical processes through SMR training or specific breathing exercises like “Breath of Fire” can serve as what we call “digital coffee.” This approach energizes you naturally without the pitfalls of caffeine dependence.

Skipping your first coffee in favor of SMR or breathwork allows your brain to do its job. When you jumpstart your system with caffeine immediately after waking, your brain may perceive this external stimulant as a substitute, reducing its natural production of cortisol. Over time, this reliance can lead to mid-morning energy crashes and multiple coffee refills to compensate.

Morning SMR sessions or breath techniques not only optimize your brain’s natural rhythms but also set the tone for deeper, more restorative sleep by aligning your circadian rhythms. With a balanced start, you can break the cycle of over-stimulation and enjoy sustained energy without dependency. Why not start your day with a natural brain boost instead of a cup of coffee?



Expanding the Sleep Biohacking Toolkit

Achieving optimal sleep quality involves more than just going to bed on time; it requires a holistic approach that targets both daytime and nighttime habits. Here are four actionable strategies to enhance your sleep quality:

1. **Daylight Exposure:** Start your day by spending at least 20–30 minutes outdoors. Morning sunlight helps regulate your circadian rhythm by boosting serotonin production, which later converts to melatonin, the hormone responsible for sleep. Natural light exposure also aligns

your internal clock, improving alertness during the day and promoting restful sleep at night.

2. **Optimized Evening Routine:** The hours before bedtime are critical. Avoid bright screens and blue light, as they suppress melatonin production. Instead, engage in relaxing activities like meditation, gentle yoga, or reading a book under dim lighting. This wind-down period signals your body to prepare for sleep, enhancing your ability to transition smoothly into restorative phases.

3. **Nutritional Support:** Your diet plays a significant role in sleep qual-

ity. Incorporate magnesium-rich foods like almonds and spinach to relax muscles, and melatonin-precursors like tart cherries or turkey to support the sleep-wake cycle. Avoid caffeine and heavy meals in the evening to prevent disruptions.

4. **Ambient Adjustments:** Your sleep environment matters. Keep your room cool (60–67°F), quiet, and dark to optimize conditions for sleep. Use blackout curtains, white noise machines, or earplugs to minimize disturbances and create a sanctuary for uninterrupted rest.

By integrating these practices, you can create a tailored approach to biohacking your sleep, paving the way for deep, restorative rest that benefits your mind and body.



Reclaiming Restful Nights

Biohacking sleep extends far beyond simple interventions like wearing blue blockers; it involves a comprehensive approach that integrates light management, neurotechnology, and intentional lifestyle changes. By prioritizing deep sleep and REM sleep, you activate the brain's natural detoxification system and optimize memory consolidation, turning sleep into a powerful restorative tool.

A quick and effective biohack for enhancing sleep quality is delta training, available through BrainTap's delta wave sessions. These sessions are designed to calm the sympathetic (fight-or-flight) nervous system and engage the parasympathetic (rest-and-digest) system, essential for recovery. This process



not only facilitates deeper, more restorative sleep but also promotes overall relaxation and stress reduction, creating a foundation for sustained well-being.

For those without BrainTap or who find themselves without access to the headset, an equally effective practice is the 4-8 breathing technique. Inhale slowly to a count of

four, turning over your fears and frustrations to your other-than-conscious mind. Then exhale gently to a count of eight, focusing on what you are thankful for. Many clients report that within a few weeks, this technique requires fewer than five breaths to transition into a deep delta brainwave state, priming the body for restorative sleep.




[@drpatrickporter](https://www.instagram.com/drpatrickporter)

ABOUT DR. PORTER:

Dr. Patrick K. Porter, PhD, is an award-winning author/speaker and the founder of BrainTap®, the leader in technology-enhanced meditation. Dr. Porter pioneered the use of brainwave entrainment to improve clarity, sleep & energy, and remains at the forefront of scientific research. He founded BrainTap with the goal of making this technology accessible to everyone. BrainTap offers over 1800 original audio sessions in 12 languages and serves a worldwide user base with its mobile app and headset. Dr. Porter has been featured in The Wall Street Journal, People, Entrepreneur, INC and on ABC, NBC, CBS as an expert in brain health & wellness, and in 2020, Dr. Porter received the IAFNR lifetime achievement award. Please visit www.braintap.com.





SLEEP & REST WITH A BUSY BRAIN ON A SPINNING PLANET

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A SPINNING PLANET:

Sleep and rest are the cornerstones of human health, powered by the circadian rhythm, our body's natural 24-hour clock. Governed by the brain's suprachiasmatic nucleus, this cycle orchestrates a symphony of biological processes, from hormone release to body temperature regulation, all in harmony with the light-dark cycle of the day.

Sleep unfolds in four dynamic stages, cycling every 90 minutes. Deep sleep is the body's repair shop, mending tissues and boosting immunity, while REM sleep transforms the mind, consolidating memories and fueling creativity. Together, these stages optimize our physical and mental health.

Beyond sleep, moments of intentional rest—like meditation or quiet reflection—tap into the parasympathetic nervous system, easing stress and rejuvenating the mind. Together, sleep and rest align us with our circadian rhythm, ensuring peak performance and resilience.

Life thrives on oscillation—a dynamic dance of opposites that defines existence. The circadian cycle is the heartbeat of this rhythm, aligning the shifting tides of day and night, activity and rest, inhale and exhale. These oscillations are not random but deeply rooted in nature, weaving a tapestry of balance that sustains vitality and harmony.

As daylight floods in, the body awakens, driven by surges of cortisol to fuel action, growth, and productivity. When darkness falls, mel-

atonin takes the stage, ushering in the restorative powers of sleep, where cells repair, memories solidify, and the mind regenerates. This cycle mirrors the universal balance: the active yang of day countered by the restorative yin of night.

Even the smallest rhythms, like the inhale-exhale breath, echo this principle. Every inhale energizes, drawing life in, while every exhale releases, paving the way for renewal. These rhythms ripple across scales—from the beating of the heart to the turning of the Earth—reminding us that opposites are not enemies but partners in harmony.

Yet, in our modern world, we challenge this natural rhythm with artificial light, erratic schedules, and constant demands. The cost? Sleep disorders, stress, and disconnection from our natural flow. But by honoring these cycles—embracing sunlight in the morning, pausing for rest, and breathing with awareness—we can reclaim the balance that fuels our creativity, resilience, and well-being.

The circadian rhythm is more than a clock; it's life's ultimate metronome, a reminder that vitality is born from oscillation, from the rise and fall, the ebb and flow, the pulse of existence itself. To live fully is to embrace this rhythm and dance with it.



A BUSY BRAIN:

The circadian cycle isn't just a biological clock—it's the ultimate symphony of oscillation, orchestrating the rhythms of life. Brain signal variability (BSV) is a dynamic conductor in this concert, ensuring our brain seamlessly adapts to the shifting tides of day and night, activity and rest.

By day, BSV peaks, igniting creativity, focus, and problem-solving as cortisol and neurotransmitters like dopamine fuel flexibility and exploration. This heightened variability enables us to meet the demands of a world in motion, shifting effortlessly between tasks and environments.

As darkness falls, BSV transforms. During deep NREM sleep, variability steadies, guiding the brain into repair mode, clearing waste, and consolidating memories.

In REM sleep, variability surges again, mimicking wakeful states to spark emotional processing and creative problem-solving. These shifts ensure the brain regenerates while staying poised for the challenges ahead.

This dynamic dance of BSV is governed by the circadian rhythm, a cycle driven by light and neurochemical cues like melatonin. Misalignment—through artificial light, erratic schedules, or stress—desynchronizes BSV, leading to reduced adaptability and cognitive fatigue. But by aligning with natural rhythms—embracing sunlight, deliberate rest, and calming rituals—we optimize BSV to flow with the circadian beat.

Brain signal variability isn't just a feature of neural activity; it's a vivid expression of life's oscillations. It rises with the sun, fuels our innovation, and retreats with the moon, restoring our essence. To honor the interplay of BSV and the circadian cycle is to tap into the brain's full power—adaptive, resilient, and attuned to the rhythms of existence.



BRAIN SIGNAL VARIABILITY (BSV):

Brain signal variability (BSV) is like the brain's secret superpower—its ability to stay flexible, creative, and ready to tackle whatever comes next. Imagine your brain as a jazz musician, improvising moment to moment, adapting to new rhythms, unexpected changes, and complex challenges. That improvisation? That's brain signal variability in action.

At its core, BSV is about keeping the brain's activity dynamic, not stuck in a rut. This variability means your brain is constantly exploring possibilities, ready to shift gears, find solutions, and respond to the unexpected. When faced with a problem—whether it's a sudden decision at work, navigating a tricky conversation, or even avoiding a stumble while walking—BSV ensures your brain can quickly scan options, select the best one, and adapt on the fly.

But it doesn't stop there. BSV is also the foundation of resilience, helping you recover from setbacks. Just like a tree that sways with the wind instead of breaking, a brain with high signal variability can bend and bounce back under pressure. It keeps you calm under stress, open to solutions, and able to learn from challenges instead of being overwhelmed by them.

In short, brain signal variability is the engine of your adaptability. It pow-

ers your ability to think on your feet, solve problems, and stay steady in the face of change. It's not just a sign of a healthy brain—it's the reason you thrive in a world full of surprises.

BSV allows the brain to flexibly **downshift** from high-alert daytime activity to calmer, restorative states. During wakefulness, higher BSV supports adaptability and responsiveness, but as evening approaches, variability decreases in certain networks, signaling the brain to slow down and prepare for rest. This adaptability enables:

- **Relaxation** by disengaging from stress and overthinking.
 - A smooth shift from **wakefulness to light sleep** (NREM Stage 1).
- During deep sleep (NREM Stage 3), brain signal variability decreases in a targeted way, creating the stability needed for:
- **Tissue repair** and cellular restoration.
 - **Memory consolidation** as the brain processes and organizes experiences.
 - Strengthening the **immune system** through hormonal balance (e.g., growth hormone release).

At the same time, the brain retains enough flexibility to respond to subtle cues if necessary, such as waking up in response to danger or external stimuli.

In **REM sleep**, BSV increases again, mimicking daytime wakefulness but in a dreamlike, internally-focused state. This heightened variability supports:

- Emotional processing, helping the brain manage stress and anxiety.
- Problem-solving and creativity by allowing the brain to explore non-linear patterns and “rehearse” solutions.

Even when not asleep, **deep conscious rest** states (like meditation, yoga nidra, or mindful breathing) benefit from optimized BSV. In these states:

- BSV supports **mental relaxation**, reducing overactive thoughts while maintaining awareness.
- It encourages balance in the **autonomic nervous system**, activating the parasympathetic “rest and digest” mode.
- It promotes a “reset” for the brain, allowing it to shift between focused effort and recovery.

BSV helps the brain remain resilient against common disruptions like stress or irregular schedules. A brain with healthy variability can:

- **Recover from poor sleep** by optimizing restorative functions during the next sleep cycle.
- Adapt to temporary changes, such as jet lag or shift work, by recalibrating its rhythms faster.



BASIC WAYS TO IMPROVE YOUR BSV FOR BETTER SLEEP & REST:

1. Wind Down: Activities like meditation, gentle movement, or calming music can promote balanced BSV, helping the brain transition smoothly into rest.
2. Light Exposure: Morning sunlight boosts daytime BSV, while dimming lights in the evening supports the low-variability state needed for sleep.
3. Mindful Breathing: Deep, slow breathing increases parasympathetic activity and stabilizes brain signals, creating a bridge between conscious rest and sleep.
4. Consistent Sleep Schedule: Regular rhythms reinforce the natural oscillations in BSV that support restful states.



VARIABLE STROBOSCOPIC STIMULATION FOR BETTER BSV:

Variable stroboscopic stimulation is like a rhythmic spark, igniting the brain's natural flexibility and adaptability. By introducing precise, dynamic light patterns, it enhances brain signal variability (BSV), pushing the brain into a state of optimal responsiveness. This stimulation gently tunes neural networks, helping the brain transition seamlessly from wakefulness to calm, restorative states.

As BSV increases, the brain becomes more adept at releasing tension, silencing overactivity, and aligning with natural circadian rhythms. The result? Deeper sleep, heightened relaxation, and the ability to sink into truly rejuvenating rest. Variable stroboscopic stimulation is more than a tool—it's a catalyst for unlocking the brain's innate power to reset, recover, and thrive.

The neuroVIZR Light/Sound device is an example of well-crafted Variable Stroboscopic Stimulation. As a Brain Engagement tool, unlike conventional Brain Entrainment, the neuroVIZR generates brain neuroplastic signaling that purpose-

ly moves dynamically within the bounds of Order and Chaos that exercises the ability of our brain to change when change is required. It softens the "glue" of habituation and stimulates the adaptive ranges of Brain Signal Variability. Like Darwin said, "It is not the strongest or the most intelligent that survive but rather the most adaptive".

As explained above, "Opposites are not enemies but partners in harmony" perfectly captures the role of increased and decreased brain signal variability (BSV). High BSV fuels adaptability, creativity, and problem-solving, keeping the brain flexible and alert during the day. Low BSV, on the other hand, provides stability, supporting deep sleep, memory consolidation, and recovery at night. These opposites work in tandem—one priming the brain for action, the other for restoration—ensuring balance, resilience, and optimal function. Together, they form the symphony of a thriving brain, proving that harmony lies in the dance of opposites.



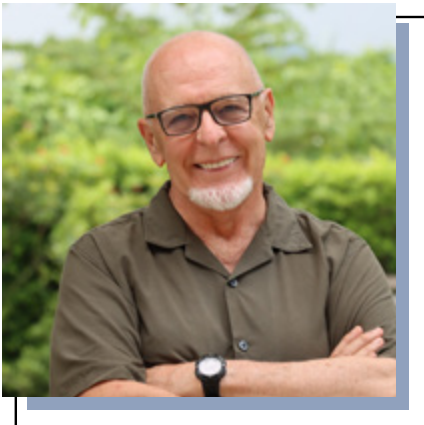
Executive Summary

Garnet Dupuis has dedicated his life to teaching, healing and developing methods and devices for Integrative and Complementary Wellness. He began his early work with light, sound and consciousness in 1970 at the “dawn” of the early explorations in the Human Potential Movement while still in university in Canada.

For additional background, please explore Garnet’s expertise at <https://neurovizr.com/articlesscience/>



Garnet Dupuis



[@neurovizr](https://www.instagram.com/neurovizr)

Garnet Dupuis is an Integrative and Complementary Wellness professional with a career that has quietly spanned several decades. Since the 1970s, he has been on a journey of exploration, delving into the fields of light, sound, and consciousness. His work was initially inspired by the Human Potential Movement during his academic years in Canada, and that inspiration has continued to guide his path.

In 1984, Garnet had the unique opportunity to bring sports massage to the United States during the LA Olympics, introducing innovative techniques that supported athletes’ performance and recovery. This experience was a significant moment in his career, blending his passion for wellness with his commitment to enhancing human potential.


Today, Garnet serves as the Chief Creative Officer and Co-Founder of Lucid Studios in Thailand, where he focuses on developing neuroVIZR instruments designed to foster positive neuroplastic changes in the brain. He views life as a spiritual journey, placing a deep emphasis on compassion and personal awakening. Outside his professional work, Garnet is dedicated to wildlife rescue and conservation in eastern Chiang Mai, Thailand, where he manages a Gibbon Sanctuary.

His academic background is diverse, including studies in Classical and Clinical Homeopathy, Oriental Medicine, Psychology, and other fields. Garnet has had the opportunity to share his knowledge globally through lectures and appearances on various podcasts. His contributions to Biohackers Magazine as an associated writer reflect his commitment to broadening the conversation around wellness and consciousness.

Garnet has also spoken on numerous stages around the world, offering thoughtful presentations on topics close to his heart, always with the hope of inspiring others on their own paths of discovery.

BIOHACKING YOUR SLEEP WITH A DELICIOUS BRUSSELS SPROUTS RECIPE





One of the most important aspects of your health is quality sleep. Good sleep is supported by foods like brussel sprouts, [cabbage](#) and eggs that are rich in sulfur and glutathione. This issue's brussels sprout recipe is sulfur rich and offers a savory seasonal treat as you hack your way to better sleep. Glutathione is a tripeptide composed of three amino acids: glutamine, glycine, and cysteine and is [synthesized](#) in our bodies using sulfur as an amino acid precursor. Sulfur from green cruciferous veggies is also present in the amino acid methionine, supporting your sleep patterns, hormones, mood, kidney and adrenal health.

Combining brussels sprouts, delicata squash, pomegranate and pumpkin seeds, this recipe dishes up abundant protective antioxidants and phytochemicals to combat the effects of stress on your sleep. Balancing your circadian rhythms with [antioxidants](#) as a biohacker is best done with foods. As you start this New Year, your body craves deeper [sleep](#) to thrive.

Oxidative stress during the holidays can accumulate and cause a dip in January in your energy and immunity. Your kidneys and adrenals need good rest and support all year long but especially as metabolic and endocrine functions fluctuate in cooler temps. Getting your sleep patterns regulated is a Biohacker's top priority and the bright flavors, [nutrients](#) and fiber in this dish make it a perfect part of your New Year healthy meal plan.

Try all of our Biohacking recipes to offset the cravings and pro-inflammatory processes that stall your health.

Right when your [glucocorticoid](#) levels spike as the days are shorter, the hustle and bustle can cause even more challenges to your sleep and kidney/adrenal function. "Seasonality" affects more than mood, energy, and sleep. Our bodies have genetically responded to seasonal shifts with physiologic adaptations such as a spike in wintertime blood pressure.

Brussels sprouts with [glucosinolate](#) and Vitamin K can help balance blood pressure, cholesterol and support deep [healing](#) sleep.

Delicata squash has a succulent skin that does not need to be peeled and gives us a dose of "anti-infective" [Vitamin A](#).

Pomegranates have powerful antioxidant EA (ellagic acid) [polyphenols](#) and ellagitannins (ET). Pumpkin seeds boost zinc and magnesium which balance [cortisol](#) and reduce inflammation.

Enjoy this savory Biohackers Magazine recipe that hacks your sleep as you reset this January. When you eat and move in ways that warm your heart and nourish you internal-

ly, you will unlock the code to balanced seasonal health.

As colder weather moves in, the earth's energy moves inward. Our health and sleep can benefit from foods that energetically harmonize with this inward movement; such as [root vegetables](#), slightly salty flavors, and seeds. In both mainstream and holistic medicine, our kidney/adrenal system relates to our sleep cycles. Physiologically, the kidneys filter blood, regulate fluids and electrolytes and maintain our pH balance. The adjacent [adrenal glands](#) are endocrine glands that regulate our cortisol levels, stress response, blood pressure, sex hormones, metabolism, and assist with salt and water balance. If cortisol spikes at night, we wake up too often.

Dave Asprey, who coined the term "Biohacking", often reminds his audience that to be a biohacker one must combine knowledge with [curiosity](#). Winter is the perfect season to dive deeper, and learn more about the science behind how our bodies respond to cyclic changes in very individual ways.

Biohacking Magazine invites you to enjoy the journey to self healing and sleep health and learn how to tweak your diet with intention.

Winter is associated with traditional healing practices that are quiet, [calm](#) and peaceful. Nothing could be more calming than slowing down to savor a bowl of colorful tender leafy green roasted sprouts mixed with tart red pomegranate seeds, sweet soft yellow squash slices, and slightly salty pepitas.

A combination of methodical biohacking and adventurous culinary science, cooking for a specific body system and season will help you outline your own unique medicinal map. Here's to the future of blending what we know and where we are willing to grow!



INGREDIENTS:

- 1 pound brussel sprouts, trimmed of outer leaves and stems, and cut in half
- 1 delicata squash, sliced, seeds removed, chopped into chunks
- ¼ cup fresh pomegranate seeds (if using a whole pomegranate remove white pith)
- ¼ cup pepitas or raw pumpkin seeds
- 2 TBLS Extra Virgin Olive Oil
- 1tsp apple cider vinegar
- 2 cloves garlic peeled and loosely chopped
- 1 TBLS sea salt plus more to garnish to taste
- Have a Large bowl and Large baking sheet ready.



RECIPE:

Soak all vegetables (and whole pomegranate) in water then rinse and dry on a kitchen towel. Remove loose brussel sprout pieces.

Cut the delicata in half across the middle and then in half lengthwise. Scrape out seeds, and then chop into 2 inch chunks. Leave the peel on.

Chop brussels in half, removing all loose parts and stem. If you prefer smaller, chop into quarters.

Crush the garlic cloves, peel, loosely chop and set aside on cutting board for 5 min.

Find fresh pomegranate seeds in most grocery stores or chop a whole pomegranate in half, and then again in quarters, remove the white part and separate the fresh seeds and set aside.

Preheat the oven to 375 degrees F.

Set aside ¼ cup pepitas or raw pumpkin seeds.

Toss brussels, squash, and garlic in a large bowl with 1 TBLS of Olive Oil, 1 tsp Apple Cider Vinegar, and 1 tsp salt until all veggies are evenly coated.

Brush baking sheet with 1 TBLS Olive Oil and spread the veggies out evenly in 1 layer.

Roast the veggies for 30 minutes, stirring once or twice. If the brussels aren't crispy add another 5-10 minutes but try not to over cook. Look for the squash to be tender and toasted.

Remove and mix into a platter with the pomegranate seeds and pumpkin seeds and extra salt to taste. Bon Appetit!





Maraba DiRaddo



[@healingmamaraba](#)

Maraba DiRaddo is a seasoned Holistic Health Coach, Movement Therapist and founder of <https://blissbroth.com> in Austin, Texas. Her BA in pre-med and holistic health and her training in Medical Massage modalities led to her work in hospitals, clinics and private practice specializing in chronic pain. Iyengar Yoga and Pilates method have also been central to her practice but she realized early in her career that nervous system and digestive health were the missing pieces in deeper injury prevention and healing. This realization led her to study Traditional Chinese Medicine, Ayurveda, and Auto-immune nutrition and to develop her unique and effective holistic protocols. Maraba's experience guiding clients for over 30 years to make health changes has proven that individualized movement and nutrition strengthens the core inside and out. She believes that aging positively requires all the good tools - and a great soup! Maraba loves to practice yoga, cook, teach, write and spend time in nature with her active family. She is very inspired by health thought leaders who encourage accessible daily hacks to make systemic change. Maraba is developing a Brain Health Reset App based on her integrative holistic protocols, emerging neuroscience and traditional healing methodologies.

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Metabolic Freedom

The Next Frontier in
America's Health Revival

by Ben Azadi, Founder of Keto Kamp and
author of Metabolic Freedom



In an era of endless diet debates and mounting health crises, Biohackers are emerging as early adopters of a groundbreaking concept: Metabolic Freedom. At its core, Metabolic Freedom is about restoring the body's innate ability to switch seamlessly between burning carbohydrates and burning fat. For those of us already tracking biomarkers, experimenting with fasting protocols, and leaning into ancestral health principles, this might sound familiar. But beyond our personal optimization, there's a bigger picture at play—Metabolic Freedom aligns perfectly with the mission to Make America Healthy Again.



A Practical Approach to Metabolic Chaos

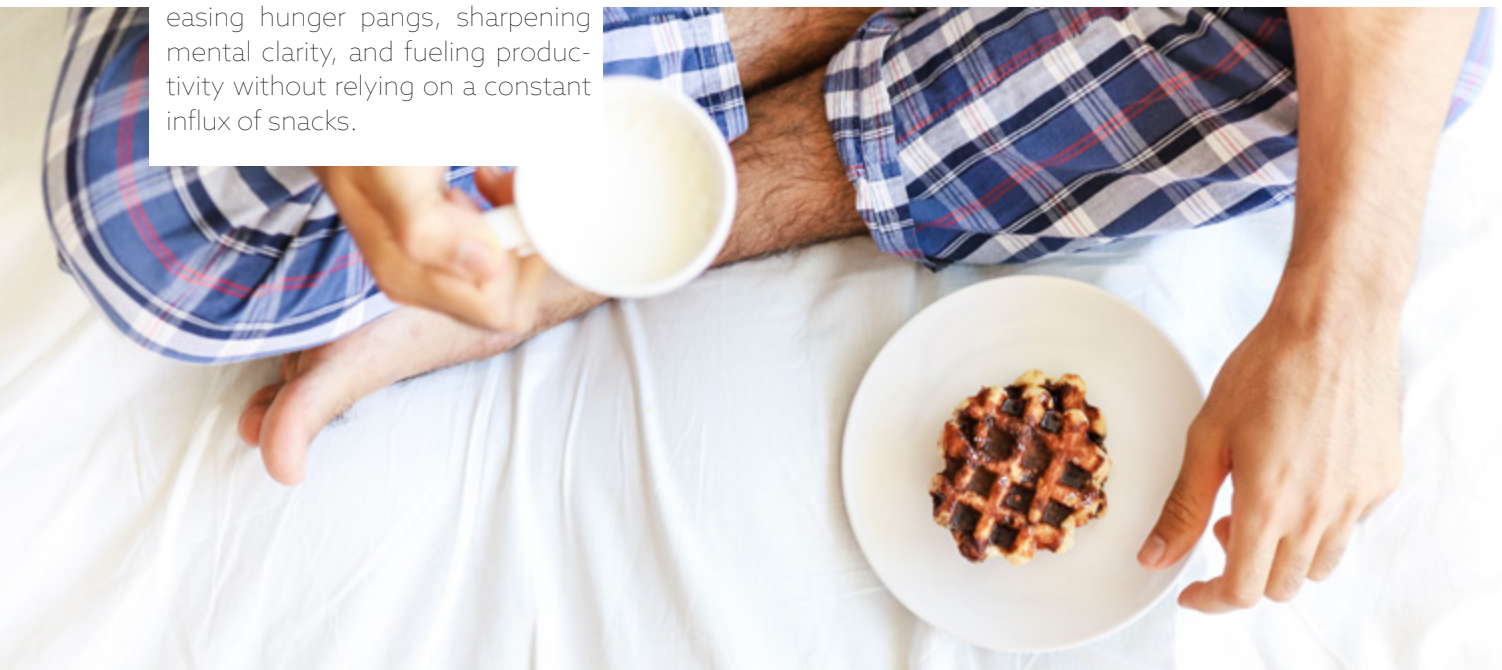
Despite decades of nutrition advice promoting “miracle” diets, obesity rates continue to soar. Americans grapple with metabolic dysfunction that reaches far beyond mere weight gain—chronic diseases, mood imbalances, and pervasive fatigue can all be traced back to poor metabolic health. We know that simply picking sides in the carb-versus-fat wars isn't the answer. Instead, Metabolic Freedom means training our bodies to access their own energy reserves. Rather than remaining chained to frequent meals and sugar fixes, we learn to run efficiently on stored fat, easing hunger pangs, sharpening mental clarity, and fueling productivity without relying on a constant influx of snacks.

Our Responsibility as Biohackers

Many of us already have the tools and data to self-optimize. We track glucose with continuous monitors, breeze through intermittent fasts, and carefully measure our responses to different dietary inputs. But true visionaries in our community recognize that personal benefits are only the first step. By promoting Metabolic Freedom more broadly, we can help lift the entire nation's health profile. If more Americans move beyond dependency on ultra-processed foods, it eases the collective burden of chronic disease and creates a more resilient society.

Sleep and Metabolic Freedom

Quality sleep and metabolic freedom reinforce each other in a steady, supportive cycle. When the body maintains balanced blood sugar and stable hormones, drifting into deeper, more restorative rest becomes natural. In turn, that well-rested state sharpens insulin sensitivity and encourages healthy cellular repair, allowing you to wake up energized and primed for flexible fuel usage. Over time, this interplay transforms restful nights and metabolic adaptability into cornerstones of lasting vitality.



Elevating Public Understanding

We often delve deep into the science behind insulin, mitochondrial function, and the role of ketones in cognitive performance. By translating our insights into accessible strategies—periodic carbohydrate reduction, strategic fasting, and selecting nutrient-dense foods—we can demystify metabolic health for friends, family, and communities. Instead of pushing one more dietary tribe, we shift the focus to adaptability: empowering people to break free from rigid eating schedules and rediscover their ability to thrive on multiple fuel sources.

A Nation of Experimenters

Making America Healthy Again doesn't mean everyone must become data-obsessed. But widespread familiarity with principles like metabolic flexibility can spark grassroots interest in simple self-experimentation. As more individuals test their personal tolerance for fasting, adjust meal times, and gravitate toward whole foods, our nation's baseline health can inch upward. Over time, this shift clarifies which interventions have the greatest impact, guiding more effective public health policies, a cleaner food supply, and a cultural pivot toward wellbeing.

From Individual to Collective Benefit

Metabolic Freedom is more than a personal advantage—it's a scalable health solution. When we no longer feel enslaved to our next sugar hit, when we can navigate busy days without energy crashes, and when we show up at work or school mentally sharp and emotionally steady, the ripple effects extend beyond our own bodies. Productivity rises, health-care costs decline, and the general atmosphere of anxiety transforms into one of autonomy and confidence.





Guides, Not Gatekeepers

Our community is critical in advancing Metabolic Freedom because we can share personal experiences and quantified results to help others break free from the Standard American Diet. We've attained our freedom through self-experimentation and lessons learned the hard way. Without our decades of collective biohacking experience, this movement might not be ready to go mainstream. Our insights pave the way for a smooth transition, helping others avoid the pitfalls we've navigated.

A Collective Calling

Metabolic Freedom doesn't just solve for personal optimization; it offers a framework to upgrade our nation's wellness. Armed with a love of data, a hunger for evidence, and a willingness to try new strategies, we are ideally positioned to lead this charge. As we practice and promote Metabolic Freedom, we move the conversation away from restrictive diets and short-term fixes to guide the nation toward sustainable resilience.

This is how we help America step off the blood sugar rollercoaster and onto a path of genuine, lasting health—a path illuminated by our pioneering spirit and our commitment to Metabolic Freedom.

For those eager to learn more, Ben Azadi will be sharing his insights in person at the **Biohacker Expo taking place in Miami from February 28 to March 1.** Don't miss this chance to deepen your understanding of metabolic freedom and other cutting-edge health strategies. **Save 50% off your admission with code "BE" at biohackerexpo.com.**



Ben Azadi



[@thebenazadi](https://www.instagram.com/thebenazadi)

Ben Azadi is a three-time bestselling health author and international keynote speaker who has spent over 15 years transforming medicine through his commitment to advancing holistic health principles. His personal journey from obesity to metabolic health drives his mission to help one billion people lead healthier lives. As the founder of Keto Kamp, Ben champions ancient healing strategies such as the ketogenic diet and intermittent fasting, offering individuals actionable tools to enhance their energy and productivity.

Ben's influence extends across multiple platforms, including his award-winning Metabolic Freedom Podcast, which was named Keto Podcast of the Year in 2022, and his rapidly growing YouTube and TikTok channels, with over 530,000 followers and 50 million video views.

As a dedicated biohacker and longevity coach, Ben has empowered thousands to overcome fatigue, brain fog, and low energy. His strategic insights have been featured in prestigious outlets like Forbes, The New York Times Magazine, and LA Weekly. Through his keynote speeches at events like Biohacker Expo and his comprehensive online health coaching program, Ben Azadi continues to resist oppressive healthcare practices, transforming patient care and empowering individuals to achieve superior health and productivity.

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Main Stage Host: **JP SEARS**

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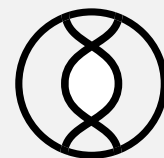
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PRODUCT *Reviews*

by @Cyborggainz

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Baloo Weighted Blanket



Product Review:

Baloo Weighted Blanket

[@balooliving](#)

Perspective from a long-term insomniac. Using the Baloo Weighted Blanket has been like discovering a secret weapon for better sleep and recovery. The first night I wrapped myself in it, I felt this gentle, calming weight that honestly feels like being hugged. It wasn't long before I realized I was falling asleep faster. If you're someone who tosses and turns or struggles to relax after a long day, this blanket could be a game-changer.

Sleep and Recovery

For me, the difference was immediate! This blanket makes winding down at the end of the day so much easier. The weight isn't overbearing; it's just enough to give that comforting pressure that helps your body chill out. Over the weeks, I've noticed fewer aches and a much deeper, uninterrupted sleep. It's like giving your nervous system permission to take the night off, and in the morning, you can tell.

Comfort That Works All Night

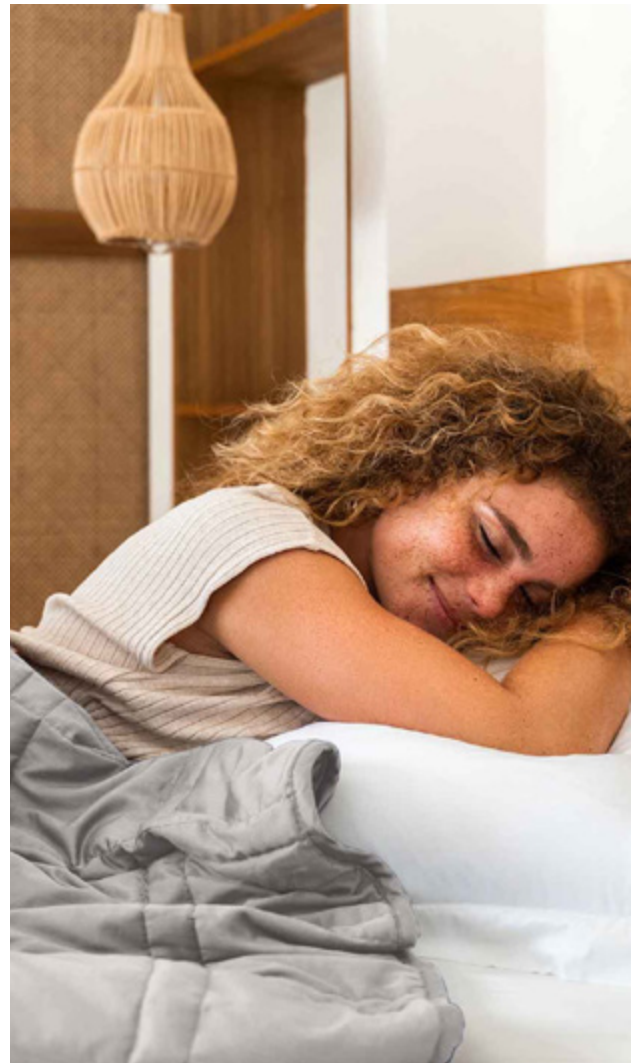
The design is a standout for me. I've tried weighted blankets before, and they can get hot or feel lumpy, but not this one. The weight is perfectly spread out, so you don't feel it shifting or bunching up. Plus, the cotton material is super soft and breathable. I'm one of those people who gets hot easily at night, and I didn't feel like I was overheating even once. It's like they thought of everything.

Relaxation After Tough Days

Whether it's from workouts, work stress, or just life in general, recovery is huge for me. The Baloo Weighted Blanket has this way of helping my body and mind let go at the end of the day. I've even found myself using it during Netflix sessions just because it makes me feel so relaxed. It's not just a blanket, it's like having your personal chill-out buddy.

A Blanket You Can Feel Good About

I'm big on products that align with a healthy, sustainable lifestyle, and the Baloo Weighted Blanket ticks all the boxes. It's made with non-toxic materials, free from polyester and harmful chemicals. Knowing it's safe and eco-friendly just adds to the comfort factor for me.



Final Thoughts

If you've been on the fence about trying a weighted blanket, the Baloo Weighted Blanket might just surprise you. It's hands down one of the most comforting things I've added to my nightly routine, and the difference in how I sleep and recover has been amazing. Whether you're dealing with stress, muscle fatigue, or just need better sleep, I'd 100% recommend it.

Pros and Cons

What I Love:

- The comforting, hug-like feel that makes falling asleep easier.
- Even weight distribution—no annoying lumps or shifting beads.
- Soft, breathable cotton that doesn't trap heat.
- It helps me wind down after stressful days and intense workouts.

• Knowing it's made from eco-friendly, non-toxic materials is a big plus.

What Could Be Better:

- Washing it can take some effort because of the weight, but it's manageable.



SEE AND BE SEEN

Upcoming Events

Experience the act of BE-ing a true biohacker among the best of them at the Biohacker Expo!

- Dive into the world of health optimization and longevity at the Biohacker Expo, happening February 28–March 1, 2025, at the Miami Airport Convention Center. Featuring visionary speakers like JP Sears, Andrew Bustamante, and Dr. Christina Rahm, this event will showcase groundbreaking insights and tools for mastering your biology.
- Explore cutting-edge innovations, interactive workshops, and top-tier exhibitors focused on biohacking, wellness, and peak performance. Don't miss this opportunity to transform your well-being. Secure your ticket today!

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- Featuring 35 of the world's best speakers diving deep into all aspects of health optimisation—from nutrition and fitness to longevity and mental health—this is the event of the year for anyone passionate about living a healthier life.
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- Get your tickets now at usa.healthoptimisation.com and use code **BIOHACKERSMAGAZINE** for 10% off!

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ACKNOWLEDGMENTS

Everyone involved in the production of this magazine is humbled by the opportunity to have a publication that makes a real difference. Our magazine is woven into the fabric of our community and we recognize the importance of being culturally relevant, authentic at all times, and genuinely passionate about living well, living fit, and living long. Thank you to our contributors, partners and circle of friends for joining us in *extending the future*.

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Cofounder & Chief Editorial Carpenter

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Founder & Longevity Exploration Maestro

YANNICK NAMIA
Cofounder & Chief Lifespan Extension Technologist

EDITORIAL CONTRIBUTORS

Garnet Dupuis
Michael Breus Phd
Dr Patrick Porter
Maraba DiRaddo
Ben Azadi
Valérie Orsoni

DESIGNER

Andres Nuñez

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