



# INCREMENTAL *Health*

## My Ultimate Guide to Sunlight

Discover how and why reconnecting with the natural light cycle might just be the best thing you've ever done.

# WHY SUNLIGHT?

The Ultimate Health Enhancer. Unlocking mental and physical vitality through the power of full spectrum natural light.

# OUR EVOLUTIONARY RELATIONSHIP WITH THE SUN

For millions of years, humans evolved under the natural light/dark cycle of the sun, a fundamental rhythm dictating our biological and physiological processes. This cycle has been integral in shaping our sleep patterns, hormonal regulation, eating habits and overall health. As a result of having no other choice, our bodies are tuned to its rise and set, using these cues for vital functions like metabolism, sleep, and immune system strength.

In modern times, our connection to this natural rhythm has significantly diminished. The advent of artificial lighting, lifestyle changes and work patterns has distanced us from the sun's cycle, leading to a disconnect that impacts our health more than anyone realises. This shift away from nature's timetable disrupts our circadian rhythm, which is essential for orchestrating a host of bodily functions, including energy metabolism, mood regulation and the repair and regeneration of cells.

Understanding the importance of realigning ourselves with the sun's natural cycle is key to improving our health. By recognising and mitigating the effects of this disconnection, we can take steps toward reclaiming the health benefits that our ancestors enjoyed naturally.

# HEALTH CONSEQUENCES OF MISALIGNED LIGHT ENVIRONMENT

**Circadian Rhythm Disruption:** Misalignment leads to poor sleep quality, reduced alertness during the day, and imbalanced hormone levels affecting overall health and energy.

**Inflammation Increase:** Lack of natural light exposure can trigger chronic inflammation, setting the stage for various autoimmune and cardiovascular diseases.

**Cardiovascular Health Decline:** Disrupted light cycles contribute to higher blood pressure and increased risk of heart disease and stroke.

**Sleep Disorders:** Insufficient exposure to natural light can lead to insomnia, disrupted sleep patterns, and overall poorer sleep quality, therefore affecting overall quality of life.

**Elevated Stress Levels:** The body's stress response is heightened when natural light exposure is out of line, leading to increased cortisol levels and chronic stress conditions.

# HEALTH CONSEQUENCES CONTINUED

**Anxiety/Depression:** Reduced sunlight exposure is linked to a higher incidence of mood disorders, including depression, anxiety and irritability.

**Vitamin D Deficiency:** Lack of sunlight results in insufficient Vitamin D synthesis, affecting bone health, immune function mood regulation and many other health factors.

**Impaired Cognitive Function:** Reduced sunlight exposure negatively impacts cognitive functions, including memory, focus, and decision-making capabilities.

**Weakened Immune System:** Natural light's influence on circadian rhythms also affects immune response, leading to increased susceptibility to infections and illness.

**These consequences highlight the critical role of aligning our lives with the natural light/dark cycle and ensuring adequate exposure to natural sunlight for maintaining mental and physical health.**

# THE DIFFERENT SPECTRUMS OF SUNLIGHT

Sunlight is a complex mix of wavelengths, each with unique effects on our health. The visible spectrum includes Blue Light and Red Light, which have different benefits and vary in intensity at different parts of the day. Blue light is at one end of the spectrum with short wavelengths.

The other end of the spectrum contains visible red light and Infrared light, which is invisible to the eye and offers therapeutic benefits. These longer wavelengths penetrate deeper into tissues, supporting cellular energy production, reducing inflammation, and aiding in recovery and healing. Exposure to red and infrared light at sunrise and sunset can help maintain our natural circadian rhythms, promoting better sleep and overall well-being.

Understanding the balance and timing of exposure to these wavelengths is crucial. Natural sunlight provides a harmonious blend of these lights, crucial for health. This balance supports various bodily functions, from mood regulation to physical recovery, emphasising the importance of regular, balanced exposure to natural light and not artificial exposure from screens and devices.



# RED AND INFRARED LIGHT

Red and infrared light, parts of sunlight's spectrum, offer profound health benefits. These wavelengths penetrate the skin, reaching deep into tissues, muscles, and bones, stimulating cellular repair and energy production. This process, known as photo-biomodulation, helps in reducing inflammation, accelerating healing, and relieving pain.

Furthermore, red and infrared light play a critical role in regulating our circadian rhythm. Exposure to these lights at sunrise and sunset helps signal our body to prepare for the day's start and wind down for the night, promoting a natural sleep cycle. This aligns our biological clock with the natural environment, improving sleep quality, mood, and overall well-being.

The therapeutic benefits of red and infrared light extend to enhancing skin health, boosting collagen production, and potentially reducing the signs of aging. Seeing sunrise or sunset not only offers a fulfilling experience but also provides the essential exposure to these beneficial wavelengths, emphasizing their importance in our daily routines for optimal health.

# BLUE LIGHT

Post sunrise and mid-day blue light is crucial for health, particularly in regulating our circadian rhythm. This natural blue light signals our body that it's daytime, enhancing alertness, mood, and cognitive function. It's also vital for vitamin D synthesis, which strengthens bones, boosts the immune system, and reduces inflammation.

Unlike the blue light emitted from devices, which can disrupt our bodies in many different ways, the blue light from the sun is balanced with other wavelengths, reducing potential harm and providing health benefits. This natural combination supports our sleep-wake cycle, helping maintain overall well-being.

The presence of blue light in natural sunlight, especially after sunrise and during mid-day, encourages outdoor activity, which is associated with improved mood and energy levels. It underscores the importance of outdoor exposure in natural light settings. Even when it's cloudy, the benefits of natural light in the daytime are profound. Artificial blue light exposure from bright screens and lights confuses our light sensing machinery and begins a whole cascade of unwanted health issues if exposed for too long or too often.



# VITAMIN D PRODUCTION

The process of vitamin D synthesis in our bodies exemplifies nature's ingenuity and the importance of natural light. When UVB rays from sunlight touch our skin, they transform cholesterol into vitamin D<sub>3</sub>, initiating a vital pathway for health. This transformation continues in the liver and kidneys, producing the active form essential for bone health, calcium absorption, and immune function.

Unlike supplementation, which can lead to imbalances by bypassing our body's regulatory systems, sunlight-induced vitamin D synthesis is self-regulated, minimising the risk of excess. This method, requiring full skin exposure without sunscreen, ensures a bioavailable form of vitamin D, tailored by our body to meet individual needs.

Beyond the biochemical benefits, this natural synthesis promotes outdoor activity, enhancing physical and mental health. Therefore, the sun-driven production of vitamin D is not only superior to supplements in terms of bioavailability and safety but also encourages a holistic approach to well-being, leveraging our intrinsic connection with the outdoor environment.

# HEALTH BENEFITS OF ALIGNING WITH NATURAL LIGHT

**Circadian Rhythm Regulation:** Aligning with natural light improves sleep patterns, hormone balance, and daily energy levels, enhancing overall health and well-being.

**Reduced Inflammation:** Regular sunlight exposure can decrease chronic inflammation, lowering the risk of related diseases like autoimmune conditions, arthritis and heart disease.

**Cardiovascular Health Improvement:** Sunlight exposure stimulates the production of Nitric Oxide, this expands blood vessels which helps lower blood pressure and supports heart health, reducing the risk of cardiovascular diseases.

**Enhanced Sleep Quality:** Exposure to natural light during the day promotes better sleep at night, improving sleep quality and duration.

**Stress Reduction:** Natural light exposure is associated with lower stress levels, promoting relaxation and reducing cortisol levels in the body.

# HEALTH BENEFITS

## CONTINUED

**Anxiety/Depression Alleviation:** Adequate sunlight can improve mood and decrease the symptoms of anxiety and depression, contributing to improved mental health.

**Improved Carbohydrate Metabolism:** Sunlight exposure can help regulate blood sugar levels, contributing to better carbohydrate metabolism and reduced risk of diabetes.

**Boosted Immune Function:** Exposure to natural light enhances the immune system's function, providing better defence against infections and diseases.

**Increased Vitamin D Levels:** Sunlight stimulates vitamin D production, crucial for bone health, immune function, and reducing the risk of chronic diseases.

**These benefits underscore the importance of daily natural light exposure and staying in sync with the sun's cycles for optimal physical and mental health.**

# HOW TO HARNESS THE BENEFITS OF SUNLIGHT

**Morning Light Exposure:** Start your day with sunlight. Just 10-15 minutes of morning sun can reset your circadian rhythm and boost all aspects of health. Try and catch as many sunrise as possible, it's by far the best way to start your day!

**Evening Natural Light:** Try and catch the fading natural light outside to help your body signal that it's time to unwind. Reduce artificial light after sunset. Embrace dim lighting to prepare your body for restful sleep.

**Regular Breaks for Sunlight:** Take short breaks outdoors throughout the day. This can help maintain alignment, improve energy levels and support natural circadian rhythms.

**Mindful Screen Time:** Limit exposure to screens by taking regular breaks throughout the day and prioritise minimising exposure before bedtime, to avoid disrupting sleep patterns and circadian rhythm.

**Blue Light Blocking:** Use blue light glasses or screen filters for long periods of device use, minimising artificial blue light's impact on circadian rhythm, energy levels and sleep.

# HOW TO HARNESS THE BENEFITS OF SUNLIGHT

**Combine Sunlight with Breathwork:** Practice breathing techniques while in the sun to enhance your connection and presence, reducing stress levels and improving health.

**Grounding with Sunlight:** Walk barefoot on natural surfaces under the sun to connect with the earth and improve well-being.

**Cold Exposure in Sunlight:** Pairing sunlight after a cold shower or outdoor cold exposure such as sea swims, lakes or rivers can supercharge your energy and mood, doubling down on nature's unlimited benefits.

**Incorporating these practices into your daily routine can significantly enhance your alignment with the natural light/dark cycle, promoting better health and well-being.**

**Remember, even on a cloudy day, the benefits of natural light exposure are super important. This is especially true in the winter months, as a reduction in sunlight is strongly linked to “SAD” (seasonal affected disorder), one of the main contributors to a decline in mental wellbeing in the darker months.**