



METABOLIC REVOLUTION

OUR HEALTH, OUR RIGHT

Illuminating Metabolic Health

Dear Friends and Advocates,

Research has shown that there is only a 6.8% chance that any one American sitting down to read this article has optimal metabolic health.¹ Most people think metabolism is solely driven by the quality and quantity of foods we eat, but the rising amount of people who are making healthier decisions regarding their food choices suggests that something other than food may be contributing to such low rates of metabolic health.

Dietary energy is vitally important. However, the signaling of how to use that energy is just as important, if not more important. This signaling is done by our hormones, and our hormones are signaled by our light environment.

When light hits the back of the eye, the signal is transmitted to the Suprachiasmatic Nucleus (SCN) in the brain, which then signals to the glands that regulate all of our metabolic signaling hormones.² For millions of years, the SCN was entrained to the natural day/night cycle of the sun. **The invention of brighter forms of indoor lighting (fluorescent and LED bulbs, screens, etc.) in the second half of the 20th century has exposed us to an entirely new stimulus of light.**

Blue light, through melanopsin receptors in the eye³, is the color of light that tells our bodies what time it is.⁴ Naturally, blue light is only present when the sun is up; it is lower in the mornings and evenings and peaks when the sun is highest in the sky at midday.

The problem today is that we use artificial lighting with high amounts of blue light after the sun goes down. Blue light exposure after sunset suppresses melatonin production⁵, which, in turn, interferes with our ability to get into deep, restorative sleep. Poor sleep and dysregulated hormones through circadian disruption are a major contributor to metabolic dysregulation.⁶

Blue light exposure has been associated with higher rates of diabetes.⁷ Further, suppression of blue light exposure at night improved metabolic abnormalities in animal models.⁸ Even timing eating with the light cycle of the day has been shown to improve markers of metabolic health.⁹

It is very clear that our light environment plays a critical role in metabolic health and protecting ourselves from developing diseases of altered metabolism. **Along with eating a whole food, lower carbohydrate diet, to achieve optimal metabolic health, we should also optimize our light environments** by seeing natural sunlight before artificial blue light in the morning, getting plenty of sunlight signaling throughout the day, avoiding or blocking blue light after sunset, and timing our eating so that it is aligned with daylight hours and not eating 4-5 hours before bedtime.

Recommended Tools for Optimizing Light Exposure:

To support circadian rhythms and promote metabolic health, consider integrating the following tools into your daily routine:

Blue-Blocking Glasses

Filter Optix Blue-Blocking Glasses - These glasses are designed to block blue light effectively after sunset, helping to preserve melatonin production and support restorative sleep. *Use code **drhussey** at checkout for a discount.*

Screen-Filtering Software

Minimize blue light exposure from screens with these tools:

- **F.lux** - Automatically adjust your computer's display to warmer tones based on the time of day.
- **Twilight** (Android) - An app that filters blue light on mobile devices based on sunset and sunrise times.
- **iPhone Night Shift/Color Tint** - Use the Night Shift setting to reduce blue light or enable Color Filters under Accessibility to shift the screen to red after dark.

Low-Blue and Red Lighting for Evenings

Replace standard light bulbs with low-blue or red-spectrum bulbs in your home, especially in bedrooms and evening spaces. A great option is available at **Low Blue Lights**

We'd love to hear from you!

How have you used light as a tool to improve your metabolic health?

Watch this short video from our Executive Director, Chérie St. Arnaud, as she shares how just a minute or two of morning light—even on cold, misty days—has improved her overall well-being.

Use this link to share your own! Your insights could inspire others on their journey.

Together, we can spread awareness about the powerful healing that metabolic therapies can provide.

In health and hope,

Dr. Stephen Hussey MS, DC



About the Author

Dr. Stephen Hussey, MS, DC is a Chiropractor and Functional Medicine practitioner. He earned his Doctorate of Chiropractic and Master's in Human Nutrition and Functional Medicine from the University of Western States in Portland, OR.

Dr. Hussey is also a health coach, speaker, and author of three books on health: *The Health Evolution: Why Understanding Evolution is the Key to Vibrant Health; Understanding The Heart: Surprising Insights Into The Evolutionary Origins Of Heart Disease - And Why It Matters; and Pain Sense: Revolutionary Insights into Human Physiology and How it Helps Us Understand and Eliminate Chronic Pain*

Dr. Hussey works with clients around the world to guide them back to health using cutting-edge research and practical strategies. In his downtime, Stephen enjoys the outdoors, playing sports, reading, writing, and traveling.

To learn more about his work or to get in touch, visit **ResourceYourHealth**.

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