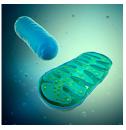


Dr. Terry Wahls came out years ago with her book, Minding My Mitochondria, and her TED talk on the same topic. Most likely, her efforts were pivotal in getting the mitochondria on the radar of a wider audience. Nowadays, many people understand the true importance of the mitochondria for health. In Functional Medicine, it is often said to "start with the gut," and we believe that when it comes to the cell, "start with the mitochondria"!

We will be talking more about mitochondria and immunometabolism at the PLMI Conference in October.

In this newsletter, you'll find -

1. Mitochondrial health: How FemmenessencePRO POST could help.



2. Educational events: Upcoming educational events for health professionals



3. Need product support or clinical input?: If you'd like to talk with us, we have several options for connecting with our team.



Mitochondrial Health: Maca and melatonin may make a difference



Image credit: Science Photo Library via Canva

Maca phenotypes and melatonin can each support mitochondrial health.

Maca is a well-known adaptogen that enables the body's hypothalamus-pituitary-adrenal (HPA) axis to respond to cellular stresses. As our research at Symphony Natural Health has indicated, some phenotypes of maca work better than others for this purpose. In cell and animal studies, maca has been shown to alleviate exercise-induced metabolic stress and fatigue and upregulate mitochondrial biogenesis and function, respectively^{1,2}. Exercise endurance may also be helped using maca². In athletes, black maca increased antioxidant activity, reduced select inflammatory cytokines, and influenced regulatory factors involved in mitochondrial biosynthesis, improving their endurance, strength, agility, and power in certain sports³.



Although most people associate melatonin with the pineal gland, this amount produced is less than 5% of the total body melatonin⁴. Yet, melatonin is made throughout the body, inside the cells, including in the mitochondria⁴. Melatonin acts as a mitochondrial regulator, which can cross the mitochondrial membrane and be produced and metabolized in the mitochondria⁵. In this capacity, melatonin helps to keep the redox balance to protect the mitochondria from an overproduction of harmful free radicals and oxidative stress. It also helps support healthy ATP production⁶.

Both pineal and mitochondrial melatonin decline with age and may be

implicated in neurodegenerative conditions like dementia, Parkinson's disease, and amyotrophic lateral sclerosis⁷. Melatonin supplementation has been shown to reduce mitochondrial aging, thereby assisting in keeping the cell healthy⁷.

References:

- 1. PMID: 33729250; 2. PMID: 35347728; 3. PMID: 37049458; 4. PMID: 34830375; 5. PMID: 38273825; 6. PMID: 35523285;
- 7. https://www.sciencedirect.com/science/article/pii/S1568163724002988

Upcoming Educational Events for Health Professionals



September 24:

A Woman's Cycle of Life: Maximizing Outcomes through Mira and FemmenessencePRO™

A woman's life cycle is dynamic in multiple realms: physical, emotional, mental, and spiritual. Part of this flux is due to the waxing and waning of different hormones from the psychoneuroendocrine circuit, which includes the hypothalamus, pituitary, thyroid, adrenal, and ovarian (HPTAO) axis. Women are becoming increasingly aware of the intricacies of the monthly menstrual cycle and the impact of their reproductive hormones from fertility to menopause. Within each decade, there are different laboratory metrics and markers to track, along with changing life priorities, whether enhancing fertility, feeling emotionally balanced, keeping skin youthful, building healthy bones, or even redefining purpose and meaning.

In this webinar, an understanding of the metrics of a woman's hormones will be brought together with optimizing those hormones through clinically-tested, well-defined phenotypes from maca (*Lepidium peruvianum*) in a product delivery system known as FemmenessencePRO. There will be a detailed discussion on Mira's unique ability to monitor multiple key hormones, including **estradiol, progesterone, FSH, and LH**, to provide a detailed and personalized overview of one's hormone patterns enabling women to become informed about their hormonal fluxes. Through patient case reports we will showcase the two-fold benefits of empowering women to understand their hormones better and enabling providers to optimize therapeutic strategies.

Following this discussion, the latest clinical research to show how not all maca is created equal will be highlighted, along with what most people do not realize: there are 17 phenotypes, having different colors, different DNA and different analytical profiles. Perhaps most importantly, these phenotypes may have a different physiological effect on the body. To date, the only published clinical research on any form of maca demonstrating statistically significant effects on hormones such as estradiol and progesterone in peri- and postmenopausal women has been Maca-GO® (Femmenessence®), which uses a concentrated, bioavailable specific phenotype ratio to support the HPTAO axis. An overview of this published research, including case reports, will be reviewed, along with how to use different FemmenessencePRO products for women at various stages of life for best results on hormone health.

By the end of this webinar, you will

- Learn of the needs of women throughout the lifecycle from a hormone perspective
- Increase your clinical toolkit with unique ways to help your patient empower their personalized approach to health
- Understand how to help navigate your female patients on the fertility journey using a point-of-care device, Mira
- Learn about options to help balance hormones throughout the lifecycle using Femmenessence for best outcomes

Register Here



Join the Experience! This year's symposium theme, <u>Herbal Roots and Medicinal Mushrooms</u>, highlights these potent remedies' use in clinical practice. We also feature a Certificate Track, Botanical Support in Aging, many plant walks, experiential workshops, and cutting-edge classes for everyone, from beginners to advanced practitioners.

However, the AHG Symposium is more than just an educational event. It's a gathering that brings herbalists together to support and inspire each other. In addition to regular symposium sessions, we offer lots of opportunities to socialize and network. Plan to attend Friday evening's Maypop Mixer and our legendary Saturday night Rockin' Roots Dance Party. The Vendor Fair will also be in full swing throughout the weekend; here, you can learn about new herbal products, educational opportunities, and more.

Keynote Speaker: We're honored to present Dr. Thomas Avery Garran as our keynote speaker for this year's Symposium. The keynote address will be: **A Foreigner in His Own Country: Insights and Perspectives on Herbalism after Two Decades Abroad** following the Maypop Mixer reception. Both events are included in the price of a Symposium ticket.

Online Symposium Options: Suppose you can't be in Asheville for the Symposium. In that case, we're offering an <u>Online Symposium</u> option that includes a selection of eight classes livestreamed or as recordings accessible for one year.

Register for the 2024 AHG Symposium

Register for the Virtual Symposium



October 26-27:

12th Annual Thought Leaders Consortium: Advanced Course on Immuno-Metabolism

Applications to Insulin Resistance, Sarcopenia, Muscle Weakness, Post-Viral Fatigue, Pre-Autoimmune, and Cognitive Impairment

A major advance has been made in the clinical understanding of the relationship between alteration in immuno-metabolic function and chronic illness. The dysfunction in immuno-metabolic function connects to a wide range of clinical problems including, but not limited to, post-viral illness, sarcopenia, and muscle weakness, early-stage autoimmune disorders, and issues associated with mental health such as depression and cognitive impairment.

This program will focus on these major clinical problems associated with altered immuno-metabolic function. The presentations from the expert faculty will incorporate both assessment and personalized lifestyle medical interventions related to the management of these complex clinical issues that

require a systems approach to their management.

This program will be held at the beautiful Laguna Cliffs Marriott Resort Hotel on the beachfront in Dana Point, California. We hope you will join us as we exhibit at this special event. For more information or to learn more about the topics, please visit the <u>PLMI website</u> for a more detailed agenda.

Register Here

Want clinical or educational support?



Image credit: Myriams-Fotos via Pixabay

Would you like more clinical guidance on using our products or have specific patient cases to discuss? Our Medical Team members are here to help. Book a <u>15-minute</u> or <u>30-minute</u> session with Dr. Mona Fahoum.

Schedule virtual product training appointments

Lisa Shank - National Sales Manager and Product Educator

<u>Stephanie Selassie</u> - Asst. Sales Manager and Product Educator

Wishing you tremendous health and harmony,







Stephanie Selassie, MS, CN

Assistant Sales Manager
Health Professional Channel

