Activity Title: Enhancing Iron Homeostasis: Strategies for Optimal Absorption and Nutri

Activity Host: Gaia Herbs PRO

Session Title: Same

Speaker(s) and Speaker Bio(s): Lara Zakaria, PharmD, MS, CDN, CNS, IFMCP

Date/Time: 2/5/25 - 4-5 pm EST

Session Amount and Type of CE Requested: 1.0 General

This session provides a comprehensive review of the role of iron and essential minerals in supporting energy, cognitive function, and immune health. We'll cover evidence-based strategies for improving iron absorption and managing iron levels using food-based and lifestyle approaches. Healthcare providers will gain practical knowledge on identifying iron deficiency, understanding absorption challenges, and implementing holistic support strategies to optimize patient outcomes.

Objectives

1. Describe the role of iron in energy, cognitive, metabolic, and immune health.
2. Identify clinical signs and symptoms of iron deficiency and factors affecting iron absorption.
3. Review evidence-based strategies to enhance iron and mineral absorption through diet and supplementation.
4. Explore practical approaches for addressing patient iron needs with a whole-person care perspective.

Outline

- **I. Introduction (5 minutes)**
  - **A.** Overview of iron's role in health: energy, cognition, immune function, and metabolism.
  - **B.** Relevance of iron homeostasis in clinical practice.
- **II. The Physiology of Iron (10 minutes)**
  - **A.** Iron absorption, transport, storage, and utilization.
  - **B.** Key interactions with other minerals and nutrients (e.g., zinc, vitamin C).
- **III. Clinical Indicators of Iron Deficiency (10 minutes)**
  - **A.** Signs, symptoms, and common patient presentations.
  - **B.** Diagnostic markers: ferritin, hemoglobin, transferrin saturation, and serum iron.
  - **C.** Factors influencing iron status (e.g., diet, gut health, inflammation, menstrual cycles).
- **IV. Enhancing Iron Absorption: Evidence-Based Strategies (15 minutes)**

- **A.** Dietary interventions: heme vs. non-heme iron sources and enhancers (e.g., vitamin C, fermented foods).
- **B.** Addressing inhibitors of absorption (e.g., phytates, calcium, tannins).
- **C.** Role of gut health and microbiome in iron metabolism.
- **D.** Supplementation approaches: types of iron supplements, dosing, and side effects.

V. Whole-Person Care Approaches to Iron Management (10 minutes)

- **A.** Lifestyle considerations: stress, sleep, and exercise impacts on iron homeostasis.
- **B.** Special populations: pregnancy, athletes, vegetarians/vegans, and chronic disease patients.
- **C.** Case examples illustrating integrative strategies.

VI. Conclusion and Q&A (5 minutes)

- **A.** Key takeaways for clinical practice.
- **B.** Open discussion for audience questions.

Bio

Dr. Zakaria is a Pharmacist and Nutritionist with a focus in implementing solutions for Functional Medicine and personalized nutrition. A graduate of the Ernest Mario School of Pharmacy, at Rutgers University (BSpharm) and the University of Colorado Skaggs College Of Pharmacy (PharmD), she spent 20 years in community pharmacy practice. After developing an interest in nutrition, she earned a MS in Nutrition from the University of Bridgeport and subsequently qualified as a Certified Nutrition Specialist (CNS) as well as an Institute for Functional Medicine Certified Practitioner (IFMCP). Dr Zakaria's practice focuses on a multi-disciplinary approach working both one-on-one with patients as well as creating implementation tools and systems for scale. She is also adjunct professor of nutritional biochemistry and therapeutics at the University of Bridgeport, faculty at George Washington University, as well as guest instructor for Functional Medicine at LECOM College of Pharmacy and has served as mentor and supervisor for CNS and pharmacy students. Lara is passionate about gut health and the prevention and reversal of metabolic, allergic, and autoimmune disease. There's power in community, working with pharmacy professionals, nutritionists, and other clinicians to leverage their unique expertise to amplify the message of personalized nutrition and FxMed.