

The Gut Balance Revolution

by Gerard E Mullin, MD

Review by David Riley, MD

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In 1908, Ilya Ilyich Mechnikov, PhD, from the Pasteur Institute and winner of the 1908 Nobel Prize in Physiology or Medicine, proposed that alterations in the gut microbiome were associated with certain diseases, and by restoring the gut microbiome, one could restore health.¹ In 2011, Francis Collins, MD, PhD, the leader of the Human Genome Project and Director of the National Institutes of Health, noted at the 2011 Society for Integrative Oncology annual meeting that the Human Microbiome Project was the future of medicine.² In June 2015, Gerard Mullin, MD, from The Johns Hopkins School of Medicine, wrote *The Gut Balance Revolution*, integrating evidence-based scientific information on the gut microbiome with a straightforward, three-phase diet and lifestyle plan for change.³ He tells a compelling story for patients and clinicians alike.

Research on the gut microbiome is exploding as the links between obesity, metabolic syndrome, diabetes, and cardiovascular disease are connected with alterations in the gut microbiome and the consequences of chronic low-grade systemic inflammation. There are more cells in your gut microbiome than cells in your body, and they influence food metabolism, appetite regulation, energy expenditure, endocrine regulation, gut barrier integrity, inflammation, and insulin resistance. The gut microbiome's primary function is to break down complex carbohydrates, produce short-chain fatty acids, protect against pathogens, help train the immune system, support detoxification, and modulate the nervous system. When the gut microbiome

is distorted—often through the use of antibiotics—its function alters; these alterations contribute to the illnesses that are among our greatest health care challenges today.

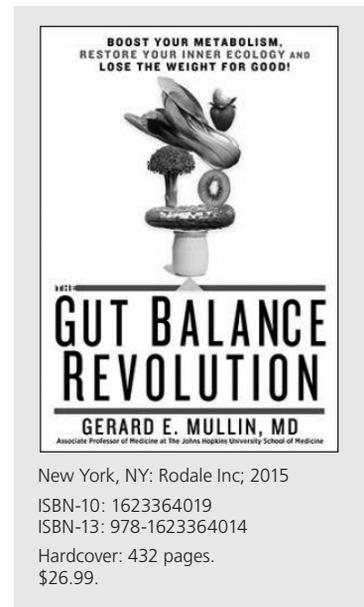
In *The Gut Balance Revolution*, Dr Mullin proposes addressing disorders associated with distortions in the gut microbiome in an evidence-based, three-phase process.³ Each phase includes a “food pyramid,” a list of foods, and recipes:

- **Phase One: Reboot** the gut microbiome using a 30-day higher-protein, ketogenic, low-glycemic load, low-FODMAP diet. FODMAP foods are highly fermentable carbohydrate-rich foods—Fermentable Oligo-, Di- and Monosaccharides, and Polyols.
- **Phase Two: Rebalance** the gut microbiome with a diet of prebiotic and probiotic foods.
- **Phase Three: Renew and maintain** the rebalanced gut microbiome integrating a long-term sustainable eating plan to support optimal health.

The Gut Balance Revolution is organized into three sections:

- The first 3 chapters are well referenced and are a clearly written overview.
- Chapters 4 through 10 provide a detailed outline for Phases One through Three including foods associated with each phase.
- Chapter 11 provides food charts, meal plans, shopping lists, recipes, and tips on how to eat on the program.

The beauty of *The Gut Balance Revolution* lies in the stories that are told and the balanced presentation of scientific evidence, personal anecdotes, and



patient narratives. Patients, clinicians, nutritionists, and other health care practitioners will find the language readable and the content useful and valuable. Perhaps the key message is the importance of perseverance. ❖

References

1. Metchnikoff E. The prolongation of life: optimistic studies. New York, NY: Putnam; 1908.
2. Plotnikoff G, Riley DS. The human microbiome. *Glob Adv Health Med* 2014 May;3(3):4-5. DOI: <http://dx.doi.org/10.7453/gahmj.2014.023>.
3. Mullin GE. *The gut revolution*. New York, NY: Rodale Inc; 2015.