



Integrate Your Integrative Health Care

Here is the One Action You Must Take

By Guy Schenker, DC

THE ESSENCE OF INTEGRATIVE HEALTH care can be expressed simply as, “Treat the person, not the disease.” When treating the person, all aspects of an individual’s health are considered, including:

- Integrated function of the neuromuscular system (chiropractic!)
- Nutrition status
- Metabolic balance to maximize vitality
- Metabolic efficiency to maximize adaptive capacity
- Immune system strength and balance
- Mental clarity and cognitive function
- Emotional poise
- Spirituality as an ever-present rejuvenator

There are many ways you can elevate your patients’ well-being to new heights. However, with just one action you can touch every one of the above-listed means of empowering your patients. You may be surprised to learn all these components of physical/mental/emotional performance are dramatically improved by building a massive army of health warriors in the gut microbiome.¹

Yes, even the health of the mental/emotional/spiritual realm can be devastated by a toxic microbiota, or conversely, enlivened to be mentally sharp and emotionally uplifted if you supplement with specific probiotics. Research has clearly defined a microbiota-gut-brain axis derived from every patient’s unique microbiota, modulating all aspects of brain function, such as cognition, and including attitudes, fears, and behavior^{2,3,4}

When you supplement patients with the ideal blend of probiotics and prebiotics (a synbiotic), you will influence many aspects of personality and mental/emotional outlook. You have the power to favorably influence depression, anxiety, chronic fatigue, and brain fog.

Gut microbiota is shown to control levels of various brain-signaling molecules (i.e., brain-derived neurotrophic factor, norepinephrine, dopamine, and serotonin) in different areas of the CNS, including both the cortex and the brainstem. Thus, unhealthy microbiota has a role in the regulation of mood and behavior and contributes significantly to the pathophysiology of mood disorders.^{3,5,6,7,8,9,10}

The brain has the ability to “sense” gut bacteria. The introduction of pathogenic bacteria activates several brainstem nuclei. These bacterial signals are relayed to the brain via afferent fibers of the vagus nerve.¹¹ Truly remarkable research shows the following:

- If the intestine of one strain of mice is colonized by bacteria taken from another mouse strain, the recipient animals take on aspects of the donor’s personality. Naturally, timid mice become more exploratory while more daring mice become apprehensive and shy.⁸

- Germ-free mice subjected to restraint stress produce catecholamine and corticoid stress hormone responses far higher than those of mice with healthy microbiota. When these mice are supplemented with probiotics, the stress response is decreased to normal.⁵

- Humans with irritable bowel syndrome have a much higher incidence of anxiety and depression. When germ-free mice are colonized with the bowel contents of people with IBS, the human GI symptoms are reproduced in the recipient mice. The animals produce a barrage of proinflammatory metabolites, many known to be neurotoxic. Even more significantly, the mice display anxious behavior, as indicated by a sudden fear of stepping down from a short-raised platform.³

Truly, the influence of the gut microbiota is felt throughout all body systems.

Nutrition status? You may be surprised to learn that all B vitamins, along with all forms of vitamin K, are produced by your microbiota. You derive more vitamins from the action of probiotics than from the foods you eat. Furthermore, the absorption of fat-soluble vitamins A, D, and E depends largely on the balance of bile acids that flow from the liver/gallbladder, and the quality and quantity of those bile acids are dependent on a healthy microbiota.^{1,8}

Another major category of nutrients produced almost entirely from microbiota rather than derived from diet is the healthy bacterial production of short-chain fatty acids (SCFAs). When produced in abundance, SCFAs actually contribute 50 to 100 mmol/l of anti-inflammatory, energy-enhancing fats in the human colon and may account for up to 30% of your energy needs, as shown in animal research.

These SCFAs largely consist of acetate, propionate, and butyrate, with butyrate being by far the most important. Butyrate is key to the communication between healthy bacteria (or putrid bacteria, as the case may be) and the 70% of the immune system that resides in the gut wall. Signaling from butyrate either activates or inhibits the macrophages, dendritic cells, and mast cells to disperse throughout the body as necessary, carrying out critical immune-related missions.^{12,13}

The benefits of butyrate introduce us to another critical aspect of integrative health care — an acutely reactive yet well-controlled immune response via the microbiota-gut-immune axis. Nearly all the ills of humankind have an inflammatory component.

PERSPECTIVE

The microbiota of your typical patient is veritable teaming with pro-inflammatory critters, driving inflammatory conditions including:

- Allergies
- Autoimmune diseases
- Deficient resistance against microbial infection
- Asthma
- Type 2 diabetes and metabolic syndrome
- Fatty liver disease

All aspects of inflam-aging relate to bad bugs in the gut. However, countless research studies show that all these inflammatory conditions can be controlled to a degree by restoring healthy microbiota with synbiotic supplementation.^{14,15,16,17,18,19,20,21}

Research showing the influence of microbiota on conditions such as diabetes and metabolic-associated fatty liver disease links the microbiota-gut-immune axis to the microbiota-gut-liver axis. Our discussion now enters the realm of cellular energetics.

From moment to moment, every cell in your body must make a choice between metabolizing fats or metabolizing sugars for energy. Energy production by the brain differs from that of the liver, which differs from that of the muscles. Every aspect of efficient energy production depends upon microbiota influence.^{21,22,25}

Chronic fatigue? Consider the essential integrated function

of the gut-brain axis, the gut-liver axis, and the gut-muscle axis.

Fibromyalgia? Again, research shows a failed integration of communication between microbiota, the liver, the brain, and the muscles.

Diabetes? Diabetes shows a dys-integrated expression of failed communication between the gut-liver axis and the gut-pancreas axis.^{11,13,21,22}

Weight gain? Research shows failure of the probiotic-control over the gut-liver axis integrate with the gut-adipose axis. Unhealthy bacteria provoke weight gain by several mechanisms. There will be a preference for storage of fat over burning fat for energy and a deficient capacity to mobilize fat from adipose tissue. Several specific probiotic species can restore the integrated balance between fat energetics and sugar energetics.^{24,25,26,27,28}

Can you begin to see that integrative health care cannot possibly be fully integrated in any individual whose full array of body, mind, heart, and soul functions is being dys-integrated by an anti-vital microbiome? Look again at the eight elements of integrated health listed at the top of this article.

If you strive to be an Integrative healthcare practitioner, you cannot omit even one of the eight. None of the eight, let alone the integrative function of all, can be maximized when wholism is devastated by bad bugs. The one clinical action you must take to wholistically integrate the well-being of all your patients is to supplement with a synbiotic specifically formulated to restore the controlling influence of gut microbiota over physical, mental, and emotional vitality and adaptive capacity.



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