**Our Gut Microbes**

There are 39 trillion micro-organisms in your gut, give or take a few billion. That’s what Dr. Will Bulsiewicz reports in his 2020 book *Fiber Fueled*. What we eat feeds the community of microbes we host in our gut, which in turn provides nutrients for the cells of our body.\* [5]

Compared to the 17 digestive enzymes produced by our own cells, the microbes in your gut produce 60 thousand different enzymes. “The fact that our microbiomes contain this insane number of digestive enzymes makes sense when you remember that there are three hundred thousand edible plants and potentially millions of types of fiber in our diet.” [54]

I also learned from *Fiber Fueled* that *fiber* refers to complex carbohydrates in the leaves, stems, roots, and fruits of plants. Bulsiewicz explains that digesting the complex carbohydrates produced by plants is entirely different than digesting the sugar in processed food. “Digestion of refined sugar starts in the mouth and in about twenty minutes it’s already been absorbed in the small intestine. Meanwhile, fiber remains unblemished as it passes through your mouth, stomach, and even fifteen to twenty feet of the small intestine so that by the time it reaches your colon, it’s the same molecule that went in your mouth.”

Why does this matter? Unlike processed foods: “Complex, unrefined carbs found in whole plant foods are chock-full of fiber, vitamins, and minerals.” The complex carbohydrates we eat, Bulsiewicz says, “actually lower blood sugar—even prevent diabetes—and decrease weight and body mass.” Eating complex carbohydrates is the key to good health. Nonetheless, Bulsiewicz reports, “97 percent of Americans are not receiving the minimal daily recommended amount of fiber, let alone what I would characterize as optimal.” [50-52]

What scientists call our gut microbiome also enables our immune cells to “identify invaders, get immune cells to the needed location, and then enhance their infection-fighting power.” [14]

You may be as surprised as I was to learn that “there are over five hundred million nerves in your intestines sending feedback to your brain through the vagus nerve. That’s five times more nerves than you’ll find in your spinal cord.” Moreover, our gut microbes produce 90 percent of the serotonin and 50 percent of the dopamine in our bodies that make us feel good. [19-23]

Humans co-evolved with micro-organisms, and our health depends on their health. Microbes, not our own cells, break down fiber into short-chain fatty acids (known as SCFAS), which Bulsiewicz asserts is “the most healing nutrient in all of nature.” [4] Other scientists agree that the SCFAS produced in and for our bodies by our gut microbes are essential for our health.\*\*

**What we eat is an eco-choice that affects our health and the microbial living-world within us. Might we recognize the trillions of micro-organisms flourishing and dying in our gut with a prayerful or meditative moment of gratitude?**

\* Will Bulsiewicz, *Fiber Fueled: The Plant-Based Gut Health Program for Losing Weight, Restoring Your Health, and Optimizing Your Microbiome* (Penguin, 2020).

\*\* <https://atlasbiomed.com/blog/what-are-short-chain-fatty-acids-and-why-should-you-care/>.