



# Wellness Minute

Health Information You Can Use On Your Path To Wellness



## COVID & The Microbiome

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Breathtaking research comes from Dr. Sabine Hazan, a GI specialist for over 30 years. She has been involved in evaluating the microbiome and fecal transplants for patients with *C. diff* for many years, and what she had to share is shocking. The microbiome is the mixture of both good and harmful bacteria, viruses and fungal forms that live in our gut, vaginal tract, skin, and mouth. Her story is like listening to a movie script. I saw her interviewed on the Highwire with Del Bigtree.

When Dr. Hazan assessed the microbiome of people who experienced a severe COVID infection or long COVID, she found they had virtually no bifidobacteria. Bifidobacteria is

one class or genus of healthy bacteria. There are at least 100 different species of bifidobacteria that have been identified. Dr. Hazan found that people who had mild symptoms of COVID had a medium amount of bifidobacteria. But some people, even though they were exposed to COVID, never experienced any symptoms. Here's what's shocking, When looking at the microbiome of people that never experienced COVID symptoms, they had a robust amount of bifidobacteria. Now they may have had the virus in their system, but they didn't experience the symptoms.

After hearing her comments, I discussed her findings with a patient who never experienced COVID, even though both her

roommates had it. Oddly enough she had recently done a comprehensive stool analysis and the amount bifidobacteria in her gut was at the upper end.

Historically, Dr. Hazan's research involved fecal transplants for patients with *C. diff*, and she shared that these transplants have been life saving for some. Research has shown a powerful link between the microbiome and the brain.

Dr. Hazan took a fecal sample of a 15-year-old boy who had severe aggressive behavior. His behavior was so erratic that each parent had to take turns to stay up all night to make sure everything was OK. Here is a picture of his microbiome. Each band of color represents

a different strain of bacteria. A healthy microbiome has diversity, so multiple thin bands show diversity. The diversity of bacteria keep a check and balance on each other. In other words, a healthy diverse microbiome will monitor and restrict the growth of dysbiotic organisms. The one large band represents dysfunction.

Having a curious mind, Dr Hazan checked the microbiome of his healthy sister's stool and found that she had excellent biodiversity. A fecal transplant was performed using his sister's stool. You can see the change in the microbiome at 3 months. But here's the mind grenade. Six months after the fecal transplant, he was so calm and present, he was able to attend a high school dance.

My mind was spinning as I heard this interview. Here's the big key. These bugs need food and space to grow and multiply. As I talk with clinical consultants at labs that measure the microbiome, they all tell me that fiber is a big key to feeding these lifesaving little bugs. The microbiome secretes chemical messengers called cytokines that turn inflammation on and off, affect brain chemistry, and immune modulation among other things. The list of their accomplish-

ments goes on and on, it's very dramatic. Soluble fiber dissolves in water, insoluble fiber doesn't. But it's the soluble fiber that appears to be a major source of food for our microbiome. Soluble fiber is found in oats, peas, beans, avocados, Brussels sprouts, broccoli, apples, citrus fruits, carrots, barley etc.

The goal for total FIBER in women is about 25 grams a day, for men about 38 grams. The goal for soluble fiber to feed the microbiome is 8-15 grams. A product from Biotics Research called BioFiber Complete contains 10 different types of fibers, is over 70% organic, and contains 5 grams of fiber per scoop. BioFiber Complete combines organic flax seed, organic broccoli sprouts, organic kale sprouts, chia seed fiber, fenugreek seed fiber, non-GM sugar beet fiber, bamboo fiber, acai berry extract, apple fiber, and apple pectin into a powder that can be added to food or mixed with water or a smoothie.

Ask your wellness clinician if BioFiber Complete might be a good fit for you and keep your ears open for new developments about the microbiome, it's an exciting field. Who would have ever thought that the little bugs in our gut play such an important, even a lifesaving role.