THE TUESDAY MINUTE

IT'S TIME TO FEEL GOOD AGAIN

THIS WEEK'S TOPIC

COVID & The Microbiome

"Hydroxychloroquine and a z pack killed the [COVID] virus, and vitamins D, C, and zinc increased a class or genus of healthy bacteria called bifidobacteria."

Breath taking 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. Her story is like listening to a movie script. You can see a link to her background story, but let me jump into some of the main findings she shared in an hour-long interview on the Highwire. She was the first to discover the whole genome of COVID, and she found it in stools because the bowel is loaded with A2 receptors. Since she was able to see COVID in the stools, she established a mechanism where hydroxychloroquine and a z pack killed the virus, and vitamins D, C, and zinc increased a class or genus of healthy bacteria called bifido-bacteria. There are at least 100 different species of bifidobacteria that have been identified.

But here's where it gets exciting. When Dr. Hazan assessed the microbiome of people who experienced a severe COVID infection, or long COVID, she found they had virtually no bifidobacteria. She found that people who had COVID and had mild symptoms 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 who 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 recently had done a comprehensive stool analysis, and her bifido-bacteria was at the upper end.

Here's another bombshell. After Dr. Hazan's interest in developing a working COVID protocol, and the desire to test it became public, her ability to do experimental trials was suddenly frozen. Since nobody was asking the question, "What effect did the vaccine have on the micro-biome?" She asked friends and fellow physicians to submit pre and post vaccine stool samples. As a scientist, she wanted to document the effects. She was particularly

interested in the bifidobacteria levels since she had seen such a big difference in how patients' bodies responded to the virus based on their levels of healthy bacteria. Based on her earlier findings, one would expect that if the vaccine was proven to be effective, it would create an environment for the bifidiobacteria to proliferate. What she found was ground breaking. Pre-vaccine fecal tests showed an average amount of bifidobacteria. Post vaccine bifidobacteria dropped after 3 months and continued to drop as time went on.

Obviously, this is not a healthy sign. It's still too early to determine a mechanism, but results like this raise signs of caution. Historically, her research involved fecal transplants for patients with C-diff, and she shared that these transplants have been life saving for some. Knowing the interaction between the micro-biome and the brain, she took a fecal sample of a 15-year-old boy who had severe aggressive behavior. He was so aggressive 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 a diversity of different bacteria. Multiple thin bands show diversity. The 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 Hazen 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 became so calm and present that he was able to attend a high school dance.

My mind was spinning as I heard this interview. So many clinical pearls can be extracted and applied to the health of our patients. Here's the unifying message from this interview. 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 fiber, but more important, soluble fiber is a big key to feeding these lifesaving little bugs. We know the microbiome secretes cytokines that turn inflammation on and off, affect brain chemistry, enhance immune modulation, the list of their accomplishments seems endless. Soluble fiber dissolves in water, insoluble fiber doesn't. It's the soluble fiber that is such an important fuel for our microbiome. Soluble fiber is found in oats, peas, beans, apples, citrus fruits, carrots, barley, and psyllium.

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. BioFiber™ Complete from Biotics Research contains 10 different types of fibers, is over 70% Organic, and contains 5 grams of fiber per scoop. BioFiber™ Complete combines fiber as 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. The 5 g of fiber in BioFiber™ Complete supplies 1.5 g soluble and 3.5 g insoluble.

There is a lot more to unpack in this interview, and we will come back to discuss some additional details, but for now, encourage your patients to eat more soluble fiber and support with probiotics that contain bifidobacteria.

Thanks for watching, I look forward to being with you again next Tuesday.