

AN OPINION. . .



Remember how busy the kitchen was at holiday times with 15 to 20 dinner guests coming and Mom remembering that Aunt Phyllis was a vegetarian, so no meat for her; Uncle Harry was a diabetic, so hold back on his sweets and starches; Sister Alice was dieting so low calorie foods for her, and cousin Bill was a teetotaler so no alcohol for him.

But what if trillions of dinner guests were going to show up. What would the menu look like then? Sounds preposterous. . . but that's exactly what happens every time you sit down to eat a meal.

You're not just feeding yourself, you're feeding trillions of your "microbial self" — the five families of lifeforms that live within you

including bacteria, fungi, protozoa, archaea, and viruses. They all coexist in your body and all of them require nutrients--a source of energy to stay alive.

There are 40 trillion microorganisms that live in and on your body. Most of them live in your intestinal tract and, of those, 99% are bacteria.

The majority of us were brought up to believe that the only good bacteria was a dead bacterium. This ushered in the hyperclean era that saw kids going off to school with backpacks filled with Purell antimicrobial gel and doctors prescribing antibiotics injudiciously. The promise of curing most infectious diseases was thought to have arrived--but such was not the case.

The pendulum swings. The opposite position was endorsed encouraging the growth even the overgrowth of bacteria in and on our bodies.

Bestsellers appeared in the bookstores. Some were written by gastrointestinal specialists having catchy phrases in them like “live dirty but eat clean” (*The Microbiome Solution* by Robynne Chutkan, M.D.).

A well-respected microbiologist, Justin Sonnenburg, began advocating that we let our children play in the dirt more to introduce their bodies to added microbes to train their immune systems—as if we already don't expose them to trillions of microorganisms daily. Every breath we take, every nutrient we put in our mouth, every surface we touch is covered or filled with microorganisms. Most are harmless. Some are beneficial. Others can cause disease. It isn't necessary to play in the dirt or stop bathing to get exposure to microbes.

As with most extremes the answer probably lies closer to the middle.—encourage your friends but discourage your enemies. Promote growth of microbial organisms in your colon but discourage growth of microbes in your mouth, the harbingers of dental decay and gum disease.

Why is it important to welcome the trillions of dinner guest microbes into our body? Because they are critically involved in helping us digest our food, protecting us from pathogens, regulating our metabolism and training our immune system.

What should we put on the menu for our trillions of microbial dinner guests? They, like us, must have a source of energy to survive. They are essentially vegetarians and, the vast majority of the time, harvest their energy from plant-based foods and resistant starches.

If we starve our microbes and fail to supply them with their nutrients of choice, they resort to Plan B and become scavengers searching for food elsewhere. The mucus lining of the intestinal tract is filled with sugar containing compounds which provides a satisfactory meal for our microbes. Digesting away the mucus layer, however, is bad for the human host causing a thinning of the mucus lining and an opportunity for microbes to percolate through into the body colloquially referred to as “leaky gut”. Inflammation results and may be the cause of many other illnesses even outside of the gut. Scientists continue to hotly debate this issue.

WHAT’S NEXT . . .

There still remains a Herculean task in front of us, namely planning the menu for 40 trillion microbial dinner guests. It’s not enough to just say we need to serve up a plant-based diet. We still need to figure out the specific nutritional needs of each one of the thousands of different species of microbes. Our best plan, therefore, is to offer our microbes a wide variety of plant based nutrients and wait for the science to provide us with more specifics.

Bon appetit

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