

My hometown is waking up...to the microbiome

This post is dedicated to the new fermenters along the lakeshore of beautiful West Michigan. Great job to the students from my [White Lake Area Community Education](#) classes, [Nourishing the Lakeshore](#), [Fermenting the Lakeshore](#) held at [Unity of Muskegon](#) and health conscious shoppers at [Sweetwater Local Organic Foods Market](#).



What is the [microbiome](#)? Very simply, it refers to the fact that 99% of the DNA in our bodies is not our own; it belongs to micro-organisms. And if you're eating nutrient dense foods, little to no sugar and fermented foods everyday, you'll have "good" microbes that will treat you, their host, to health and wellness. Fast foods, lots of sugar and processed carbs feed pathogenic "bad" microbes and WILL lead to illness as well as extra pounds.

A little history...In the 1990's, [the Human Genome Project](#), the biggest project ever undertaken in biology, focused on decoding human genetic information ([Holt, 2008](#)). There was hope to find the genetic cause and cure for every disease that affects humanity. What was discovered by 2003 was that every animal species shares the majority of genes, but that the expression of the genes can come in a multitude of ways depending on something called the epigenome. The epigenome is influenced by what we are exposed to in our lifestyle. While the genome can be likened to the hardware in a computer, the

[epigenome](#) is similar to the software, which tells the hardware what to do. But there turned out to be another missing link.

Ultimately, by 2008, the Human [Microbiome](#) Project began where we realized that part of the reason a stalk of corn has more genes (32,000) than a human (25-30,000) is the fact that we are hosts to an estimated 100 trillion bacteria. These bacteria work in concert with our genes to run our bodies.

NPR has an animated yet thorough introduction to this new knowledge. It is about 5 minutes long and I strongly encourage you watch it:

This research is in its very early stages. Yet if we look at the research of civilizations that did not live like we do, [traditional peoples](#) (like those found by [Dr. Weston A Price](#)), we see EVERY one of these healthy groups ate fermented foods. And they ate no processed foods whatsoever. When we learn to ferment and return to traditional eating, we, too, can experience the radiant health that is our birthright.

Today, our microbiomes are compromised all sorts of ways. Besides the losses during infancy addressed in the video above, our balance of good to “pathogenic” bacteria shifts with antibiotic use, toxins in our air, water and food, long term use of prescriptions and birth control pills as well as radiation. Without these beneficial “little critters” as I like to call them, we can’t digest and absorb nutrients to build healthy cells and this leads to nutritional deficiencies.

When we have an abundance of bad bacteria from eating processed food and drinking sodas, the “food” we eat gets broken down into toxic compounds which get absorbed into the bloodstream. From there they go to wherever we have a vulnerable area like our joints (i.e. arthritis), brain (i.e. fog, ADHD), skin (i.e. eczema, rash, acne) and our vital organs like our heart. These same bad little guys can damage

the lining of our intestine and cause it to become inflamed and permeable (leaky gut), which leads to food intolerances and allergies. When this happens, we no longer are getting nutrients to build us up but instead get toxins that make us sick. And because 85% of our immune system is in our gut microbiome, if we don't have good gut flora, our immune system goes haywire. No wonder so many people are unwell and overweight.

When people return to traditional ways, including fermenting, eating organic produce, consuming grass fed and wild animals and cutting out processed "foods", their microbiomes can heal and do the work necessary to help return to wellness. For many, supplementing with probiotics is a sensible choice while they transition to more traditional ways. If this is something you choose to do, please make sure the product you use has integrity.



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Photography

Wishing you *real* food for *real* health so you can be *real* happy.