

Gut Microbes, Inflammation and Appetite

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Microbes are everywhere. They are in the dirt, on every surface we touch, on our skin, under our fingernails, and they are especially living on every moist tissue of our body that is exposed to the outside world. Our guts, extending from input end to output end are our most extensive moist tissue and while they are inside of us, are completely exposed to the outside world by what we eat.

When we were young many of us were told that eating candy and then not brushing our teeth would cause tooth decay and cavities. The reason being that certain microbes thrive on sugar and create inflammation that in turn rots the teeth. I'm writing today to tell you that this inflammatory process can start in the mouth and continue throughout the entire digestive system depending on what we choose to eat.

Appreciation for what we eat, and how that affects the microbes that live in and on us, and how those microbes affect our health has until recently been overlooked by most of western medicine. Awareness of the importance of this connection has been long appreciated by naturopathic physicians and now a crisper understanding of how and why is emerging from the scientific research community.

Humans are not really the independent living individuals we have envisioned ourselves to be. If we count cells, we are only about 10%

human! Thankfully human cells are much larger than those of microbes. 500-1000 different species of gut microbes live in each and every one of us. An adult human has as much as 4lbs of these microbes living in their



gut at all times. More than half of the weight of our feces is in fact microbes. We humans are walking, talking ecosystems excreting daily massive numbers of our microbial counterparts.

In health, microbes that colonize our gut complete our digestive processes, produce vitamins, and prevent pathogens (bad microbes) from making us ill. It is coming ever more into focus how things can go badly for our health when our gut microbes are abused.

From science experiments we know that animals that have had their gut microbes completely sterilized do not live. Extensive

use of broad spectrum antibiotics that kill gut microbes indiscriminately can lead to a life threatening infection of *Clostridium difficile*. Inflammatory bowel diseases such as Crohn's and ulcerative colitis are associated with an imbalance of too many inflammatory gut microbes.

You might have heard that all three of these conditions are being treated experimentally with fecal transplants from healthy people. That's right, they put fresh feces teeming with microbes from one person into another!

Another ill health connection to gut microbes now being made is obesity. Obese animals and obese humans have different proportions of the 500-1000 different gut microbes that live in each of us. If you haven't guessed it, yes, they are also experimenting with treating obesity by giving fat people fecal transplants from skinny people!

What we eat changes the proportions of the various gut microbes living within us. It turns out the proportions of microbes that healthy people have in their guts, and that we all want living in ours, thrive on the fibers found in whole plant foods, fruits and vegetables. The gut microbes we don't want so much of? They thrive on refined sugars and other highly refined carbohydrates such as foods made from bleached white flour.

The gut microbes that thrive on refined sugar and highly refined carbohydrates create inflammation in our gut, which in turn creates

inflammation in our whole body. This whole body inflammation contributes to the fatigue, aches, pains and arthritis so many experience daily, heart disease, insulin resistance leading to type II diabetes, and interferes with our body's ability to signal that we have eaten enough. People become obese by overeating. People overeat because they feel overly hungry. People feel overly hungry because they have a gut teeming with inflammatory microbes.

Come to my lecture at the Tualatin Heritage Center to learn more on this topic including what you can do to change your microbes through diet and exercise, why GMO foods are part of the problem, and other steps you can take to reduce your inflammatory gut microbes without waiting for the FDA to approve fecal transplants for all.

Lecture:

***Gut Microbes,
Inflammation and Appetite***

**Monday Nov. 11th • 7:00pm
at the Tualatin Heritage Center -
call 503-691-0901 to reserve a seat.**



Dr. Jeff Clark is a naturopathic physician with True Health Medicine, PC, a group practice in Tualatin serving the whole family with naturopathic primary care and acupuncture. The clinic is located at 8555 SW Tualatin Rd, 503-691-0901.