

# THE HEALTH NUGGET



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## Self-Betrayal, Part 3

As we continue our exploration of autoimmunity, the subject of digestion becomes very fascinating. Evidently, what we eat and how well it is digested will determine the quality of blood, which in turn can stimulate a disease response. Physicians, scientists, and researchers are increasingly recognizing the importance of the gastrointestinal tract in the development of autoimmune disease.

Take for example the observation of T. Colin Campbell, Ph.D. He noticed that a 1992 Finnish study published in *The New England Journal of Medicine* “measured the levels of antibodies that had formed in the blood against an incompletely digested protein of cow’s milk called bovine serum albumin (BSA)” in diabetic and non-diabetic children.<sup>1</sup> The presence of this incompletely digested protein indicated that first of all the protein wasn’t being fully broken down and that it was somehow entering the blood circulation. Systematically, BSA was found in higher numbers in children with autoimmune type 1 diabetes than in non-diabetic children. The study revealed that “of the 142 diabetic children measured, every single one had antibody levels higher than 3.55.”<sup>2</sup> None of the non-diabetic children had cow’s milk antibody levels in that vicinity. Campbell concluded that as the body recognizes these incompletely digested proteins as foreign, antibodies are developed and the immune system goes about destroying both the cow’s milk protein fragments and our own pancreatic cells since they are so similar and ‘look alike.’ Problematic digestion in this case could be a possible culprit in setting the stage for autoimmune disease.

The largest organ of digestion is the small intestine. Here, absorption of nutrients largely occurs. The contents of what is inside the intestines is considered to “contain a toxic/antigenic load from which the body needs to be protected.”<sup>3</sup> So, if absorption is a fundamental function of the small intestines and yet there is great risk of contamination, you would think that there must be a strong security system, and there is.

Protection is supplied by complex mechanisms throughout the gastrointestinal tract and in the small intestine. We will refer to this function as the intestinal barrier. Normally, the intestinal barrier prevents the absorption of pathogens and macro-molecules, i.e. partially digested protein. But when this intestinal barrier is compromised, permeability is increased permitting the seepage of “endotoxins”, or toxins of internal origin. “In experimental animals, chronic low-grade endotoxemia causes the appearance of auto-immune disorders.”<sup>4</sup>

Proponents of what has been labeled Leaky Gut Syndrome hypothesize that damage to the intestinal lining increases permeability of the gut wall allowing “toxins, microbes, undigested food, . . . or larger than normal macromolecules” to leak through.<sup>5</sup> In response to the presence of foreign invaders, antibodies are created and can encourage various autoimmune states. “The leaky gut syndrome is almost always associated with autoimmune disease and reversing autoimmune disease depends on healing the lining of the gastrointestinal tract. Any other treatment is just symptom suppression.”<sup>6</sup>

A hypersensitive response to foods and components of the normal gut flora can be created by the increased permeability of the intestinal wall. When the corresponding food is consumed or a foreign microbe is encountered, inflammatory reactions are triggered. Autoantibodies (antibodies active against self) are thus created and inflammation can become chronic. Inflammation and irritation of the intestinal lining are thought to create this hyperpermeability. The theory postulates that this hyperpermeability may be either the primary cause of disease or a secondary consequence of it and thus creates a vicious cycle. Similarly, the increased permeability is thought to be significant in the origination of food allergies and can also be a result of food allergies.

There appears to be an array of causative factors for this weakening of the intestinal barrier. Chronic stress impacts our intestinal tract in several ways which include slowing down digestion, reducing blood flow to the digestive organs, depressing immune function and directly altering absorption of nutrients. It has been reported that when elevated, the stress hormone cortisol “can lead to leaky gut syndrome, which allows antigens into the bloodstream and increases the risk of food sensitivities.”<sup>7</sup>

Pain medications (nonsteroidal anti-inflammatory drugs), steroid medications and antibiotics are also potential precursors. Toxic overload of environmental contaminants can be factorial. Alcohol and foods are also potential causes of a compromised intestinal lining.

Testing for intestinal permeability is done by ingesting mannitol and lactulose, water-soluble sugar molecules that our bodies cannot use or metabolize. These two sugar molecules differ in size and weight and are absorbed into our bloodstream at different rates. “Mannitol is easily absorbed into the cells by people with healthy digestion, whereas lactulose has such a large molecular size that it is

only slightly absorbed.”<sup>8</sup> Large amounts of lactulose and mannitol present indicate a leaky gut condition. If low levels of both are found it indicates general malabsorption.

This altered state of normal function often goes undetected, hidden under the surface. No obvious indicators as the gut being a potential source of our problems are revealed.

If the intestine could ‘think,’ or at least bring its functions to our conscious forefront, what would it say to us? Would it scream, “Come on guys, all that stuff you are feeding me, the state of constant tension I have to function in, is killing me!” Would it remind us of the value of making healthful choices, living in harmony with the laws of health?

Too often we sabotage our very self. Temporarily blind to the ultimate consequences of our choices, we act contrary to our inner most convictions and embark in a path of seeing/relating to the world in a way that justifies myself—the ultimate self-betrayal. Scripture describes the experience like this: “Keep on hearing, but do not understand; keep on seeing, but do not perceive. Make the heart of this people dull, and their ears heavy, and shut their eyes; lest they see with their eyes, and hear with their ears, and understand with their heart, and return and be healed.” Isaiah 6:9-10.

Don’t miss the point of this passage. God is trying to get our attention. Even in the spiritual domain, the problem is with absorption. Healing comes when we understand with our heart, when we allow the Truth to fulfill the heart’s true quest, and get off the path of self-betrayal.

<sup>1</sup> Campbell, T. Colin. *The China Study*, p. 188.

<sup>2</sup> Ibid.

<sup>3</sup> Galland MD, Leo. “Leaky Gut Syndromes: Breaking the Vicious Cycle.” <http://mdheal.org/leakygut.htm>.

<sup>4</sup> Ibid.

<sup>5</sup> [http://en.wikipedia.org/wiki/Leaky\\_gut\\_syndrome](http://en.wikipedia.org/wiki/Leaky_gut_syndrome).

<sup>6</sup> Rona MD, Msc, Zoltan P. “Altered Immunity & Leaky Gut Syndrome.” [http://www.afpafitness.com/articles/?page\\_id=13](http://www.afpafitness.com/articles/?page_id=13).

<sup>7</sup> Shomon, Mary J. *Living Well with Autoimmune Disease*, p. 289.

<sup>8</sup> Lipski, Elizabeth. *Leaky Gut Syndrome*. p. 27.

