

FOOD AS HEALER, FOOD AS SLAYER

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Nowhere in medicine is there more controversy, superstition, confusion and religious fervor than there is surrounding the subject of food allergies and illness. Conventional allergists and immunologists generally limit interactions between food and the immune system to the Type 1 hypersensitivity, immunoglobulin E (IgE) mediated response. Practitioners of integrative and complementary and alternative medicine have long recognized the limitations of this point of view yet have failed to produce a viable alternative clinical model with which to test and assess interventions based on complex dietary manipulations.

However, a growing body of literature illuminates the intimate relationship between the gut, food and illness. Despite the limitations of the assessment tools (electrodermal screening) and the lack of a control group, small sample size, and lack of a standard, validated assessment tool for measuring outcomes, Taylor et al (pages 58-64) break ground in their pilot study. While cognizant of the limitations of their methodology, the authors demonstrate that alteration of the diet to reduce its antigenic load is correlated with a reduction in symptom severity in a condition that has no known conventional treatment (multiple chemical sensitivity).

Certainly, conventional medicine has recognized that some foods cause harm, and most doctors have recommended avoiding certain foods to treat common conditions. Yet even many of these recommendations—from low-fat diets for prevention of cardiovascular disease and bland diets to treat ulcers, to low-salt diets to treat hypertension—are now relegated to the pile of unnecessary or harmful advice. And while medicine embraced these ideas, it has resisted the concept that changes in diet can not only prevent disease, but can be used as a therapeutic tool, often where no other exists.

The need to critically assess the role of diet as a therapeutic tool in disease cannot be overstated. The need for a healthy diet is well recognized in the prevention of chronic illness such as cardiovascular disease, diabetes, obesity and cancer,

but the use of nutritional therapy in illness stops there. Using food as a therapeutic tool in illness is a vast unexplored area of medical science. The power of food as medicine lies in the exact domain where current medical practice is weakest—in the chronic immune, endocrine and degenerative diseases that afflict modern civilization.

However, the emerging science of nutrigenomics highlights the complex role of macronutrients, micronutrients and phytochemicals in altering endocrine, immune and metabolic responses that regulate the subtle balance between health and illness. The mechanisms whereby food acts to alter patterns of gene expression regulate complex immunological signals and shift endocrine responses are being clarified. The old idea that food is simply a vehicle for delivering energy in the form of calories is giving way to a new model of food—food as information. Our evolutionary adaptation to a particular diet has perhaps set the conditions that alter gene expression patterns to trigger illness, rather than support health in the context of an unfamiliar landscape of nutrient-poor fast food, increasing sedentary behavior and incessant stress. RD Laing wrote that, “Insanity is a sane response to an insane world.” Perhaps the disease is a normal response to a diseased world (and a toxic diet). As a species, we ate a complex, unrefined, wild diet consisting of a wide variety of plant and animal foods rich in phytonutrients, fiber and omega-3 fatty acids. Today, our monotonous diet triggers different and diseased patterns of gene expression. The US Department of Agriculture (USDA) reports that the top nine foods eaten by Americans are whole cow’s milk, 2% milk, processed American cheese, white bread, white flour, white rolls, refined sugar, colas, and ground beef. All of these foods are foreign to our genome that evolved on a Paleolithic diet. This monotonous diet creates altered patterns of gene expression that lead to disease, including food allergy or sensitivity. Dairy and gluten are two generally well-accepted food antigens responsible for an array of complex disorders including autoimmune diseases, digestive disorders, endocrine disturbances and neurologic and behavioral disorders. These data must be the wedge into a new framework for thinking about the relation of food, illness and health.

While many hurdles remain in designing, funding and inter-

preting research on the interaction between food and health, it must be an area of highest research priority. Food is our greatest ally in helping to prevent and treat illness, and is helping our patients to create health. We must separate religion science and assess the role of food as medicine, particularly in chronic illness where current pharmacologic approaches fall short.

Clinical experience treating chronic conditions with elimination diets such as irritable bowel syndrome, inflammatory bowel disease, migraines, autoimmune diseases, chronic fatigue immune dysfunction syndrome, fibromyalgia syndrome, multiple chemical sensitivity, psoriasis, eczema, urticaria, arthritis, and respiratory illness, enuresis and cystitis must be translated into research protocols that illuminate individual differences in response to dietary antigens and their relation to diseases. This research will yield critical new insights into the role of food as slayer and food as healer.

A handwritten signature in black ink, appearing to read 'Mark A. Hyman', with a long, sweeping horizontal line extending to the right.

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