



## Delayed Food Allergy

### All Your Tests are Normal

People who suspect that food allergy is contributing to their chronic health problems are often told by unsuspecting doctors, “All your tests are normal,” followed by assurance that food couldn’t possibly be causing their symptoms. In mainstream medicine, testing for food allergy is most often done by measuring immunoglobulin E (IgE), classic or immediate allergy, either by skin prick or radioallergosorbent (RAST) serum testing. Most food allergy, however, is not IgE-mediated. Overall, IgE allergy occurs in approximately three percent of the population. Other immunoglobulins are also implicated in immune reactions to foods, but they are seldom investigated in spite of decades of research (by Herbert Rinkel, M.D., Theron Randolph, M.D., Michael Zeller, M.D., Jonathan Brostoff, M.D., et.al.) that brought to light this seldom recognized cause of health problems that have proved difficult to diagnose. Because non-immunologically-based adverse reactions or intolerances to food can also cause symptoms, it is important to define what delayed food allergy is not.

### Delayed Food Allergy is NOT:

- 1) Immediate (IgE) food allergy, which includes hives, asthma, and potentially fatal, systemic allergic reactions (anaphylaxis) most often to peanuts, fish, seafood, or tree nuts; infants’ respiratory, skin, or digestive problems often due to ingestion of wheat, dairy, corn, or soy antigen in breast milk or foods
- 2) Adverse reactions from naturally occurring chemicals in foods, including salicylates, theobromine in chocolate, caffeine in coffee, solanines in nightshades (potato, tomato, eggplant, peppers, tobacco—known for their role in arthritic symptoms), and tyramine in cheese (associated with migraines)
- 3) Reactions to contaminants in food, including pesticides, herbicides, molds, industrial runoffs, drugs given to livestock such as antibiotics and bovine growth hormone (BGH), toxins in fish from algae overgrowth, mercury in seafood, and bacterial food poisoning (e.g., pathogenic strains of E. Coli, salmonella, etc.)
- 4) Reactions to food additives, including artificial colors (e.g., FD&C Yellow No. 5, known as tartrazine), preservatives, flavors, and sweeteners, monosodium glutamate (MSG), nitrites, and sulfites
- 5) Symptoms resulting from impaired digestion, including deficient enzymes or hydrochloric acid, lactose intolerance, or malabsorption from a variety of digestive diseases (Crohn’s disease, celiac disease, colitis, etc.)

### Can You Say . . . Multitasking?

The gastrointestinal tract (GIT) conducts sophisticated operations, including enemy surveillance, defense, combat, energy production, biochemical reduction of foods, hazardous waste cleanup, and recycling. It has to not only take in food, but also take in a variety of toxic and potentially dangerous substances and then allow nutrients to pass through its lining into the bloodstream, all the while preventing absorption of toxins. This selective permeability occurs as a result of healthy, tight gaps between the cells that line the GIT and a mucus layer that forms a protective physical and immunological barrier between the GIT and bloodstream. Maintaining these tight gaps is key to optimal nutritional status, physical and mental health, and immune health

## **Leaky Gut**

When the normally tight gaps between cells of the GIT lining are breached (particularly in the small intestine), a “leaky gut” results. Partially-digested, large food particles and toxins are then able to enter the bloodstream where they are identified and tagged as “non-self” or foreign by circulating immune cells. IgA antibodies, the body’s first line of defense against infection, are secreted into the GIT (and respiratory tract, milk ducts, etc.). IgA antibodies attach to food in the GIT, forming immune complexes (ICs). While some ICs pass through a healthy GIT lining into the bloodstream, most of them are removed from circulation by the liver and spleen. When a lot of ICs enter the circulation due to a leaky gut, the ability of the body to remove them is overwhelmed and the ICs circulate and are distributed in body tissues where they stimulate chronic immune reactions and inflammation.

## **A Case of Mistaken Identity**

When protein in food that’s been tagged by the immune system as “foreign” closely resembles a protein in the body, the immune system can attack that body tissue as if it were foreign. This case of mistaken identity, called molecular mimicry, can result in autoimmune diseases. Though any food or tissue could be involved, foods most apt to contribute to autoimmune diseases are grains and dairy, and the tissues most often affected are connective tissue and bone.

## **But—is it True Love?**

Answers to the question, “What foods do you love?” often reveal the foods to which people are allergic. People will addictively eat foods to which they are allergic to avoid symptoms of withdrawal, similar to chronic alcoholics who eventually drink not to feel good but to prevent feeling worse. A food craving is thus born, and the person will eat that food repetitively, unknowingly undermining his immunity and health.

## **The Sinister Seven**

Though any food can be allergenic, the “sinister seven” foods that commonly trigger delayed allergic reactions are corn, dairy, egg, soy, wheat, yeast, and citrus. Add to this list any other foods eaten repetitively, such as lentils or rice in vegetarian diets. Dairy, wheat, and corn account for up to 80 percent of delayed food allergies.

## **Symptoms**

Unlike acute allergic symptoms associated with immediate (IgE) food allergy, symptoms from delayed food allergy usually occur from two hours to three days after eating a reactive food. This timing often results in people being unaware of the cause of their symptoms. Delayed food allergy can affect several body systems, resulting in feeling “sick all over” with complaints that include headaches, joint and muscle pain, puffy eyes, fatigue, sinusitis, urinary tract symptoms, respiratory problems, flu-like symptoms, swelling, flushing, fever, bad breath, rashes (including chronic hives, eczema, and acne), mood disturbances, “brain fog,” and numerous digestive symptoms (e.g., pain, reflux, gas, bloating, indigestion, nausea, vomiting, constipation, and diarrhea).

## **Who’s At Risk?**

No single cause of delayed food allergy exists. Rather, a convergence of events added to a genetic predisposition to allergic or autoimmune diseases puts people at risk for developing it. Factors that can tip the scales for a susceptible person to develop delayed food allergy and leaky gut include chronic fungal or bacterial infections, yeast overgrowth, parasites, chronic stress, multiple courses of antibiotics, birth control pills, non-steroidal anti-inflammatory drugs (NSAIDs—e.g., ibuprofen, Motrin, etc.), corticosteroid use (e.g., prednisone), alcohol consumption, and a diet high in sugar and low in nutrients.

## **Diagnosis**

A comprehensive dietary, medical, and family history accompanied by a complete physical exam by a practitioner familiar with the clinical presentation of delayed food allergy is the most important first step for establishing a diagnosis.

Various laboratory tests help substantiate a suspicion of leaky gut, including a lactulose/mannitol urine test and a serum total IgA. Specific food allergies can be determined by various tests, including salivary or serum IgA and serum IgG antibody testing. Doing your own elimination diet/test at home is considered one of the most revealing methods to determine which foods are problematic. Though low cost and accurate, the diagnostic diet requires time, effort, organization, and good self-observation skills.

### **Treatment**

Delayed food allergy does not develop overnight and its treatment similarly takes months, or longer, for people who suffer chronic immune dysfunction. Once food allergens are identified, avoidance of the most severely reactive ones and a four-day rotation of the moderately allergic ones are recommended for two to three months. While even a week without offending foods can lessen symptoms, further improvement has been shown to occur at two months and again following 18 months of avoidance. Some food allergy is fixed, meaning that no matter how long an allergic food is avoided, eating it will still cause a reaction. Most food allergy is cyclical, meaning that after a period of avoidance, a food can be tolerated in a certain frequency and "dose." However, a return to repetitively eating a reactive food will very likely result in recurrence of symptoms. Nutritional support for leaky gut can include glutamine, zinc, probiotics (friendly gut bacteria), hydrochloric acid, digestive enzymes, fish oil, antioxidants, vitamin A (to boost total IgA), mineral replenishment, and support of nutritional imbalances.

### **Diet Tips**

Fasting a day every week has been shown to help heal leaky gut by resting the digestive system. Choosing organic foods and reducing toxic environmental exposures are recommended, inasmuch as chemicals can trigger or contribute to adverse immune reactions.

Raw foods are more allergenic than their cooked counterparts, especially fruits and vegetables. Though often referred to as a vegetable, corn is actually a member of the allergy-prone grain family. Frozen or outdated fish can be high in histamine, which contributes to allergic reactions. Kamut and spelt are ancient varieties of wheat and need to be avoided on an elimination diet test of wheat.

### **Paleolithic Diet**

People in early civilizations were hunters and gatherers, and they predated the introduction of grains, beans, and dairy into the human diet. Avoiding foods based on an evolutionary perspective has been shown to benefit many chronic health conditions that are resistant to treatment such as acne, water retention, fatigue, and feeling "sick all over." A Paleolithic or "caveman" diet is abundant in vegetables, fruits, lean meats of grass-fed animals, nuts, and seeds, and can help restore a leaky gut.

### **Introducing Foods to Infants**

IgA in breast milk enhances the immunity of infants who are breastfed. Rotation of infant formulas may be advised for infants who aren't breastfed and who have a family history of allergy. Avoid feeding allergy-prone children wheat and dairy until one year of age, eggs until two years, and tree nuts, fish, seafood, and peanuts until three years. Introduce new foods by feeding them (initially in small quantities) for four days before adding another food to help assure that the child does not have a delayed allergy to it. Infants' food allergy often quickly results in rashes, runny nose, irritability, diarrhea, and puffy, red ears or cheeks.

### **From Clueless to Hopeful**

Individuals (in particular women) with a family history of allergy or autoimmune diseases who have health problems for which their physicians have found no cause or solution may find that delayed food allergy plays a role in their illness. Delayed food allergies can range from mild to severe, and their treatment can be demanding in that lifelong changes in diet and lifestyle are often required. Once informed, formerly clueless sufferers of delayed food allergy have hope of recovering lost health.