A Closer Look at Food Allergies:
Untangling the Bodies Immune Response to Food

Food allergies can affect us in unexpected ways. Phil, a 63 year old patient at Ann Arbor Holistic Health, had a chronic cough for nearly half his life. He worked with people every day, and the cough interfered with his ability to perform his job. Sometimes he would be forced to leave work early, other times he would wake to the sound of his own wheezing. At the age of 48, he began seeing a pulmonologist. His pulmonologist was extremely knowledgeable. However, the medications that were prescribed only numbed Phil’s discomfort. Nothing he tried provided any long term relief. When Phil was recently hospitalized with bronchitis and pneumonia, he accepted that he would live with his cough forever. Frustrated, but still intent on improving his quality of life, Phil began to look into other influencing factors. He started to read more about how food allergies may be affecting his respiratory system. Journal articles and websites continuously highlighted the correlation between the two, and Phil decided to schedule a consultation at Ann Arbor Holistic Health. During his consultation he learned about food allergy testing, and decided to get tested. His results were positive for a significant number of foods. Phil removed these allergens from his diet, and his respiratory symptoms resolved themselves within a month. Phil has been cough-free ever since.

What is an allergy?
An allergy is the immune systems response to a protein usually found in a food, such as peanuts, eggs, wheat or milk that it perceives as a foreign body.

How do I know if I have an allergy?
Just because you don't exhibit obvious signs of a food allergy like hives or digestive problems doesn't mean you are allergy-free. The immune systems response to allergies can appear up to 72 hours after digestion, and in many different places throughout the body, so it is important to watch for these 13 warning signs:

13 Warning Signs:

1. **Tiredness, drowsiness, no energy.** Feeling out of sorts is often correlated with an unknown food allergy. If your bodies immune system is warding off an allergen, there is less energy left for our busy schedules.
2. **Frequent headache or migraines.** Digestive inflammation due to an allergen can result in headaches. The headaches may not disappear until the dietary issue is addressed.
3. **Stomach bloating, nausea, diarrhea, constipation, flatulence.** These symptoms, as well as Irritable Bowel Disease (IBD) including Crohn's Disease and Ulcerative Colitis, and Irritable Bowel Syndrome (IBS), are common reactions to a food allergy.
4. **Mouth Ulcers.** The trademark sign of a stressed immune system. Since your immune system is busy combatting the allergen, it forgets to protect you from infections and viruses.
5. **Chronic cough, bronchitis, asthma, colds and 'flu.** Respiratory conditions are caused by inflammation in the lungs and nasal passages.
6. **Eczema, psoriasis, and chronic skin problems.** It may be surprising that food can affect our skin, but inflammation from an over-worked immune system can manifest externally, too.
7. **Aching joints, backache.** The inflammation of our digestive tract can settle in the leg joints or the spine, which causes great pain. Unfortunately, the medicine we take can numb us, but until we address the cause we will never be fully pain free.
8. **Gradual weight change.** An unrecognized food allergy can affect your thyroid gland which disrupts your metabolism. The thyroid hormones aid in the processing of food into energy or into fat. If the signals are malfunctioning, you may “store” when you should “burn” and vice
versa. Some people who can eat whatever they want are simply not processing the food they consume, and therefore not receiving any of the nutritional benefit.

9. **Tinea or Yeast (Candida) infections.** Fungal infections such as thrush, jock itch, ring worm, athletes foot and yeast infections are signs of food allergies. The immune system is busy fighting an allergen and is not as strong in preventing fungal ailments. If this is you, deal with the Yeast issue first- by ridding your body of Candida (the fungal infection)- then tackle the underlying food intolerance.

10. **Clumsiness, lack of coordination.** Food allergies can cause inflammation not only in the joints and organs but the nervous system as well. The nervous system controls the bodies muscles, so if an untreated food allergy is affecting us we may become clumsy. This is often noticed among children, but switching to the correct diet can improve their behavior dramatically.

11. **Miscarriage, infertility.** Unchecked food allergy can interfere with a couples ability to conceive and maintain a healthy pregnancy.

12. **Hemorrhoids and Ear pain.** These 2 symptoms are often linked to milk allergies.

13. **Cravings, addictions.** Is there a food you cannot resist? Believe it or not, addictions are another sign of undiagnosed food allergy.

### IgE versus IgA or IgG

Phil could not believe how much allergies affect the entire body. He soon learned that allergies weren't just to things like peanuts and bee stings, and that there are actually many different kinds of allergic reactions. There are two main allergic responses that are important for us to understand- IgE, and non-IgE (IgA and IgG).

<table>
<thead>
<tr>
<th>IgE</th>
<th>IgA and IgG</th>
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<tbody>
<tr>
<td>Fast response (few minutes)</td>
<td>Slower response (2 hours-72 hours), sometimes take years for symptoms to manifest</td>
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<tr>
<td>Strong response</td>
<td>Weaker response</td>
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<tr>
<td>Similar physiological response in most people</td>
<td>Varied physiological response in most people</td>
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<tr>
<td>“fixed”- do not change during our lifetime</td>
<td>Can evolve at any age</td>
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<tr>
<td>Analogous to immune system “blow-torch”: instant, acute, powerful</td>
<td>Analogous to immune system “sand paper”: delayed, slowly damaging</td>
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<tr>
<td>Immune system response to a protein found in digestive system that is perceived as foreign object</td>
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### Causes

Most food allergies are acquired not inherited, and the most common food allergies are IgA or IgG. The causes of these adverse immune reactions are varied. Some develop sensitivities due to repeated exposure especially in large quantities, and others react to pesticides and herbicides combining with the natural chemicals in food.
The Immune System in Our Digestive Tract
How can something as seemingly innocuous as food affect us in such startling ways? Interestingly enough, 70% of our immune system is located in our digestive tract. This means our body strategically places its largest defense inside our intestines— the front line is in our gut! Part of this immune defense is our lymphatic system, 50% of which is located in our digestive tract, as well. The lymphatic system is a network whose primary function is to create immune cells, in addition to moving fluid away from our bodies tissue, absorb fat and move fat into the circulatory system. The lymphatic system is similar to the circulatory system, except instead of shuttling blood, it shuttles a clear liquid called lymph which is full of white blood cells. What we breathe and what we drink has not been as threatening to our species survival as the food we ingest. Because of our bodies preemptive and highly developed defense system, even foods that are good for us can be seen as potential threats.

Leaky Gut Syndrome & its affect on food allergies
Food allergens trigger inflammation in the digestive tract which leads to the many symptoms listed above. Leaky gut syndrome refers to digestive disturbances and infections caused by severe inflammation of the intestine. This inflammation creates increased permeability in the walls of the intestines. Partially digested food enters into the blood stream through small openings between the cells in the intestinal lining where it is met by a hostile immune system. The body produces an increasing amount of antibodies to fight the food we eat, and the food bound with the antibody continually pass from the intestine to the blood stream. By removing the allergen, we can heal our “leaky” guts and begin the process of improved health.

What can we do if we suspect we have an allergy?
There is good news. We can successfully eliminate the symptoms by discovering what foods serve as our triggers. By excluding the trigger food from our diet, the intestinal inflammation quickly recedes and the symptoms disappear. But how do we know what foods cause us trouble? Phil began investigating different diagnostic tactics.

1. ELISA
The Enzyme-linked Immunosorbent Assay panel (ELISA) is a blood test that examines 96 of the most common foods. The food categories tested include: animal products, dairy, meat and fowl, grains, nuts, vegetable, seafood and fruits. By undergoing the ELISA test, patients are able to measure both IgE, IgA and IgG immune responses. Ann Arbor Holistic Health provides a simple means that combines both tests.

2. Supplements and Vitamins
Vitamin D, essential fatty acids, and probiotics are recommended supplements that help speed up our recovery process. Supplements such as quercetin and curcumin are plant-based herbs that lessen inflammation and ease our symptoms. Once we know what food is causing us problems, we can jump start our healing with some of these natural remedies.

3. RAST
Most doctors offer a IgE blood test called RAST (short for radioallergosorbent test). Though this method is extremely accurate in determining IgE based food allergies, it does not address the issue of non-IgE allergies at all. The ELISA food allergy test offered at Ann Arbor Holistic Health also tests for IgE food allergies.

4. Elimination Diets
Though elimination diets are accurate and cost-effective, they involve a long and arduous process. Most food intolerances are caused by the following foods: Dairy, wheat, egg, soy, peanuts, shellfish, and tree nuts. Removing one of the above from your diet can theoretically indicate the allergen, but as we have seen with Leaky Gut Syndrome, we often have more
than one allergen due to years and years of damaging inflammation. Testing for multiple-allergens is very difficult to do with this method.

5. Stool Samples
   Stool samples are excellent barometers of human health. Since the majority of the body's immune cells are present in the intestinal tract, a stool sample is the best place to search for evidence of food allergies. However, stool samples are messy and unpleasant.

6. Skin Prick Tests
   Skin prick tests, one of the most common methods for IgE immune responses, can be painful and do not detect non-IgE food allergies. They can also be inaccurate with a high level of false positives.

Conclusion
It surprised Phil to think maybe a food allergy was affecting his respiratory system, but after further study he understood that food has an enormous influence on our health. After completing the ELISA 96 allergen food panel and RAST test, it was quickly determined that he had food allergies to eggs, dairy and gluten. After avoiding these foods for a month, Phil's cough completely disappeared. Comprehending his body's relationship to food was the key to unlocking true health and wellness.

“You are what you eat. Or, even more accurately, you are what you absorb,” says Dr. John Wycoff, an osteopath based out of East Lansing who believes hormonal balance, allergies and diet are integral to health. As reactionary medicine and over-usage of prescribed chemicals fail to alleviate our pain and discomfort, more and more physicians are embracing holistic approaches to healing. Through a deeper understanding of what our bodies do and do not absorb, and how these physiological responses affect us, we can take charge of our wellness and move towards a brighter, more fulfilling future. If you are experiencing any of the listed symptoms, please call us.

Please call 734-222-8210 to schedule a free consultation and evaluation. At Ann Arbor Holistic Health we are known for providing professional and compassionate care. We strive to guide people towards a comprehensive and holistic healing strategy. Restoring your body to health will restore the quality of your life.

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