
CHAPTER 1

An Introduction to Food Allergy

We Begin Our Journey to Better Health

You are reading this book because you or a loved one are suffering. You suspect that foods may be part of the cause of this suffering, but you are not sure that the symptoms that plague you could arise from your diet. If they do, which foods must you avoid? I specialize in helping people who suffer from food allergy and, through this book, I will try to help you find the answers to these questions.

As to the first question—what symptoms can foods cause?—the answer is many. My food-sensitive patients suffer symptoms that you probably know are allergic, including hives, eczema, congestion, wheezing, and sneezing. Sometimes their symptoms are scary and dangerous, such as choking and fainting that may end in unconsciousness. They also suffer symptoms that you may not realize are caused by allergy, such as tiredness, poor concentration, headaches, stomach aches, diarrhea, numb areas of the body, and aching joints and muscles. If you suffer from these symptoms, I will tell you how they arise.

As we explore food allergy I will also answer the second question: Which foods cause these symptoms? By knowing which of your symptoms could be caused by foods and which foods to suspect, you can learn to live a life without pain and discomfort.

But you need more than lists of symptoms and foods to successfully treat yourself. You need to understand why food allergy exists. You

should know principles of diagnosis and treatment so you can decide what actions you need to take. I will try to teach you this.

Understanding and treating food allergy are like building a house. The symptoms and suspect foods are the framing, walls, windows, and doors of the house. They need a firm foundation, or they will collapse. As you would start building a house by forming this foundation, we will begin our study of food allergy by examining general information about food allergy and some of the principles that should guide your thoughts and actions.

Once we establish this foundation, we will then look at the foods that cause allergic symptoms. Finally, we will put the roof on our study of food allergy by summarizing what we learned as we apply this knowledge to treating your food allergy.

Before going further, I should give you a word of caution to help you use this book wisely.

Don't Try to Make This Book Your Doctor

I wrote this book to tell you my methods of treating food allergy so you can apply them to your own life. I did not write it to tell you how to diagnose these illnesses without assistance. Diagnosing illness is the specialty of your primary care professional. Let him or her help you diagnose your illness.

In my allergy practice, I try to make sure each of my patients has a primary medical care professional who has already diagnosed allergy and excluded—as far as possible—nonallergic illness as the cause of my patients' symptoms. If you were my patient and we questioned the cause of your illness, I would send you to your primary doctor for diagnosis. Go to him or her now if there is any question about your diagnosis. If your doctor wants help in diagnosis, he or she may suggest you see a neurologist, dermatologist, or other specialist; if so, take this advice.

Maintain a Healthy Diet While You Follow My Dietary Advice

Some of the foods and beverages I ask you to avoid add no value to a healthy diet. Other foods and beverages are championed by dietary experts who teach us they are a necessary part of a healthy diet (a number

of dieticians are scandalized that we ask our patients to exclude them). Excluding these foods and beverages is not fatal to a healthy diet. There are plenty of healthy foods you can eat while you avoid the foods that cause you pain and discomfort.

In certain circumstances there is a danger you will slip into a nutritionally inadequate and therefore unhealthy diet. For instance, if you already follow a medically prescribed diet that excludes healthy foods, and you also try to exclude the foods and beverages that trouble my patients, your diet may be inadequate and your health threatened. The same threat could surface if you follow a diet not prescribed by a skilled primary care professional. If there is any chance that your diet will become inadequate and unhealthy, do not follow my diet until you consult your medical care professional or a dietician.

Illnesses Caused by Food Allergy

As you try to determine if your pain and discomfort may be caused by food allergy, ask yourself a question: Could my symptoms be caused by food allergy? To answer this question you need to know the symptoms that food allergy causes. I will try to answer this question.

It's not easy. Describing the illnesses caused by food allergy is like trying to gift-wrap an elephant—there's not enough paper to do it. What's more, even if you had enough paper, where would you start?

I know this analogy is a little ridiculous, but it does give you some idea of the dilemma I faced in writing this section. Food allergy provokes so many illnesses that to include an elaborate scientific description of all of them would have made this book so expensive the average person couldn't afford to buy it—or carry it.

Besides that, I did not write this book to help you diagnose your own illnesses. Diagnosing and treating illnesses should be left to your medical care professional, and you should not rely on any book to diagnose yourself. Your medical caregiver is trained to recognize symptoms and determine their cause. Go to her or him for help so you can avoid the mistakes that will surely result from self-diagnosis and treatment.

Instead, the purpose of this book is simply to make you more conscious of food allergy and the many illnesses associated with it, as well as to let you know that your symptoms may be caused by food allergy. In this section I want to increase your awareness of these symptoms. If

you suffer from any of these symptoms, you should at least consider the possibility that they are food-related.

Direct and indirect causes. The long list of disorders for which food allergy is the direct cause is augmented by numerous illnesses for which it is indirectly responsible. Like an inconsiderate bully, allergy delights in the opportunity to further torment my patients who suffer nonallergic disease.

For instance, we often see patients with back pain caused by degenerated vertebrae or whiplash injury; food allergy greatly intensifies this pain. For patients with intestinal inflammations such as ulcerative colitis, allergy makes their bouts of painful diarrhea more offensive. In these instances, the disorder is not directly caused by food allergy; food is aggravating a preexisting condition.

In the following summary of allergic illnesses, I will not make a point of telling you which illnesses allergy affects directly and which indirectly. Since doctors are unsure of the cause of many illnesses, it is not always possible to make that distinction. However, it is important to realize that if exposure to certain foods causes discomfort and pain, you must avoid them.

Allergic Illnesses: Blood Vessels

The blood vessels are an appropriate place to begin our exploration of the illnesses brought on by food allergy. So many allergic symptoms can be explained in part or altogether by swelling or spasm of the blood vessels and how this swelling stimulates the sensations of itch, or by swelling arising from the nerves that interact with these blood vessels. Food allergy can cause these vessels to swell or spasm.

Migraine Headaches

A popular theory holds that migraine headaches arise from spasms of the blood vessels in the head. The spasm restricts blood flow, denying blood-borne nutrition and oxygen to the brain and eyes. This decrease in energy and oxygen produces the vision changes and numbness that warn many patients they are about to be socked with migraine's agonizing pain.

These headaches may be caused by a vulnerability of the nervous system to sudden changes in either your body or the environment

around you. Many researchers believe that migraine sufferers have inherited a more sensitive nervous-system response than those without migraines. During a migraine attack, changes in the activity of the nerves controlling the blood vessels that surround the outside of the brain inflame these blood vessels.

The controller nerves force the blood vessels into spasm. The migraine head pain erupts when the blood vessels relax after the spasm is over. Unfortunately, they relax too much and swell like a boiling sausage, stretching and irritating the nerves that connect the blood vessels to the pain-sensing areas of the brain. Then, when blood circulates through these vessels, pushed by the pumping of the beating heart, each pulse of blood further irritates these pain-sensing nerve fibers, giving the characteristic pain of a migraine headache that pulses in time with the heartbeat.

Hives and Angioedema

Another disorder that we can explain by blood vessel changes is hives, a condition characterized by intensely itchy red blotches—some large, some small—caused by the swelling of small blood vessels at the surface of the skin. The swollen vessels leak fluid into the surrounding skin, causing the skin to swell into a welt and turn red.

The discomfort that accompanies the hives results from irritation of the itch-sensitive nerves at the skin's surface. Not only are hives uncomfortable, they also can be terribly embarrassing. Imagine going to work with red splotches all over your face! Many patients have suffered that experience.

Angioedema is a condition in which the hives form deep in the skin. Patients develop swelling that can turn fingers into sausages, raise flat-topped welts on the skin, and puff up the eyelids, hands, and feet. These deep-seated swellings, which are sometimes redder and sometimes paler than the surrounding skin, typically do not itch because the nerve fibers at the surface of the skin are not stimulated to send out an itch sensation. Often hives and angioedema strike together, and patients suffer both the red, itchy hives and the uncomfortable swelling.

Asthma

Blood vessel changes also can explain some characteristics of asthma, which causes difficulty in clearing air from the lungs. During severe

asthma attacks, the chests of victims become distended because their breath is trapped in their lungs like the air in an overinflated balloon. In severe attacks of asthma, exhaling, which is second nature to all of us, becomes an exhausting struggle.

Breathing is difficult because the passages that carry air to the far reaches of the lungs are obstructed. The blood vessels swell and leak fluid into the airway lining, much as they do in hives and angioedema. The swollen linings partially block the passage of air, producing the irritating and sometimes frightening whistle or wheezing sound so familiar in asthma sufferers.

The same swelling that causes migraine headaches, hives and angioedema, and asthma occurs in a number of other areas. We'll examine the consequences of this reaction in the respiratory tract, the sinuses, the chest, and the joints.

Swelling in the Respiratory Tract

If the swelling centers in the vocal cords, it makes the voice *hoarse*; further swelling results in *voice loss*. This happens frequently in many patients; it especially handicaps singers, ministers, and others who frequently address the public. Perhaps the strain these activities put on the vocal cords weakens the area and makes the vocal cords more susceptible to allergy's voice changes.

Swelling in an area near the vocal cords, especially when accompanied by an annoying itch in the breathing passages, brings on the *chronic cough* and persistent *throat irritation* that exasperate so many patients. The spring and fall rainy seasons send a constant stream of coughing and throat-clearing patients to allergists, usually at the request of parents, spouses, or friends who tire of listening to this irritating, barking cough day and night.

For a sizable share of the population, the airway swelling becomes so pronounced that they feel like they are strangling. The strangling feeling, I believe, arises from a *swelling of the airway*—a swelling that makes patients feel they cannot breathe. Fortunately in most people the strangling feeling does not progress to real strangulation because the airway swelling causes only a partial blockage. Although this is almost always a harmless symptom, patients often live in fear that one of these attacks will be their last.

Medical care professionals often may misdiagnose this frightening

disorder and call it *hyperventilation*, a diagnosis implying an anxiety origin. This is not necessarily so.

There are clues that this choking feeling is real and not imagined. Patients who suffer from airway swelling usually know that it is real—that something is blocking their breathing. They even point to the spot on the neck or the chest where they feel the obstruction.

Although their struggle for air is similar to the hyperventilation that accompanies anxiety attacks, and they are anxious during the attack, their anxiety is brought on by the feeling of strangulation and not the psyche. Forget the tranquilizers!

When the swelling occurs higher in the respiratory tract, its symptoms are relatively harmless but unpleasant. If the swelling is at the back of the throat, it can cause a *recurrent sore throat*. Although painful, these sore throats seem to have no infectious basis because they produce negative throat cultures. The throat usually looks normal on examination.

It can also produce *swelling of the tongue, lips, or membranes in the mouth*, as well as the most common complaint of allergy patients—*nasal stuffiness*. This unpleasant symptom, which results from swelling in the mucous membranes of the nose, is like having a constant cold with its accompanying tiredness, irritability, and just plain yuckiness. It is frustrating to treat this condition if the patient refuses to limit the foods and beverages that promote the stuffiness.

Swelling in the Sinuses

If the swelling is even higher in the respiratory tract—in the sinuses—patients experience the nagging, steady pressure and pain of *sinus headaches*. More than half of the patients who come to allergists for treatment feel aggravating pain in the forehead, eyes, cheeks, or back of the head that is characteristic of these distressing headaches. I know firsthand how distressful they can be; I suffered dreadful sinus headaches. The opportunity to help others avoid these headaches attracted me to the field of allergy.

Swelling in the Chest

Another surprisingly common allergic symptom is *chest pain*. My patients often complain of a painful tightening or a heavy sensation under the sternum (breastbone), much like that experienced by people suffering a heart attack. There can even be changes in the rhythm of

the heart, either speeding it up or slowing it down, and at times causing missed beats. More than a few doctors have been surprised to see a normal EKG in a patient suffering allergic chest pain.

Swelling in the Joints

Allergy torments weak or damaged areas; it is no surprise that the swelling of angioedema frequently attacks the muscles and joints of patients with nonallergy-related diseases such as rheumatoid arthritis or osteoarthritis. The swelling generally occurs deep in the affected joints; you do not see it on the surface of the joint, nor do you feel the heat or redness that are the hallmarks of arthritic inflammation. Many of my patients with arthritis experience episodes of pain in their arthritic joints when they cheat on my diet.

This same annoying pain bothers joints that have been damaged by injury. Patients with whiplash and other spine injury are vulnerable, as well as those with temporomandibular joint (TMJ) syndrome or post-traumatic joint injury (e.g., joints damaged by football injury). Here again I speak from personal experience. My “football” knee aches and swells with fluid when I exceed my tolerance for certain foods—in my case, almost always those flavored by MSG (monosodium glutamate), blundered into by mistake.

Nerves, Blood Vessels, and Mystery

Much of the mystery surrounding allergies stems from their ability to strike widely separated areas of the body, areas as unrelated as the joints and the respiratory tract. But in the previous discussion I used a key bit of information to dispel this mystery.

We saw how widely separated and unrelated parts of the body are affected by the same process—irritation and spasm of blood vessels. In tracking this swelling as it moved around the body, we learned why allergic disorders bring widespread discomfort and pain. We also saw that allergy targets areas already weakened by injury or disease as well as areas genetically predisposed to allergy’s miseries.

Understanding swelling and multiple affected areas, we know that allergy is not mysterious. To further dispel its apparent mysteries, let’s further explore the relationship between blood vessels and nerves and see how this relationship leads to symptoms caused by the overload of dietary chemicals.

Blood vessels can no more dilate or spasm by themselves than a car can drive itself. Imagine picking up the morning paper and reading: MR. JONES'S 1990 HUMMOBILE JAILED AFTER BEING CONVICTED OF SMASHING INTO STOP SIGN.

Upon reading this, you would feel that you should probably make reservations for the reporter, the judge, and the arresting officer at the nearest psychiatric ward and order a trial for Mr. Jones, the car's driver. The car is not at fault, the driver is.

Just as cars do not drive themselves, so blood vessels do not order themselves to dilate. Nerves do the ordering; they manipulate the blood vessels, making them swell and spasm. Understanding this nerve/blood vessel relationship is key to understanding how allergy plagues the nerves and blood vessels.

There is evidence that certain foods damage nerves and that these damaged nerves stimulate blood vessels to swell and leak. Nerves are stimulated by neurotransmitters (i.e., chemicals that transmit or carry messages to nerves). Some of the foods we will discuss are neurostimulating and neurotoxic (i.e., damaging to nerves). It is possible that these foods directly stimulate the nerves that govern blood vessels, forcing dilatation and swelling and provoking food-sensitive patients' discomfort and pain.

Allergic Illnesses: Smooth Muscles

Blood vessels are not the only body tissues involved in allergic illnesses. Muscles called "smooth muscles" also participate. The smooth muscles we are concerned with encircle the digestive tract and the airways of the lung.

I visualize allergy's effect on smooth muscles as the same effect it exerts on blood vessels. Like the vessels, smooth muscles are richly supplied with nerves, and these nerves "drive" smooth muscles like we drive a car. Also like blood vessels, nerve impulses force smooth muscles to spasm or relax. Unlike the vessels, which cause allergic illness by relaxation (swelling), smooth muscles cause pain when they spasm or contract.

Asthma

In looking at asthma earlier, we saw that blood vessel swelling in the lining of the airways constricts the air passages, obstructing the flow of

air and causing the whistling or wheezing sound we hear as the air forces itself out of these narrowed air passages. But we shouldn't limit our discussion to swelling of the lining because that is not the only reason the air passages constrict.

Each air passage is surrounded by layers of muscle, the smooth muscle we are examining, just as the water running to a sprinkler is surrounded by the walls of a hose. Unlike the rigid walls of a hose, the muscle around the air passages is alive and in constant motion. It dilates and contracts to open or to close the numerous branches of the airway, directing the flow of air to different parts of the lung like a traffic officer directs the flow of traffic through a busy intersection.

What if during rush hour, the traffic officer went on strike, closing half of each road leading into the intersection? Pandemonium would result, with angry, snarling drivers trapped in a gridlock. The stream of traffic would be slowed almost to a halt, and it would take forever for the cars to thread their way through the intersection.

Asthma is like that. Things go smoothly when the airway muscle is functioning normally, contracting and relaxing as it calmly directs the flow of air. When the muscle is in spasm during an asthma attack, the airway narrows, restricting the flow of air through the intersections of the lung.

Food allergy is only one of many causes of asthma attacks, but when diet is involved, the most likely reason is nerve malfunction causing swelling and signaling the smooth muscle of the airways to go into spasm. The swelling further causes the muscles to spasm. Dietary discretion can reduce this spasm the same way it controls the blood vessel swelling in the lining of the airway.

Smooth-Muscle Spasm Along the Digestive Tract

When spasm occurs in the stomach, it is referred to as acid stomach or *esophageal reflux* and often leads patients to suspect that they have an ulcer. Those who do have ulcers are especially susceptible to this condition, another example of allergy preying on an already weakened area. The combination of food allergy and ulcer produces a persistent, gnawing pain. Unfortunately, changing the diet will not cure an ulcer, but it can eliminate this aggravating complication.

At the end of the intestine, and surrounded by the same smooth muscle, is the colon, an organ frequently affected by allergy. Here

muscle spasms give rise to the *abdominal cramps and diarrhea* that so often make my patients' lives miserable. Doctors often diagnose these symptoms as spastic colon or irritable bowel. In many cases, food allergy is not suspected; however, changing the diet usually alleviates these cramps and diarrhea.

Allergic Illnesses: Contact Dermatitis

Our trip through the digestive tract ends at the rectum, where an uncommon but miserable effect of food chemicals manifests itself. A small number of allergy-prone adults complain of an intense *rectal itching* that mystifies doctors.

The acid foods seem unusually adept at causing this uncomfortable and embarrassing condition, although other foods also contribute. *Diaper rash* in babies is more common and often is caused by these same offenders. I suspect that as the stool passes through the anus, a high concentration of acid from foods irritates and burns the skin.

We know that this contact reaction occurs at the other end of the body, where patients suffer *scalp rash* marked by itching and sores from using shampoos that contain citrus.

Another form of contact dermatitis that should be mentioned is the oh-so-common *hand dermatitis*, sometimes called housewife's hand dermatitis. Anyone who handles acidic foods is susceptible. Contact with these foods makes hands red, dry, cracked, and very itchy.

Allergic Illnesses: Central Nervous System

The effect of food allergy on the central nervous system—the brain—is perhaps the most difficult subject to discuss because it is surrounded by uncertainty and controversy. Many doctors and laypeople do not accept the idea that food chemicals can impair brain function or be responsible for the many symptoms that patients suffer. They believe that anxiety, depression, and other mood disorders are more likely to be at the root of these symptoms.

I disagree. As we examine our modern diet, I will point out that certain components are known neurotoxins (e.g., aspartic and glutamic acids), and I will give you a theory about how they and other food chemicals can generate allergic disease through injury to nerves. Do we

suddenly reverse our thinking when it comes to the major nerve center of the body, the brain, and say it cannot be affected? I see no reason to do so.

At the same time, I don't want you to think that foods are solely or even primarily responsible for these disorders. Anxiety and psychological instability are often major causes. In other cases they may be contributing factors that potentiate allergy's harm. To illustrate this point, think of food allergy in some people as driving these illnesses like a hammer drives a nail. In other people it seems to play more of a supportive role, like the fingers holding the nail. But whatever the relative contribution of each factor, an allergist's job is to help his or her patients gain relief, and changing the diet often provides some of that relief.

Perhaps the best way I can illustrate the effects of food allergy on mental function is through one of my patient histories. Frequently I see patients who complain of allergic symptoms that are so minor I wonder why my patients came for treatment. When I ask them how they feel in general, the real reason comes tumbling out. They tell me about being tired, irritable, and depressed all the time—just plain feeling crummy and unable to cope with everyday life. Jackie is one of those patients.

Jackie is a woman in her forties who serves as a middle manager in a nationally known company. She had been feeling tired and listless for so long she was worried about her ineffectiveness at work. "I had my doctor check my thyroid because I was sure I was hypothyroid, but the tests were normal. Then I began to think that I was 'wimping out'—that the tiredness was all in my head."

"That's not at all unusual, Jackie," I assured her. "It isn't necessarily all in your head. Many people find that physical factors, such as food allergy, cause these symptoms."

Jackie's symptoms are almost as frequent in my patients as stuffy nose or headache. What's more, patients often hide these symptoms as they would hide a disgraceful family secret. Like Jackie, they are afraid to "wimp out" because they don't want to be thought of as a hypochondriac—a whiner and a complainer. They are not any of these things. Tiredness, irritability, and often hyperactivity and the inability to concentrate frequently accompany food allergy and usually subside with diet changes.

When Jackie returned to my office after her first three months of

treatment, I remember our conversation. I asked, “How are you doing, Jackie?”

“Changing my diet helped much more than I thought it would, Dr. Walsh,” she reported. “I know you asked me to retry the foods I’ve eliminated, but I feel so good, I’m afraid to return to them.

“I’m surprised at how much better I feel. I’m not as tired, and I’ve got a lot more ambition at work. Although I’m not 100 percent better, I have improved so much I no longer think it’s all in my head.”

Then Jackie told me that she made another interesting discovery. “I was talking to one of my coworkers the other day. She told me she sees you, too, and has to follow the same diet. Every time she cheats, she ends up feeling tired and irritable and her work suffers.”

Since then, Jackie finds that her ability to concentrate at work nose-dives when she strays from the diet she should follow, a symptom shared by many of my patients. They have difficulty describing this familiar effect of foods, but many agree that an appropriate label would be “spacey” thinking.

You might think I go too far—that foods we have eaten all our lives can’t possibly affect our mental ability—but don’t be too sure. We are learning that the thought and memory processes that take place in the brain are assisted and influenced by neurotransmitters. Some of the foods we will discuss contain appreciable levels of these neurotransmitters, and you do not need to stretch your imagination far to reason that, in certain susceptible people, they may muddle thinking and turn it “spacey.”

Neurotransmitters are a hot research topic in the study of depression. Since allergy and depression both appear frequently in our modern society, it isn’t surprising that they often coexist in patients.

Food allergy does not cause depression, but the tiredness, irritability, and ineffective thinking that often accompany food allergy can make depression much harder to overcome. Modifying the diet helps to relieve these symptoms. Depressed patients who also suffer from allergy deserve the same allergy care as those who are free of depression.

Other Allergic Illnesses

Although I have described many discomforts and pains of patients, there are still many others I have not included that may affect you.

Describing every possible symptom would make this section too long. Every day patients tell allergists of aches, pains, and discomforts brought on by allergy, many strange and unusual, all a burden. If you suffer from these symptoms, I hope I can help you avoid the foods that cause them.

We have examined the illnesses caused by food allergy. If it causes so many illnesses, you must wonder why it is so difficult to diagnose. Let's explore this topic next as we look at an overview of food allergy and the complications encountered in its diagnosis.

Overview of Food Allergy and Complications in Diagnosing Food Allergy

The ways in which people react to foods vary as much as the ways by which they eat this food. They can gulp the food quickly or eat it leisurely, hastily satisfy their hunger, or enjoy a lazy meal.

As people eat, so can they react to foods. They can react quickly and dramatically and then recover equally rapidly—or become sick slowly and recover sluggishly. This difference in the quickness of reactions to food confuses many food-sensitive people and often hides the food allergy that causes their illness.

Other factors compound this confusion. As the speed of the reaction can vary, so can the number of foods involved—one food or many foods may bring pain and discomfort. The involved foods can be obvious and the patient sure of the cause, or the identity of these foods obscure and the sufferer confused.

For some, symptoms strike when they consume even a minuscule amount of food; others need a comparatively large quantity before experiencing pain and discomfort. On skin testing, the harmful foods may surface, or perversely hide their identity.

With all these confusing factors, you can see why diagnosis can be complicated for these poor food sufferers. Let's try to help you understand these factors by examining the variances I just mentioned, one at a time.

Sudden, Dramatic Food Reactions

For many people, even tiny amounts of such foods as nuts, fish, peanuts, and shellfish can precipitate severe and life-threatening ill-

nesses; because they are quick-striking and dramatic, a person's attention is immediately drawn to the food. The sufferer usually does not have trouble determining the culprit food.

An example of this type of allergy is the person who dines at a nice restaurant, enjoying a delectable meal of shrimp. Suddenly his eyes swell and tears flow, his nasal passages close, his skin erupts with angry red hives, and his air passage swells, threatening to strangle him. The reaction is dramatic, frightening, and dangerous. Obvious cause—shrimp. Obvious response—no more shrimp!

Allergy to a Single Food

As the example of the shrimp reaction shows, the quickness and severity of dangerous food reactions startle the victim and forcibly grab his or her attention. The culprit food is even easier to identify when only one food is responsible. Then the quick-appearing reaction points directly to this food. If you experience diarrhea or hives every time you eat corn or carrots, you know where the problem lies.

Infrequently consumed foods are easier to spot than those eaten more frequently. However, in many cases a commonly consumed food such as wheat, or a beverage such as milk, is at fault. Because the food is eaten at every meal, it's hard to pinpoint because the symptoms continue without letup or return daily. Then, a nonallergic illness such as an inflammation to the intestines or arthritis is suspected and the true cause—food—is ignored.

Allergy to Multiple Foods

As the number of foods causing symptoms multiplies, the difficulty in finding these foods also multiplies. When a person eats or drinks a number of potentially harmful foods at a meal and then suffers symptoms, he or she easily becomes confused.

Although the patient with one food allergy seldom needs help finding the food, the patient with many food allergies often needs help.

Genny, a fifty-five-year-old mother of four and grandmother of three, had been sent to me by her internist after years of struggling unsuccessfully to treat her daily abdominal pains and crippling migraine headaches. Her symptoms began after her second child was born and often made the demanding role of motherhood a dreadful

ordeal. In fact, pain often forced her to take to her bed, even when her children were small and needed supervision. She was miserable.

As I investigated her food allergies I found she suffered from multiple and serious food allergies. When I considered how to treat her, I admit I was discouraged. However, we pursued our usual approach to the patient with multiple food allergies, the approach we will be discussing as we proceed in our exploration of food allergy.

It worked! Genny returned to see me in three months, with both abdominal pain and migraines markedly improved. No days spent in bed. My staff and I were delighted.

There are many people like Genny in our practice, each with his or her own pitiful tale. With each patient I worry whether I can control these truly troublesome multiple-food allergies; with almost all patients I find that the tools of the allergist—combined with the patient's fine cooperation and hard work—bring about a pleasing reduction of miserable symptoms.

Slow-Developing Food Reactions

Now the diagnosis of food allergy becomes even more difficult. We no longer have the guidance of the fast-striking food reaction (i.e., eat shrimp, get immediately sick). To further confuse diagnosis, most of the patients in my practice with slow-developing food allergies react to multiple foods; they suffer all the puzzlement that multiple food allergy brings.

For instance, Linda is a forty-two-year-old printing salesperson who must often entertain her clients at restaurants. She never develops symptoms after dinner, but the next morning she wakes up feeling crummy. Her hands and stomach bloat, and her bathroom scale records extra pounds of fluid; her cramps and diarrhea force her to stay home from the office, or she tries to go to work but suffers a miserable day; she is tired, irritable, and understandably depressed.

Linda came to see me because she couldn't understand why eating out caused such severe symptoms. She is a bright woman, so lack of mental ability didn't prevent her from recognizing the cause of her symptoms. Because it took hours for her suffering to begin, the harmful foods were concealed, they were multiple, and their effects appeared slowly.

Fortunately, we were able to single out the offending foods, and as long as Linda avoids them, she awakens refreshed in the morning.

By now you have some understanding of the roadblocks allergists encounter in diagnosing slow-developing and multiple-food allergies. You might think these are the only factors that slow allergists as we try to solve the mysteries of our patients' miseries. I wish you were right. Another important factor hinders our diagnosis: accumulation, and its role in concealing the foods that cause illness.

Accumulation

Most of us can identify with accumulation in the usual sense of the word. Remember that Thanksgiving dinner when you stuffed yourself until you felt like your stomach would burst? You just plain ate too much! You loosened your belt while berating yourself for eating like a pig. You accumulated too much food, and the accumulated food brought you discomfort because of the sheer bulk in your stomach.

If you have food allergy, accumulation doesn't mean eating an amount of food so massive that your stomach bloats and your belt pinches. It means eating or drinking too much of the foods or beverages you tolerate poorly. Foods or beverages that won't hurt you in small quantities will bring pain and discomfort if you exceed that magic amount your body can handle.

Accumulation does not occur in most of the quick-striking and dangerous food allergies. In these reactions, often only a small amount of food is necessary to bring illness, sometimes only the minuscule amount you breathe when you smell it cooking. This same small amount triggers many single-food allergies and some of the multiple-food allergies. In these cases, accumulation is not a factor; my patients can't tolerate any of the offending food or foods.

However, with most cases of slow-reacting and multiple-food allergies, accumulative-food allergy is important. Because many people suffer slow-reacting and multiple-food allergy, accumulation commonly accompanies food allergy. Many of my patients can tolerate some offending food, but any quantity above this tolerance level leads to misfortune.

Although many quick-striking food reactions are dangerous and even deadly, those associated with accumulation usually aren't. Although

they frequently bring pain and discomfort, they seldom threaten life. Although this relative lack of danger is an advantage, the difficulty in diagnosing these reactions isn't. Unlike quick-striking food reactions, accumulative reactions require a lot of detective work that can be frustrating and perplexing.

The Additive Effect

The additive effect of food allergy further complicates its diagnosis. This additive effect accompanies multiple-food allergies. Eating a small amount of a number of offending foods (additive effect) is the same as eating a large amount of one food. For instance, if too much orange juice makes your stomach cramp, you might think you can solve the problem by drinking only one little glassful a day.

It's not that easy. If you don't realize that strawberries and tomatoes, for example, reinforce the painful effects of orange juice, and you consume some of those foods in addition to a little orange juice, your stomach will continue cramping and you will continue aching, discouraged because you feel you missed the diagnosis.

Don't give up; there may be a number of foods, acting in combination, causing your stomach ache. If you find one of them (e.g., orange juice), don't stop thinking and investigating. Look for brother and sister foods that add to the distressing cramping caused by orange juice. Eating less of all these foods should calm your stomach.

Accumulation and Addition and the Onset of Symptoms

How soon after a meal will symptoms strike? How long does it take to fill a bucket? The answers are the same. If the bucket is empty, it may take a long time to fill it. If it is full, it may slop over if you add a single drop of water. Managing accumulative food allergy is the same as adding no more to the bucket than the amount withdrawn daily.

If you suffer from food allergy and eat an offending food, it may take hours or up to a day or more for illness to strike—or you may not even get sick—if you haven't eaten other offending foods lately. In this case, you don't have enough of these foods accumulated in your body to cause symptoms. You would not be adding more to your bucket than what it holds.

However, if you ate enough of these foods lately, you would be like that full bucket that can't hold even a tiny bit more water—you could react quickly. That's why many people find that the time from eating to onset of symptoms varies. It can range from minutes to hours to days, a variation that can confuse you.

Time of onset also varies depending on the amount consumed. A little bit may be okay—no symptoms. A larger amount may cause a mild reaction the next day. A meal featuring lots of an aggravating food forces early and severe discomfort. Even more variability and more confusion.

I am reminded of Mike's case of migraine headaches. Mike owned a local franchise of a major restaurant chain, so his attention was naturally directed to foods as a possible cause for his migraines. But Mike was confused. Sometimes he was sure certain foods caused the migraines; the pain struck right after he ate them. Sometimes he was sure they didn't; he ate them without experiencing pain or the headache appeared the next day. When his neurologist couldn't explain these odd circumstances, he sent Mike to see me.

The answer lay in his story. Mike was affected by multiple foods, his symptoms appeared only after he had accumulated enough to have a headache, the foods were additive in their effects, and all of this brought variability to the time of onset of his headache pain.

When we identified the group of foods that caused his migraines and explained why he experienced variability in his symptoms, Mike was able to avoid food-caused migraine headaches. As long as he doesn't cheat on his diet (as he does at times), food doesn't give him headaches.

Craving: A Factor without Explanation

Another factor that interferes with the diagnosis of food allergy is craving. It seems ironic that many humans crave the foods that harm them. Food craving often blocks a patient from accepting an allergist's advice on which foods to avoid.

I suspect that the craving factor is operating when a patient tells his or her allergist, "I can't believe these foods cause me any problems." Or, "That can't be right. These foods don't bother me." These are characteristic responses from patients with food cravings who don't want to even consider the possibility that the foods they love cause their discomfort.

You might wonder why I believe that this is a form of denial in certain patients. The answer is simple. After they admit that these foods really harm them—typically about three years later—they also admit that their food cravings made them reject our advice. (I don't know why it so often takes three years, but it does.)

Past and Present Training and Conditioning

Another factor interfering with the diagnosis of food allergy is past and present training and conditioning. We are conditioned to believe that certain foods are healthy; we are persuaded that we must eat them every day because they are essential; we are convinced that without them our diets are unhealthy. Mama told us, teacher told us, and now dietitians and other health experts tell us that we must eat these foods. Unfortunately, for those who suffer allergy, Mama, teacher, and dietitians were and are mistaken.

Even though we know they are mistaken, it is hard for us to discard this well-intentioned advice. Each of the foods and food chemicals we will discuss in this book are defended vociferously by acknowledged experts in food science who honestly believe they are safe. Some of these foods are regarded as essential to a healthy diet. Many scientific studies confirm the conclusions of these experts. Unfortunately, some patients' reactions to these foods deny their value and safety.

This lifelong conditioning is the reason why so many folks with allergies continue to consume the foods and beverages that cause distress: "After all," they tell themselves, "orange juice has a lot of vitamin C." This conditioning is also the reason why so many medical professionals are unaware of the illness or illnesses that certain foods can cause some patients with allergies: "Can't be milk. It's such an important source of calcium." And it's also the reason a patient often resists an allergist's advice: "Can't be wheat. Mother always said bread was the staff of life."

Prior and present conditioning definitely complicate the diagnosis and treatment of food allergy. So many people find it ridiculous even to suspect that the glassful of orange juice clutched in their fist packs not only vitamins but also a lot of misery. Persuading them otherwise is often quite a job.

It's Not Hopeless

With this lengthy discussion of the complexity of food allergy, you may think I am telling you that diagnosis is hopeless. I am not. You can learn to diagnose your own food allergy.

Speaking as an allergist, I admit that I could easily fail to diagnose or help food-sensitive patients, but in most cases I succeed because food allergy has one helpful trait. Each food (or group of foods) tends to cause characteristic symptoms; not all the time, but enough times to help identify the food. After years of diagnosing and treating food allergy, a doctor can use this tendency to help his or her patients. I hope this book will help you learn these characteristic reactions so you can use that knowledge.

Another factor making the diagnosis and treatment of food allergy possible is that certain foods, beverages, and food chemicals are the worst offenders. If you know them, this knowledge will guide you to discovering their role in your illness. When you look for them, you will find the food allergies we already discussed: they may involve multiple foods, be accumulative or additive, their symptoms may be variable in time of onset, or patients may often crave them.

Once a person with symptoms recognizes and determines his or her tolerance for these foods, a lot of the mystery surrounding food allergy disappears.

How Allergy Starts

In the next few sections we will discuss thoughts and principles that will guide you as you look for signs of food allergy in your own symptoms. They are the same thoughts and principles that I teach medical care professionals who visit my office.

For many years these doctors and other medical care providers have joined me in my office to learn how to treat allergic patients. I welcome them and enjoy their visits. Seeing the dawn of understanding light up their faces as they start to understand the terrible burden imposed on patients by allergy is a great reward. I know that the knowledge I give them will help these professionals more effectively treat their own patients, will guide them to the path improving their patient's health. Their understanding of allergy is one of the most rewarding aspects of my practice.

We will begin our exploration of food allergy in the same way I begin teaching the medical care professionals who visit me in my office. Before seeing patients, we find a quiet room and review some general principles I use to diagnose and treat food allergy.

We will start with my first and most important principle: *You cannot treat your allergy if you do not suspect it*

You're probably thinking, "Gee, that seems obvious—and wouldn't it be true of any illness?"

But allergy isn't like any other illness. In many cases it lacks its own clear-cut set of symptoms and, instead, mimics those of other illnesses. That's why it is important for you to take this principle to heart. If you fail to suspect allergy as a possible cause of the symptoms you suffer, you will not seek allergy care, nor will you find and eliminate the foods and environmental conditions that make you ill. Suspecting allergy is your first step on the road to good health.

This first step is not an obvious one for many people. For you it may be obvious—your suspicion of allergy caused you to read this book. But think back to how your allergy symptoms started. They might have crept quietly into your life like a silent predator, to steal your comfort and replace it with pain and discomfort. Like a pickpocket stealing your wallet, it tried to avoid getting caught. Often it hides under a cloak of confusion, making it difficult for you to suspect it. Perhaps the best example of this confusion is the sneaky way it often starts.

Allergy Often Starts like a Cold

Allergy often starts like a simple, virus-caused cold. Prior to its onset you feel fine—no sneezing, wheezing, or itching. But one day you begin to notice those old, familiar symptoms of a cold. Your spirits droop, you cough, your chest feels tight, and your head aches. Then your nose begins to drip, your head totally stuffs up, and that tickle in your throat turns into a raspy cough. Once again you have fallen victim to the common cold virus. Having survived many colds, you know just what to do. Take it easy, drink plenty of liquids, get lots of rest, and wait for the cold to slip quietly out of your life.

However, this time it's different. Instead of clearing up in a few days, your symptoms go on and on. Week after week, month after month, the symptoms wax and wane. At times you feel a little better; at other

times your nose is so stuffy and your head so painful that routine tasks become a chore. Your doctor treats you for a sinus infection, but the sinus pains return soon after you finish the antibiotic. Your “cold” won’t leave, and you don’t know why.

Patty and Michelle serve as good examples of allergy following on the heels of a cold. Patty’s mom, a local physician, called me about her daughter. She was suffering with huge red hives that started on her arms and spread to cover her entire body; they itched so much that at night she tossed and turned, sleeping only fitfully.

She told me that Patty was not eating shrimp, peanuts, or other hive-causing foods when the hives began. Although she was not eating them when the hives started, she must now avoid them—they seem to make her hives worse. This is surprising—Patty had never reacted to them in the past. The most likely explanation is that a virus infection like the common cold caused the hives; they first appeared while she was recovering from a cold that had made the rounds of the family. As the virus departed, it left the hives behind. Now that the hives are present, she must identify and avoid the foods that make the hives flare up.

Michelle’s story is similar. Ever since she suffered a severe viral cold, with pneumonia, Michelle has wheezed. Wheezing showing up after a virus-caused cold is common among my patients with asthma and shows the ability of a virus to initiate asthma. Now that the asthma is present, Michelle must avoid foods and environmental exposures that make her wheeze. Combining Michelle’s story with the large number of patients whose hives started after a cold leaves little doubt that viruses often are the keys that unlock allergic illness.

Too Much Musty Air Can Trigger Allergy

Allergy symptoms may also start for reasons that are unrelated to virus infections. For example, although most of us know that pollen triggers allergy, few realize that other environmental factors do the same. A home with too many house dust mites and too much mold, yeast, and algae can start allergy symptoms.

For instance, Becky and Jim came into my office for evaluation. Becky was suffering from frequent and painful headaches, and Jim complained of nasal stuffiness. Their symptoms started soon after they

moved into their current home. Even though this home is on a hill, which should ensure that rainwater drains safely away from the foundation, the basement still leaks water with each rain. It smells musty and must be moldy—a good reason why both Becky and Jim are miserable.

Another example of the environment's role in initiating allergy is Jeanine's daughter, Kris. Every day at school she suffers migraine headaches and often spends more than an hour in the nurse's office. A number of teachers from that school also are my patients—suffering the same headaches as their students. Unfortunately, they can't afford to spend an hour in the nurse's office every day.

Many other examples come readily to mind, including that of Mary, whose cough started after steam-cleaning her carpets (introducing mold with the water?) or that of Pat, whose stuffy nose started after remodeling his daughter's old house (was the wood he was sawing moldy?). If Becky, Jim, Jeanine, Mary, or Pat had not recognized school, work, or home as the source of illness, they would not have suspected allergy.

Allergy Can Start for No Known Reason

Perhaps one day you feel stomach cramps and notice that your stools are loose. At first you suspect that you've caught a stomach flu, but instead of disappearing in a day or two, your cramps and diarrhea return again and again. When your symptoms start, you wonder if you have fallen prey to some foodborne bacteria. When your symptoms continue, you start suspecting allergy.

On the other hand, allergy may begin with a bout of sneezing and an itchy nose. Your nose has never bothered you quite this way before, but it feels uncomfortable now. You chalk up your discomfort to a mild cold or sinus infection and decide not to worry. It should go away by tomorrow. But it doesn't go away tomorrow, the next day, or the next week; you start suspecting allergy.

No matter how your allergic symptoms start, they confuse you because they do not seem to have a specific cause. Why won't your cold go away? Why does your stomach ache, your head hurt, or your skin itch? You've never suffered from allergy to anything in your life, so why should you suspect allergy now, especially at your age?

Unfortunately, although you are confused by allergy starting in such a bewildering way, and at an age you do not expect, your allergy may be causing your symptoms. You cannot seek proper care until you realize that fact.

To further confuse the issue, allergy attacks many different parts of your body. Is it possible that allergy can make your stomach hurt, your skin itch, your joints ache, and your sleep fitful, all at the same time? Aren't these totally different symptoms caused by totally different illnesses? You haven't changed anything in your house or eaten any new foods, so how can allergy bother you?

If I am to succeed at teaching you to treat your own food allergies, you should know that multiple symptoms are possible. Only then can you strip away the confusion that hides allergy—the true cause of your symptoms.

Two mistaken beliefs are major roadblocks to suspecting allergy. I will discuss them next, so they do not interfere with your ability to suspect that allergy causes your pain and discomfort.

Age and Diet: Factors in Food Allergy

My patients often ask me two questions:

1. "I didn't have allergy before. Why should it bother me now?"
2. "I haven't changed my diet. How could I be allergic to certain foods?"

These questions tell me that my patients had a mistaken view of allergy that prevented them from discovering that it caused their symptoms, needlessly prolonging the time when they finally suspected it and acted on its presence. To prevent you from holding these same mistaken views, I will answer these questions. I will use information that allergists believe to be true and other information that is somewhat speculative but probably true. I will present the proven and speculative information together to help you see allergy as I see it, to assist you in your thinking, and to guide you in your battle against this thief of wellness.

The Age Factor

“I didn’t have allergy before. Why should it bother me now?”

It may surprise you that allergy can start at one or at eighty years of age. There is no specific age of onset. Actually, your allergy did not start at one or eighty years of age; your *symptoms* started then. Your allergies were with you when you were born.

Allergy nested in the genes that determine who you are when you emerged from the womb. Your proud mom and pop held a healthy baby but a baby ready, when the right moment arrived, to sneeze, wheeze, or itch. When your symptoms started, at one or eighty or anywhere between—that was the right moment.

You did not sneeze, wheeze, or itch in the delivery room because your guardian immune system kept allergy locked inside you. Later in life, when your immune system weakened and could no longer hold your allergy in restraint, your symptoms started.

What weakened your immune system? My experience with patients convinces me that two events we have already discussed weaken your immune system: a virus, or an overwhelming allergy exposure. If we review them now and discuss their effect on the immune system, you will see that age and lack of prior allergic symptoms do not rule out allergy as a cause of your symptoms.

Viruses Weaken Your Immune System

Virus infections can profoundly weaken your immune system. A good example of this weakening occurs in people infected by the AIDS virus. This virus weakens and destroys the lymphocytes of the immune system, the same lymphocytes that protect against infection. I use the AIDS virus as an example of viruses’ potent effect on immunity, not to imply that the viruses that set off allergy have that devastating an effect on the immune system. They do not.

Most viruses do not affect the immune system at all, or weaken it only temporarily. The viruses that start allergy belong to this later, less potent group. They only temporarily weaken the immune system. Unfortunately, “temporarily” can last a long time—weeks to years—before the immune system recovers the strength to overpower allergy, return it to its shackles, and end your symptoms.

Environmental Exposure Also Weakens Your Immune System

Your allergies may start because you lived or worked too long in air contaminated by high levels of dust mite or mold, yeast, and algae. I hear about these exposures frequently in my patients' stories.

Many of my patients lived comfortable lives until they moved into a musty home and stayed too long—or studied for too many years in a musty school or worked too long in a musty building. Under a continuing barrage of house dust mite, mold, yeast, and algae, their immune systems eventually crumbled and allergy escaped. Pain and discomfort followed.

This tie between mustiness and sickness surprises many patients. “But Dr. Walsh, I lived there (or worked or studied there) for three years before my symptoms started.”

My reply: “Yes, you did live comfortably for three years, but the air quality was poor, forcing your immune system to carry too heavy a load. Finally, exhausted from fighting too much mustiness too hard for too long, it failed.”

Viruses Can Combine with Environmental Exposures

As I listen to my patients tell me about how their allergies began, I hear a recurrent theme—that both environment and virus can join forces to start allergy symptoms.

My patients tell me about living in a musty environment without trouble until they became sick from a cold or other virus infection. Then, headaches, rashes, joint pain, tiredness, and other symptoms of allergy started. In reviewing these stories, I often think that the most potent stimulus to allergy is not virus or exposure but virus *and* exposure.

Allergy Can Start at Birth

If viruses and prolonged harmful environmental exposures cause allergy, does this mean that babies cannot be allergic? After all, their life in the womb shelters them from mite, mold, and pollen, and their mothers' antibodies help them defeat viruses.

I'm afraid the answer to this question is yes, babies can suffer allergies. Sally's story of her son John's stuffiness is typical of many stories. “John was born with a stuffy nose.” Allergy truly respects no age, even the tender newborn baby.

Whether weakened by a virus, by prolonged exposure to great mustiness or both, your allergy escaped its immune prison. It now delights in bringing you pain and discomfort. No matter if you are one, twenty, or sixty years of age, the milk, shrimp, or peanuts that you enjoyed without harm yesterday can trouble you today. When you wonder why, remember our first principle and its extension:

Suspect allergy; you cannot treat your allergy if you do not suspect it. Do not think that your age protects you from this bully. It doesn't.

The Diet Factor

"I haven't changed my diet. How could I be allergic to certain foods?"

Now that you have learned to suspect allergy, you wonder if one or more foods may cause your symptoms. They may. To identify them, you might be tempted to concentrate your attention on foods new to your diet. You may be right; new foods cause many allergies. However, if you only pay attention to new foods, you may be making a mistake that seriously interferes with your suspecting allergy. You may find that no new food causes your symptoms and dismiss the thought of allergy.

You could be overlooking the real culprits, foods you have eaten for years. Although we think of these foods as old friends, they may not be friendly at all. As old friends can turn to bitter enemies, so trusted foods can suddenly start to trouble you. Although your diet includes only foods that you have eaten without trouble for years, you may still be food-sensitive—to these same foods in which you invest so much trust.

Why You Now React to Foods You Have Eaten for Years

Yesterday you drank milk and ate wheat, tomatoes, or corn without trouble. However, yesterday is not today, and as the date on the calendar changed, you also changed. You are not the person you were yesterday. When you last ate these foods, you reacted not at all. Today you do react.

In the past your immune system protected you from food allergy—foods could not harm you. Now your immune system no longer protects you from this allergy and you no longer tolerate the foods you ate safely in the past.

Therefore, don't be confused if you fail to identify a new food as the

cause of your symptoms. Start suspecting foods that you have eaten without trouble for years.

This leads us to another principle of allergy diagnosis and treatment: *You can be allergic to any food, even foods you have tolerated for years.*

Now that we have laid the foundation for understanding food allergy, we can start to build on this foundation in our quest to understand this allergy. To do this we need to answer a question: Is there only one type of food allergy?

Two Food Allergies

It seems obvious that there is only one program for food allergy. Why should there be two? Two types of food allergy would needlessly complicate the diagnosis and treatment of people who suffer pain and discomfort from foods. It would also lead to confusion and misunderstanding in scientific studies of food allergy if the investigators did not account for both types of food allergy in their studies.

You guessed it—there are two types of food allergy, and they do lead to confusion. Sometimes when you think you suffer from one type of food allergy, you are really being affected by the other. On the other hand, you can suffer from both types at the same time, like a computer programmed to run two different operations at the same time.

Our Programming

Our allergy programming is strange, I admit. That two simultaneous food allergies exist is little appreciated but extremely important in understanding food allergy. The biggest error I see in the reports about food allergy, whether on radio, TV, or in scientific papers, is the failure to appreciate that two types of food allergy cause our symptoms.

Let's make sure you know about the two types of food allergy. To do this, we will first review the symptoms they cause so that we can relate these symptoms to the types of food allergy causing them. We will focus our discussion on:

- ◇ the symptoms caused by food allergy;
- ◇ the two separate types of food allergies that cause these symptoms.

The Food Symptoms

Food Allergy Symptoms Appear Quickly or Slowly

We will start by looking at the illnesses food allergies cause, called symptoms. In the section “Overview of Food Allergy and Complications in Diagnosing Food Allergy” above, I described how allergists separate the symptoms of food allergy into two categories: those that appear quickly after eating a food, and those that appear hours later. It is appropriate to review them here.

The quick-appearing symptoms strike within minutes after eating, so we call them “immediate food symptoms.” The slow-developing symptoms take hours to appear. They are also appropriately named: “delayed food symptoms.” Slowly developing and rapidly developing symptoms sometimes act both similarly and differently.

Rapidly Developing Food Symptoms

If your symptoms appear soon after you eat, you may react like a bee-sensitive person stung by a bee. You may feel mildly annoying symptoms (a little hive, a stuffy nose), or you may be threatened by startling and dangerous symptoms (shock or choking).

Any food can cause immediate food symptoms, including common foods such as milk, wheat, and corn. These common foods seldom cause the dangerous symptoms that threaten your life; other foods, less commonly eaten, do.

Delayed Food Symptoms

Whereas immediate food symptoms act like a bee sting, delayed symptoms act more like influenza. You may suffer painful headaches or abdominal cramps, or you may be overwhelmed by tiredness that saps your energy and confuses your thinking. It may seem as though these flulike symptoms will never stop.

These flulike symptoms are not specific to food allergy. Fibromyalgia causes them; also tension, chronic fatigue syndrome, a cold, or many other illnesses can make you feel as if you have the flu. Because these symptoms are not specific to any illness (unlike the more flamboyant symptoms that proclaim the quick-striking form of food allergy), they confuse the diagnosis, making it harder for you to think of food allergy.

Not only is it difficult to recognize that these ill-defined symptoms are caused by food allergy, it is even more difficult to determine which food to blame. As a result, authors of articles about food allergy tend to cover delayed symptoms poorly and to pay more attention to the easily described and more flamboyant immediate symptoms.

If your knowledge about food allergy depends on such articles, you may be impressed by immediate symptoms and not impressed by delayed reactions. You might even think that few people suffer delayed symptoms and that their symptoms are mild. This is not so; many suffer, and their suffering is great.

We see patient after patient suffering from delayed symptoms to food. Most missed the link between symptoms and food because they thought that food symptoms always strike quickly after eating. It is only when I tell them about delayed symptoms that they start suspecting food allergy.

The Two Types of Food Allergy

If people reacted to foods in only one way—either immediately or delayed—food allergy would be so much easier to understand. Moreover, if only one type of food allergy caused these symptoms, our understanding would be further simplified. However, this is not the case. Food symptoms are caused by two separate food allergies that target two different food components:

1. Type one targets the chemicals in foods.
2. Type two targets the proteins in foods.

Allergy Directed Against the Chemicals in Foods

This is the food allergy I see most frequently in my patients. These foods contain high quantities of the following food chemicals:

Monosodium glutamate

Acidic foods

Low-calorie sweeteners

Refined Sugar

I use the resulting acronym—MALS—throughout this book to indicate foods containing high quantities of these food chemicals.

The chemicals in our diet. We all like to eat flavorful foods; we load our desserts and candy with refined sugar and our drinks with citrus. We enhance the flavor of our meals with monosodium glutamate (MSG) and enjoy a sweet taste that contributes few calories to our diets—low-calorie sweeteners. Even worse, we consume these chemicals meal after meal, far exceeding our tolerance.

Many of my patients find that when they consume large quantities of these flavor-enhancing chemicals, their head and stomach pains flare. Their throats ache, their noses plug, and their stomachs cramp as they consume their food, so flavorful, sweet, and acidic.

Immediate and delayed symptoms to food chemicals. Symptoms caused by the food chemicals can also appear hours later—and frequently do. For instance, a pizza flavored with MSG at night may provoke a migraine headache the next day (delayed reaction). Alternatively, symptoms may strike quickly after a meal (immediate reaction) if the meal contains so much citrus, sugar, MSG, or low-calorie sweetener that it “overloads” tolerance. Symptoms also strike quickly if previous meals contained such quantities of these chemicals that the present meal, adding its chemicals to the amount in the body, causes a tolerance overload.

Use of the term MALS, which I introduced above, does not imply that the food chemicals listed there are in any way defective or harmful to the nonsensitive person. Each chemical is valuable, produced by competent manufacturers, and useful for people who do not suffer ill effects from them. The “mal” (which in English means undesirable) in MALS applies only to the regrettable symptoms that affect food chemical-sensitive patients.

The name unites four seemingly separate chemicals—monosodium glutamate, acidic foods, low-calorie sweeteners, and refined sugar—into an organized group. These chemicals combine to provoke symptoms. If you eat an MSG-flavored sausage followed by five sugar cookies, your headache came not from MSG or refined sugar individually but from both together. One sensitive person may react most strongly to one of the four chemicals, another person to another chemical. However, even though you must avoid the chemical that bothers you the most, do not focus all your attention on this chemical and ignore the contributions of the other chemicals.

The concept of the food-chemical or MALS food allergy is important to your understanding of food allergy. Among my patients, it is the

most important, frequently encountered, and misunderstood of the two food allergies. My patients find that understanding it and eliminating or reducing their consumption of the foods containing high levels of these chemicals relieves many of their symptoms. If you understand it, you will have taken a great step in learning to treat yourself.

Allergy Directed Against the Proteins in Foods

The second type of food allergy is targeted against the proteins in foods.

In company with carbohydrates and fat, all foods contain protein. Among their many uses, they form the backbone of cell walls, enable enzymes to digest food, and transport oxygen around the body.

Certain antibodies that cause allergy act on these proteins. The best known is the IgE antibodies that provoke immediate reactions. They are the same antibodies that direct their actions against proteins in dust, mold, and pollen, and they also find food proteins easy targets.

Certain food proteins more readily draw their attention; for instance, certain proteins of peanut and shrimp strongly attract the IgE antibodies that cause quick-onset choking or hives (a fact unattractive to people suffering from these dangerous reactions).

Just as foods contain protein that can unleash immediate symptoms, they also contain proteins that set off delayed food symptoms. In susceptible people, the milk, wheat, corn, and other food proteins that trip off quick-appearing hives or diarrhea while eating also prompt headaches and abdominal pain that appear the following morning.

I will use the term “classic food allergies” to refer to food-protein allergies in this book.

The Relative Importance of Immediate Versus Delayed Allergy to Food

With its scary and sometimes dangerous symptoms, who can doubt the importance of immediate food symptoms directed against food proteins or food chemicals? In contrast, the consequences of delayed symptoms are uncomfortable but not as dangerous.

Immediate symptoms almost always appear every time an allergic patient eats the offending food. Not so with delayed symptoms. Delayed symptoms do not always follow eating the culprit food.

Certain factors are necessary before they appear, and we discussed them in the section “Overview of Food Allergy and Complications in Diagnosing Food Allergy” above. The factors apply to both food *protein* and food *chemical* allergy. For instance, in both types of food allergy a provoking food might be eaten at a number of meals before the sensitive person eats more of the food than he or she can tolerate.

Once a patient starts noticing this delayed pattern, he or she learns to avoid the consequences of eating the food by avoiding eating the same foods daily. The patient also learns to avoid consuming the *amount* of these foods necessary to activate the symptoms. Even when the patient eats an allergy-causing food daily, he or she typically limits consumption to the amount he or she *tolerates*.

If you can determine which foods cause your delayed symptoms, you can learn to use these same procedures to prevent suffering.

Milk is a food many milk-allergic people drink daily but in moderation. Their milk protein allergy shows up on our skin tests, a result greeted with surprise and often disbelief.

When I question patients about the amount of milk in their diet, their answers show that they perhaps subconsciously have learned to restrict their milk intake to the amount they tolerate. Thus they avoid the stuffiness, abdominal pain, or other symptoms of delayed milk allergy, symptoms they would suffer if they consumed milk without restraint.

I realize that you may be confused by these two types of food allergy. Why should you need to absorb all this complicated information? Can it help you understand your food allergy? The answer to both questions is: *If you are unable to separate these two kinds of food allergy in your mind, you will never understand food allergy.* Mary’s and Dominic’s experiences illustrate this point.

When I question Mary about her food allergy, she states, “Yes, I need to avoid certain foods. If I eat garlic, onions, or eggs, hours later I develop a very painful migraine headache and my stomach hurts. I’ve learned to avoid them.”

Patty’s replies to my questions about her son Dominic’s food reactions are as follows: “I have to keep chocolate and cheese out of Dominic’s diet. If he eats either, he develops severe diarrhea. They also cause terribly painful headaches. And tomatoes and potatoes stuff up his nose.”

I then asked, “What about MSG, Patty?”

She replied, “He can’t take any MSG. If he does, his face breaks out in a rash that looks like broken blood vessels in his skin.”

Mary’s allergy to garlic, onions, and eggs is not directed against the food chemicals we have already discussed. It is directed against the protein in these foods. How do we know that they are not directed against their content of food chemicals? Because these foods do not contain excess quantities of acid, sugar, MSG, or low-calorie sweeteners.

In contrast, the foods Dominic must avoid do contain these chemicals: citrus (tomato and potato) and MSG (cheese and tomatoes are naturally high in MSG, and he reacts to MSG used as a flavoring). I’m not sure why he reacts to chocolate; it is such a complex food that several mechanisms may be operating.

In our advice to Mary, we do not need to tell her to avoid foods with high levels of food chemicals—she does not react to them. However, we must tell Dominic to avoid foods with these high levels because he does react to them. These stories show that the correct approach to food allergy treatment depends on whether a person is allergic to food protein, to food chemicals, or to both.

We will begin our study of these food chemicals by following the road I took to discovering their importance. We will focus on these extremely important foods and beverages in the first five sections of chapter 2, examining them one at a time.

