CHAPTER TWO

Understanding and Treating Arthritic Conditions



With advancing age, most of us will experience some degree of manageable arthritic pain in some part of our body. However, there are those like my colleague Gary Null,

Ph.D., who believe and promote that even this is a matter of choice, and that much of arthritis can be avoided with proper measures, such as those outlined in this book. When arthritis becomes a degenerative condition, however, treating only the symptoms rather than the causes can totally alter the quality of one's life.

Sonia, a 75-year-old widow and grandmother, came to us in a wheelchair. She had a degenerative disc disease that was affecting her ability to walk. She was taking numerous medications, including painkillers and drugs for diabetes and high blood pressure. She had seen a neurologist, an endocrinologist, and an orthopedist. But no one and nothing seemed to improve her condition. The first thing I noticed from her blood tests was that she was seriously deficient in B12 and B6 vitamins. Immediately, we put her on vitamin supplements and changed her diet radically from the fatty, meat-centered diet she typically ate to a nutrition-rich Mediterranean-type regimen. She also began chiropractic treatments once a week, followed by acupuncture sessions, and physical therapy exercises that she could do at home.

Little by little, Sonia's condition improved. After one month, she no longer needed a wheelchair, just a cane for walking support. She began sleeping better, her pain diminished significantly, and her coordination and mobility continued to improve. After two months, she was walking without the cane and had dispensed with the pharmaceutical drugs, taking only Tylenol for the occasional pain flare-ups. By the third month of treatment, her vitality had returned and she was taking overseas trips.

CONVENTIONAL TREATMENT AND ITS LIMITATIONS

Millions of people suffer from pain, arthritis, bulging discs, injury, or from all four. The standard medical treatment has simply been to prescribe medication to reduce the symptoms, such as anti-inflammatories (Advil, Aleve, ibuprofen, naproxen, Celebrex, Vioxx, Bextra, Indocin, etc.), muscle relaxants (Soma, Skelaxin, Parafon, Valium, etc.), and pain medications (Tylenol, Darvocet, Lorcet, Codeine, Percocet, etc.). These pills just supply a "mask of relief." Because the sources of the problem – cell damage and tissue degeneration – are not being treated, the damage worsens.

As the joint or part of the body deteriorates, more medications are needed, and new prescriptions are given. Increase the white pill from twice a day to four times a day, the red tablets from two to three times a day, and so on. Very often, the doctor dismisses the patient with a pat on the back and one or two prescriptions, saying "Tll see you in a month." Soon the patient is taking three or four different medications. As he or she continues to complain, more professionals become involved in care, including perhaps a rheumatologist, an orthopedic surgeon, a neurologist, a pain clinic specialist, and sometimes even a psychiatrist. Injections and steroids will follow sooner or later. Sleep or the digestive system may be affected, so an appointment with a sleep clinic or gastroenterologist may be the next step. Lab tests and X-rays will be done as well. As the condition fails to improve, and as pain persists, patients become overwhelmed with medical appointments and pills. They lose their independence, become slaves to their condition, and find themselves trapped in the maze of the medical system.

Pain relief is important, of course. But the failure to treat the cause means that the painful condition will progress. In the end, surgery appears to be the only possible solution. However, even if the surgery is successful, the deterioration of the tissues may have progressed so far that pain and disability persist and the freedom the patient seeks remains beyond reach.

If you could look back and see the evolution of your suffering joint, or of the joint of your spouse, parents, or relatives, you would observe something like a slow motion picture of progressive degeneration. This very slow deterioration will have been years in the forming, with the joint tissues slowly but surely affected by the process we describe in this chapter.

As you read this, ask yourself: "Why has the doctor just kept giving me pills and pain killers and done so little to actually improve the joint all those years?" And, "Why was an orthopedic doctor consulted so many times while he just kept switching pills and giving those cortisone shots, to no avail?" Or, "Why have none of these highly trained specialists ever told me to try something unconventional or pursue an alternative course to prevent the joints from wasting away like this?"

Here are two even more interesting questions: "What could have been done three or four years before that joint deteriorated so badly to stop its degenerative wasting?" I want you to remember this question, and the second: "What can be done today so that in one or two years the problem joint will cease being a problem?" I'll tell you what can be done: First, understand the process of arthritis, injury, and pain. Look for the answer in this book and perhaps in one or two additional books found in the bibliography at the end of this volume or mentioned on our website. Then accept that conventional medicine alone is not enough to take care of these problems. Be receptive to alternative medicine options. Then develop an active attitude and assume responsibility for being the caretaker of your joints.

As a starting point, we are going to explain the process of arthritis.

WHAT IS ARTHRITIS?

Arthritis, properly called osteoarthritis, is a degenerative joint disease marked by the breakdown of the cartilage in the joints. This breakdown of cartilage leads to swelling, stiffness, and pain. It usually affects the surrounding tissues of the joint, involving muscle, tendons, and ligaments. As the disease progresses, the cartilage thins and ulcerates (forming small tears or holes), abnormal calcifications occur, spurs grow, and the function of the joint declines. As joint movement becomes increasingly restricted, stiffness, pain, and swelling worsen. Finally, the joint becomes crippled and disabled.

The term "arthritis" is used generally to mean a painful swelling in a joint, without indicating any particular cause. Indeed, the term covers a large group of conditions of different types, which include back pain, hip pain, neck pain, rheumatoid arthritis, bursitis, injured joints, ligament injuries, metabolic joint diseases, and many other joint conditions.

Let's clarify this: If your elbow is hurting and you call it arthritis, then yes, it may be osteoarthritis, but it may also be tendonitis, bursitis, ligament sprain, rheumatoid arthritis, or the inflammatory manifestation of a general disease. Osteoarthritis is just one of the many painful conditions that can affect the elbow.

Similarly, a painful knee may or may not be due to osteoarthritis. Numerous conditions such as ligament or tendon injuries, gout, and even infections can cause the knee joint to swell and hurt, but they are not osteoarthritis. We use the term arthritis as a general way of saying that a particular joint is sick. But if we want to establish a classification that will help with management and treatment, we need to determine the type of condition we are facing.

Classification

For proper treatment, arthritis needs to be separated into two main groups: Group A, the arthritic conditions caused by a local injury, and Group B, the arthritic conditions caused by a general (whole-body) disease. Since this division determines the type of treatment, it is extremely important to understand it.

In **Group A**, local causes such as injuries, usage, posture, sprains, trauma, etc., cause localized pain, heat, and swelling, which in turn causes inflammation of the ligament, tendons, muscles, and joints, and degeneration in knees, neck, fingers, wrists, shoulders, hips, and spine. **These conditions are the focus of this book**, and they need to be separated from those in Group B.

Group B includes the joint conditions caused by the effects of a general disease, such as rheumatoid arthritis, lupus, vasculitis, psoriasis, and immune or metabolic disorders. In these disorders, the joint pain is just one of the general body manifestations of a whole-body disease.

Hence, when confronting an achy joint, unless the cause of the ache is very clear, the first step in management is to decide whether the condition is in the A or in the B group – whether the cause is local or general. This decision can be made only through evaluation and an examination by a physician who may also order X-rays and lab tests. Many people do not like to go to doctors – or they do not trust them (and even though I am a doctor I understand this) – but there is just no other way to accomplish a proper diagnosis.

Most general diseases show abnormal laboratory results that help in the identification. Many also show specific radiological findings that will aid in the diagnosis. If medical evaluation shows that a problem joint is related to a general disease (Group B), as described above, the patient needs to be seen by a medical specialist without delay. General diseases such as lupus, rheumatoid arthritis, metabolic diseases, and infectious joint disease require complex medical treatment. However, the effects of these diseases can be significantly reduced – and even potentially eliminated – by implementing the many lifestyle suggestions in this book, so please read on.

In this chapter, we will be addressing the arthritis conditions due to local causes – Group A – which are by far the most frequent. Nevertheless, this initial classification of Group A or B is critical. A painful joint should always be evaluated by a qualified physician. Once this step is taken, and Group B arthritis has been ruled out, then adequate treatment can be initiated to deal with the sick joint.

Group A: Local causes of arthritis

- Bursitis
- · Cartilage or meniscus injury, or inflammation
- Degenerative joint disease (osteoarthritis)
- Infectious arthritis (bacteria, fungus, virus)
- Tendonitis
- Tenosynovitis
- Trauma

Group B: Systemic diseases that cause arthritis

- Cancer
- Connective tissue diseases
- · Endocrine disease (diabetes, hyperparathyroidism, thyroid disease)
- Juvenile arthritis
- Lupus erythematosus
- Lyme disease
- Metabolic disease (gout, pseudo-gout, etc.)
- Neuropathies
- Polymyositis
- Psoriasis

- Rheumatoid arthritis
- Vasculitis

As you can see, "arthritis" in a finger, ankle, elbow, or hip may be the result of multiple conditions. If your neighbor complains of arthritis, the question to ask is "What kind?" Arthritic conditions should be referred to in the plural because they encompass more than 100 different diseases. Arthritis takes many forms, and osteoarthritis is just one of them.

Pain in a joint, as noted previously, may be caused by an injury to any of the joint's structures: cartilage, ligament, tendons, or bursa. A wrist may hurt because of irritation in the tendon passing through it (tendonitis), or a finger may hurt due to a sprain in the ligament. A shoulder may hurt due to the swelling of one of the bursa (bursitis), a sprain in the tendon, or a muscle tear. A knee may swell and hurt due to both a hurting ligament and tendonitis. You get the idea. All these conditions may trigger pain in the joint, but they are not true osteoarthritis. They are tender, swollen, and hot, yes, but they are not osteoarthritis because they are *outside the joint*.

True osteoarthritis or degenerative joint disease affects the inside of the joint, involving the cartilage and bones of the joint, and the structures of the joint space. This is the most frequent type of arthritis; it is indeed a true arthritis and one of the main subjects of this chapter.

So, let us review. A painful joint (shoulder, knee, wrist, etc.) may be due to:

- an arthritic condition caused by a general disease.
- an arthritic condition caused by a ligament sprain (tendonitis, spur, or bursitis).
- osteoarthritis of the joint.
- · a traumatic injury to the joint caused by a sport, accident, or work.
- pain and swelling caused by infection or growth.

Each of these conditions results in a painful joint (wrist, knee, etc). People may refer to them all as arthritis – a general term that is easy to remember – but each one of them is different and requires a different type of treatment. It is through medical evaluation that the appropriate type of therapy can be determined.

ARTHRITIS: A HISTORIC DISEASE

Arthritis has been affecting people for a very long time. The ancient Greeks knew about it. In fact they gave us the word to describe the condition: from *arthros*, meaning joint, and *itis*, meaning inflammation. The Romans were familiar with arthritis as well. A historian has estimated that more than 70 percent of Romans over the age of 30 were afflicted with some form of arthritis. One of the functions of the famous Roman baths was to help ease the aching joints.

Books on the subject started to be written as early as the 16th century, and by the mid-17th century, many books on arthritic conditions were available. Over the centuries, countless people have suffered from arthritis. One of the most famous was the French impressionist Pierre-Auguste Renoir, the man who painted the beautiful *Luncheon of the Boating Party* in 1881 and the *Dance at Bourgival* in 1883. Renoir was born in 1841 and lived until 1919, but his best paintings all date from the 19th century, because, for the last 20 years of his life, his hands were severely crippled with arthritis.

The last 50 years have brought major advancements in the classification, management, and treatment of arthritis. Now, arthritis can be better understood and treated, providing relief and improvement in the quality of life.

Research continues in many different fields of arthritis, including immunology, genetics, and microbiology, in an effort to find the mechanisms of joint inflammation and deterioration. Better understanding will lead to new and better treatment.

RISK FACTORS AND LIKELY CAUSES OF ARTHRITIS

Now we begin the interesting part. Understanding the causes of arthritis will help you see that many of these factors can actually be modified. Yes, you can change (and sometimes even eliminate) some of the causes of your own arthritis. The exact cause of arthritis is not very clear. We know it happens, but we don't know why. Physicians know that physical injury such as an ankle sprain or ligament trauma can set the stage for arthritis; these injuries affect wear and tear on the joints. Repetitive trauma is also considered being among the causes.

However, many publications show that degenerative joint disease is not just a passive ulceration in the cartilage, but rather an active biochemical process that adversely alters the structure and repair mechanism of the cartilage and joint tissues. This is similar to what happens when you scratch a bug bite: rather than simply wearing away skin tissue, you are triggering a complex mechanism of defense, inflammation, and repair.

The arthritic process begins when enzymes damage the collagen fibers that maintain the structure of the cartilage. This damage to fibers and cartilage, and the irritation caused by the enzymes, trigger the inflammatory process.

RISK FACTORS YOU CANNOT OR MAY NOT BE ABLE TO CHANGE

Scientists have pinpointed several predisposing factors that increase the risk of developing arthritis:

1. Genetic predisposition. Some people carry a genetic predisposition to developing arthritis. This means they have a gene, or a genetic marker, that makes them susceptible to the condition. For instance, if a person's parents have osteoarthritis, there is a good chance that he or she will develop osteoarthritis too. Some families are affected by the same type of arthritis in almost every generation, which clearly shows that osteoarthritis has a high heritable component.

Researchers have found that a large number of different genes contribute to the development of osteoarthritis. Defects in the gene that causes arthritis may lead to the development of abnormal proteins in the cartilage, the growth of abnormal collagen fibers, or in abnormalities in one or two structures of the joint. The genes most commonly affect either the strength or the repair capacity of the cartilage, enhancing the damaging effect of daily wear and tear.

However, there are a growing number of scientists and other professionals, with supporting research to back them, who believe that gene expression can be altered through healthy lifestyle choices.

- 2. Ethnicity. Whether or not a person develops arthritis may also depend on their ethnic background. Certain ethnic groups have shown a higher incidence of osteoarthritis. There is some evidence that Asians, especially Chinese, have lower rates of osteoarthritis in the hip but higher in the knee. African-Americans of both sexes tend to have a higher rate of osteoarthritis than other races.
- 3. Age. It is a fact of life that the risk of developing arthritis increases with age. The older the person, the more wear and tear the joints have undergone and the higher the chance of developing arthritis. The risk of developing osteoarthritis increases even more after age 45. However, as I mentioned before, you can greatly *decrease* your chances of developing arthritis by developing healthy habits (such as proper eating, regular, adequate exercise, stress reduction, and so on) early on, and maintaining these habits throughout life.

RISK FACTORS AND LIKELY CAUSES THAT YOU CAN DO SOMETHING ABOUT

While there is little that we can do about the three risk factors above, we can do something about the remaining ones:

4. Joint abuse. Repetitive activities performed on a regular basis over the course of many years may make a person prone

to developing arthritis in a stressed joint. Whether sports- or work-related, repetitive activities cause repetitive microinjuries to the joint structure, causing cartilage breakdown and faulty repair. This, in time, leads to joint degeneration and osteoarthritis. The affected joints in these cases will be the ones that suffer most from the repetitive activities, such as a soccer player's knee, a tennis player's elbow, a typist's wrist and fingers, or a construction worker's hips and back.

Osteoarthritis resulting from sports injuries is on the rise as more people are exercising and playing sports in their leisure time. Sports activities that begin in the teenage years and continue to middle age carry a greater risk of causing osteoarthritis.

- 5. Weight. If a person has excess weight, which is now more likely the case than not in America, then the bones and joints must work harder to support those extra pounds. This is especially true for the joints of the hips, knees, and ankles. Over time, the extra weight hammers the joint, causing damage that the body cannot fix. The degenerative process starts and progresses. As the process advances, minor daily activities like shopping or walking to the car may trigger acute joint inflammation. An obese person may engage in an exercise program and start walking half a mile or more a day. This will not be good news for his or her joints: the hammering of hundreds of pounds may cause irreversible damage to hips, knees, or ankles. Studies show that overweight women are about nine times more likely to develop osteoarthritis than women of normal weight. Overweight men are four times more likely to develop osteoarthritis than a man of normal weight. The association between body weight and osteoarthritis becomes stronger as people become heavier.
- 6. Nutritional causes. It is now understood that cartilage is not just a lifeless layer of rubber, but rather a living tissue that is continually renewed. A continuous process of breakdown and

repair by the body keeps it fresh and functional. Special cells in the cartilage are continuously digesting old cartilage and creating new cartilage as part of the joint's normal function. To make new cartilage, these cartilage-building cells need special nutrients that come from the foods we eat. Hence, the process of breakdown and repair seems to be influenced by nutrition. Indeed, recent publications report that nutritional deficits can adversely affect cartilage's biochemical and biophysical strength. Among the nutritional causes for osteoarthritis, we find:

- a. Effect of free radicals. A free radical is a damaged oxygen molecule that destroys healthy connective tissue. Free radicals are harmful to all the tissues of our body, including the cartilage, and they are generated in response to any type of stress (chemical, physical, emotional, and mental). Other causes of free radicals include exposure to environmental toxins in food, air, and water. Free radicals cause a very slow degeneration of the cartilage, which initially shows no symptoms. By the time arthritis settles in and the symptoms begin, however, the damage is already significant. Free radicals also hurt the "omega-3 good eicosanoid" system, explained in chapter 4, which is our bodies' tissue-healing system. The adverse effects of free radicals are twofold: direct damage to cells and the antihealing effect.
- **b.** Nutrient deficiency. Many nutrients are involved in the synthesis of cartilage. Unhealthy nutritional habits can deprive the body of these essential nutrients and cause weakness in the cartilage structure. Some of these nutritional deficiencies are caused by low intake of vitamins C and E and deficiency of boron and niacin. Certain eating habits, such as those associated with the Standard American Diet (S.A.D.) are known to cause adverse effects in the joints. The Standard American Diet, rich in fat and processed carbohydrates but poor in omega-3 fatty acids (omega-3s), is a clear contributor

to osteoarthritis. Those who eat lots of fast food and no fresh salads or fruits deprive their bodies of healthy essential fatty acids and anti-oxidants. Add free-radical damage to this, and you have a sure recipe for trouble.

c. Food allergies. There are indications that food allergies play a significant role in the onset and progression of osteoarthritis. In fact, I've found that adverse reactions to foods play such an important role in pain that I've devoted an entire section to this, which is coming in a moment. For now, just know that foods that most commonly create arthritic conditions include dairy products, beef, yeast, wheat, eggs, oranges, peanuts, green beans, vegetables of the nightshade family (peppers, tomatoes, eggplant, potatoes), chocolate, sugar, corn, and yellow wax beans.

Now, please don't toss everything out of your refrigerator. Not every arthritis patient has food allergies, and those who do may be allergic to some of these food products but not to all. We suggest you review your eating habits and your symptoms and consider withdrawing two or three of those foodstuffs. We also suggest that you consider the possibility that you may have a food allergy. Your local health food stores and naturopathic physicians will usually have information on the subject, including possible testing outlets. Searching the internet may also be enlightening (although often timeconsuming and sometimes misleading).

d. Metals and minerals. High levels of copper, mercury, and aluminum are found in many patients with osteoarthritis. It is believed that their negative effects result from their interference with the absorption and use of vitamins and antioxidants. Imbalance in minerals such as selenium, boron, manganese, zinc, and calcium can cause disorders in the cartilage structure. Therefore, either deficiencies or excesses

of minerals and metals will lead to cartilage weakness. What can you do about it? Eat a variety of raw vegetables and fruits and, again, visit your local health food store and natural health practitioners to gather information about taking a light mineral replacement. Here again, searching the internet may be of help, subject to the same caveats.

e. Pro-inflammatory diet. The nutrients in the foods we eat are the body's building blocks. They are of particular importance to the immune system, which regulates inflammation. Adequate nutrition will produce a normally functioning immune system and, therefore, an adequate response to inflammation. This is accomplished through the food components known as essential fatty acids (Omega-3s, -6s, and -9s). Omega fatty acids are converted by the cells into molecules called eicosanoids (pronounced ee-**ko**-sin-oids), which play a vital role in regulating the inflammatory process.

In ideal conditions, we eat a high amount of omega-3s (which produce "good," or anti-inflammatory, eicosanoids) and just a small amount of omega-6s (which produce "bad," or pro-inflammatory, eicosanoids). Consuming large amounts of omega-6 fatty acids and very little omega-3s and antioxidants (omega-3 protectors) causes inflammation. This is anti-healing nutrition, generating few of the good eicosanoids and too much of the harmful ones. In this situation, a small joint can lead to a disproportionately large amount of inflammation. The injury may then take too long to heal, or arthritis of the joint is magnified and prolonged.

- 7. **Toxins.** Our bodies are assaulted with a variety of toxins, on a daily basis. Toxins play such a major role in our adverse health that I've written an entire chapter on them, coming next.
- 8. The indirect effect. Arthritis may have its root in a distant

part of the body, the spine. If a person has a degenerative or inflammatory process occurring in the spine such as disc disease or spinal arthritis, the nerves coming out of the spine will be squeezed and become irritated. If an irritated nerve goes to a muscle, the irritation will be transmitted to the muscle. Then the muscle, which passes over a joint like a bridge and helps hold it together, will not work well - it will either be too relaxed or too tense, because of abnormal nerve stimulation. If it is too tense, it will squeeze the bones together, increasing rubbing and friction, causing cartilage damage. However, if the muscle is too relaxed, it will not hold the joint together, which creates misalignment and upsets the balance of the joint. The imbalance will cause an abnormal motion of the joint, which sooner or later ends up harming its cartilage and ligaments. Therefore, excessive relaxation or excessive contraction of the irritated muscle may trigger the inflammatory and degenerative process leading to arthritis. That is how neck arthritis can cause osteoarthritis of the shoulder, or spinal arthritis in the lower back can cause arthritis of the hip and knee.

9. Combinations of factors. Putting aside the factors (genetic, ethnicity, and age) that can be difficult to affect, imagine someone with a combination of risk factors. An obese person who abuses his joints at work (thereby exposing himself to greater free-radical damage), and whose nutrition is mostly fast food (and hence generates bad eicosanoids), stands a good chance of developing arthritis. So, does a person with a bulging disc whose weight is normal but whose nutrition is deficient in vitamins and antioxidants and full of food allergens. Similarly, osteoarthritis may result from other combinations of the factors described above. In some individuals, genetic predisposition and food allergies may be more significant. In others, age and obesity will be the cause. Yet in others, a combination of repetitive sports activities and poor nutrition may be the determining factors.

FOOD AND PAIN

As I gain experience with arthritis and pain management, I see increasing links between diet and pain. It's not that people are necessarily eating *poorly*, but rather that they are eating poorly *for them*. Food choices strongly influence arthritis, pain, and the healing of injuries, and any therapy that deals with these medical problems cannot omit this "food factor." This is how it happens.

Definitions

Part of human nature and the nature of language is that people have different understandings of terms. So, before discussing these concepts, it's good to offer some definitions so that we're all on the same page.

Food Allergy – This is an immediate reaction whereby histamines are released in the body, as in the case of any non-food allergy. It is experienced soon after the food is consumed, and it comes fast. Examples include getting a skin rash after eating shrimp, a swollen throat after eating peanuts, or hives after eating berries. These symptoms do not need to be pronounced to indicate a problem. Even subtle reactions, such as sneezing after consuming a particular food, are worthy of investigation.

Food Intolerance – This is considered a digestive system intolerance to certain foods. Examples of food intolerance are getting heartburn after eating hot sauce or Mexican food, diarrhea after fettuccini Alfredo, or gas (in any form) due to indigestion after egg salad. You feel it coming. You know when it hits you.

Food Sensitivities – Contrary to the above two, you don't necessarily feel a food sensitivity. There are few (if any) immediate reactions, and they don't come fast. In fact, they are so silent that you may never know you are suffering from them. These are the

object of this review. (Note: Some authors use the names "food allergies" and "food sensitivities" interchangeably, so keep this in mind when you do your own research.)

Food sensitivities signal an immune reaction triggered by particles that have leaked through the gut (intestinal) lining. This phenomenon, termed "leaky gut" in some publications, occurs when intestinal cells are damaged by the effects of ingesting toxic substances (such as sugar, alcohol, pharmaceutical drugs, etc.). In this case, the intestinal walls cannot properly work as a barrier to contain the toxic waste produced by these particles, and these particles leak through the walls into the blood stream.

This might be a bit hard to understand, but stick with me. Once these toxic particles enter the blood stream, they essentially tease and annoy the body's systems – including the immune system, which forms molecules called globulin complexes that adversely affect metabolism somewhere in the body. Where the attack and hurt occur is unpredictable; however, the body is certain to experience a toxin-produced inflammatory process *wherever the target is*.

As unpredictable as nature itself, these metabolic attacks may occur in any organ:

- They may attack the nose and sinuses in some individuals, causing many years of nasal congestion, recurrent sinusitis, itchy nose, or sneezing.
- They can cause weight gain, diarrhea, attention deficit disorder, or headaches.
- They may hurt the lungs, causing asthma, coughing, or wheezing.
- They can cause allergies or indigestion, or they may attack the skin, resulting in acne, rosacea, or eczema.
- They may damage the head or the brain in some people, causing headaches, memory problems, learning disabilities, or confusion.
- They may attack the joints in one person, the nervous system in another, or the hormonal system in a third. That is why I included discussions of these ailments in this new edition.

• They can be the cause of or they can trigger episodes of pain, arthritis, and headaches, and they may interfere with your healing after you have suffered an injury.

A while ago, we implemented FOOD SENSITIVITY TESTING in my medical practice, and since then, as we eliminated food aggressors in the affected individuals, we have seen many of the above conditions dwindle or disappear. Many times, we were surprised by the clinical improvement of our patients in whom we suspected food-born ailments. Food sensitivities cause many more problems than you might think.

There is no way to predict who will be affected or, as I mentioned previously, in which way or when. There is no way to sense these metabolic toxicities, and because the reaction is so slow, people don't associate their problems with the foods they ate a few days or even weeks earlier.

Finally, there is also no way to know which foods are affecting a person, unless they take the Food Sensitivity Test.

NOTE: WITHOUT IDENTIFYING THE FOOD SENSITIVITY AS OFFERED BY THE FOOD SENSITIVITY TEST, THE PERSON WILL ALWAYS SUFFER WITHOUT RELIEF.

Food <u>allergies</u> cause reactions that are quick and obvious.

Food <u>sensitivities</u> cause reactions that are neither quick nor obvious, but rather are slow and unknown to the person.

Many people go through years of suffering without knowing this and without knowing that their problem has a solution.

And yes, I tell you this based on my own personal experience, too. I discovered in 2008 (after countless years of headaches, migraines, and Irritable Bowel Syndrome (IBS), and after taking this test) that I was sensitive to spinach, eggs, apples, and dairy products. Avoiding these foods has made a big difference in my life.

Because sensitivity reactions to foods can develop up to 3 days after eating, most people have difficulty connecting the food with their sensitivity. In addition, since the symptoms are vague, chronic, and not severe, awareness of this condition is low.

But How? How Does It Happen?

Some foods are capable of irritating the lining of the intestine, creating an adverse reaction. This usually occurs through one or a combination of three mechanisms: the particular food brings a toxic load or chemical contamination; there is a lack of the enzymes needed to digest that food; and/or, because of genetic reasons.

Whatever the reason, particular foods can cause irritation in the lining of the bowel, starting a low-grade irritation-inflammation process. If the person continues to eat this food, and/or the condition persists, the person will develop an abnormal situation in his/ her bowel which I call "Silent Bowel Illness" (SBI), to emphasize that the intestine has silently entered an altered state. When the irritation becomes more severe and the inflammation worsens, the bowel starts to accumulate toxins, inflammatory molecules, abnormal bacteria, and excessive waste from germs, undigested food particles, and the byproducts of fermentation and putrefaction, a not-so-nice situation called DYSBIOSIS. (If you don't know what DYSBIOSIS is, I would recommend that you get on the internet and learn about it, since it is the root of many chronic diseases and disorders – from arthritis to Alzheimer's, heart disease to obesity.)

Please also bear in mind that this is a very simple explanation for a very complex process that involves inflammatory molecules, arachidonic acid, interleukins, white blood cells, abnormal gut flora, excessive fermentation, abnormal cells, bacterial breakdown, and other adverse gut phenomena that are the root of dysbiosis and leaky gut.

As I noted before, this condition is marked by a leakage of toxic particles into the blood stream that end up attacking organs, including joints and muscles. In response, the body's immune system molecules (called globulins or immunoglobulins) attack those food particles, thereby forming a food-globulin complex that increases inflammation, slowly attacking even more organs and systems of the body. This is the precursor to disease.

Remember, nothing specifically tells the person that his dinner from two nights ago or that same breakfast he's been eating for the last 20 years is causing these adverse effects: *this micro-storm gives no signs*. The effect is very slow, and it may take weeks, months, and even years to cause medical problems. In most cases, *the person doesn't know it is happening*.

> Food sensitivity causes bowel illness and gut dysbiosis: a combination of inflammation and toxicity that can adversely impact joints, muscles, and nerves, and can affect recovery after an injury.

Why So Sensitive?

We don't exactly know why some people are sensitive to certain foods, but as I suggested above, it can be caused by genetics, chemicals in food, other toxins in food, and environmental pollutants. We also suspect that an imbalance of a chronically stressed adrenal gland, which is strongly connected to the gut, is involved as a causative factor. We know that a range of factors increases the chances of developing food sensitivities. Some people inherit a sensitivity to certain foods, while others may develop them as a result of stress, medications, poor eating habits, antibiotics, and food intolerances (like milk or flour attacking the intestine in certain individuals). By the way, if you have gluten intolerance and/or lactose (dairy) intolerance, your food sensitivity problems will be even WORSE!

There are other causes of food sensitivity as well: chemicals, colorants, and preservatives damage the internal skin (lining) of

the intestine; fruits and vegetables that are picked while not fully ripened causes intestinal irritation; and food additives that are used to maintain freshness, improve flavor, or manufacture exotic dishes frequently irritate the bowels. There are over 5,000 different chemicals added to food products in the USA for coloring, flavoring, preserving, thickening, emulsifying, etc. Also, contamination of food with germs, like parasites, Candida, bacteria, and viruses can cause food sensitivity. In these cases, the recommended tests are: 1) stool study for white blood cells, ova, and parasites and 2) the ELISA Test for Candida.

What Types of Foods Cause Sensitivities?

It can be anything: apples, almonds, grapes, peanuts, oranges, bread, milk, eggs, lentils, yeast products, ketchup, yogurt, chocolate, raisins, tomato products, beef, pork, salami, grouper, soy, cream cheese, bananas, or corn. It could be any food. The type of food varies with every person, and there is no way to know until a Food Sensitivity Test is done.

We have been doing the Food Sensitivity Test in my office for a few years already and have found many astonishing reports. Personally, I am sensitive to beans, eggs, apples, almonds, and spinach (guess how I used to prepare my favorite salad?).

I have had patients whose tests showed sensitivity to chicken and beef, while others were sensitive to most fish; one woman was sensitive to banana and pear; one man was sensitive to all fruits and pork (but not to gluten, wheat, or chocolate, as he thought); another man was positive for rice, salmon, tuna, and vegetables. Symptoms can be very misleading. Furthermore, people are prone to thinking they are allergic to something just because it is getting a lot of press – gluten (wheat), as one example. So, I have had patients claiming they were sure they were gluten sensitive, and found they were not, but they were sensitive to chicken and rice, instead. I have also had patients that were certain they were sensitive to all seafood and spices find that they were instead positive to wheat and potatoes. We have found an incredible variety of results.

HOW COME? We are all biochemically different, and we react differently to environmental toxins and stress, so no two people react in the same way to the foods they eat. "Could this mean that certain foods that I eat, although healthy for some, and actually recommended by nutritionists, could be toxic for me and be the source of my pain?"

Yep! The "right" food may actually be wrong for you.

The Roman poet Lucretius is credited as saying, "One man's meat is another man's poison" – meaning that what one person finds likeable another might find distasteful. While Lucretius did not specifically apply this statement to food alone, in the case of food sensitivity, we can take it literally.

Symptoms of Food Sensitivity

One thing is for sure: symptoms vary a lot from patient to patient. I've seen individuals suffer the following list of conditions as symptoms of their food sensitivities.

Respiratory symptoms – coughing, sneezing, wheezing, asthma, snoring, sleep disorders, bronchitis, clearing throat often, nasal congestion, sinusitis, hearing loss, sore throat, itchy ears, canker sores, swollen tongue, runny nose

Eyes – watery eyes, itchy eyes, blurred vision

Immune system – catching colds and infections easily, yeast (fungal) infections

Neurological – poor coordination, headache, migraine, depression, memory problems, mental fatigue, pain, intellectual difficulties, confusion, insomnia, poor concentration, autism, learning disability, Attention Deficit Disorder (ADD). Food sensitivities can also directly or indirectly cause neuropathy with subsequent neuropathic pain, which can affect limbs, back, and neck. **Skin** – eczema, psoriasis, dermatitis, acne, hives, rosacea, rashes, hair loss, cracked nails, excessive sweat, and dandruff

Metabolism – weight gain, obesity, water retention, cravings, food addictions, binge eating, and weight-loss resistance

Emotions – mood swings, anxiety, fear, irritability, anger, nervousness, hyperactivity

Energy – body fatigue, sluggishness, apathy, lethargy, restlessness, severe tiredness, Chronic Fatigue Syndrome

Musculoskeletal – stiff muscles, stiff joints, tendonitis, pain in joints, weak muscles, osteoporosis, fibromyalgia (Many authors consider fibromyalgia rooted in food sensitivity. In addition, for people who suffer from arthritis of the shoulder and knee, foods sensitivity can cause flare-ups of pain and inflammation.)

Malabsorption – vitamin deficiency, iron deficiency, anemia, calcium deficiency, nutritional diseases caused by lack of vitamins and mineral absorption

Digestive system – irritable bowel syndrome (IBS), diarrhea, constipation, bloating, heartburn, belching, stomach pain, stomach ulcer, indigestion, esophageal reflux

And there are many more symptoms and disorders.

The adverse effects on the digestive system and metabolism can disrupt the healing process after injuries, can be the root of nerve pain and muscle fatigue, and can weaken muscles, making the person more susceptible to neck and back pain. All these combine with the toxic effect on the joints and tendons to trigger or perpetuate the process of inflammation. The results can be swollen tender joints, pain in the back, thighs, or neck, headaches, fatigue, and a whole variety of symptoms. AND...you may go from doctor to doctor, see specialists, and get numerous medical treatments, BUT UNLESS YOU GET TESTED AND RESOLVE YOUR FOOD SENSITIVITY PROBLEM, YOU WILL NOT GET BETTER, AND YOU WILL NOT ACHIEVE GOOD HEALTH.

What will happen if you ignore the symptoms? Your disease will worsen!

Adverse Food Sensitivity

A host of problems can result from food sensitivity. Here are just a few things that food sensitivity can affect:

- 1. your quality of life
- 2. your health
- the frequency and extent of doctor visits: you may end up taking more medications, needing more tests, seeing more doctors, developing more disorders, and using more over-the-counter medications
- 4. the quality of your sleep and your sex life
- 5. the frequency of visits to the toilet
- 6. your enjoyment of food and dining (you become a victim of your own food)
- 7. in the case of injury, the wrong foods can distress your metabolism and interfere with the healing process
- 8. food sensitivities can be the root cause, or part of the root cause, of your arthritis, headaches, and pain conditions.

Many people are told:

- "It's all in your head"
- "You are lazy"
- "Control your cravings"
- "You need to see a psychiatrist"
- "It's normal to feel this way at your age"

- "Just take these pills twice a day"
- "Take these allergy pills and use this spray"
- "Take Zantac"
- "Take Protonix"
- "Take Nexium, it's better"
- "Take an antacid"

Or, they use numerous over-the-counter products such as Pepto-Bismol, Maalox, Mylanta, Tylenol, Advil, Benadryl, Triaminic, sprays, Cortaid, etc.; or, they are prescribed creams, pain killers, Xanax, more sprays, Prozac, pills, and more pills or sent to specialists and more specialists . . . and more specialists, when instead they should get tested for food sensitivity in order to find out whether certain foods are the cause of their health problems.

The Cocktail Effect

If you drink a mixture of alcohols, you will experience a more severe intoxication than if you just drink a bit of wine. In the same way, suffering from many food sensitivities could make you sicker. Imagine having food sensitivities to milk, gluten, red meat, mayonnaise, and potato, and then having a daily breakfast of cereal (gluten) and milk, then a baked potato with sour cream for lunch, and a cheeseburger for dinner. You will be pushing yourself to disease.

Imagine Martin's daily lunch is grilled tuna with salad. Healthy, eh? However, Martin doesn't know that he is allergic to tomato, fish, lettuce, and pepper. He thinks he is eating healthfully, but he may just be hurting himself.

Lisa eats a hard-boiled egg and an apple every morning, ½ a turkey and cheese sandwich for lunch, and pasta salad or another pasta dish for dinner. But she's got food sensitivity to wheat products, dairy products, eggs, and turkey. She doesn't get any immediate reaction, so she doesn't know it, but her health problems are brewing.

Yes, even healthy foods can hurt you.

Other Conditions Thought To Be a Result of Food Sensitivity:

anemia	indigestion
anxiety	learning disability
atherosclerosis	mental exhaustion
attention deficit disorder	morbid obesity
bad breath	multiple sclerosis
brain fog	osteoporosis
breast pain	panic
constipation	poor concentration
cramps	poor memory
Crohn's disease	restless leg syndrome
chronic fatigue	rheumatoid arthritis
depression	sleep problems
fibromyalgia	sneezing attacks
gallbladder problems	thyroiditis
Hashimoto's	tinnitus
high blood pressure	and more

If you have any of the above conditions, I encourage you to be tested for food sensitivities. You might want to add two additional tests: the ANTI-GLIADIN TEST (for possible gluten sensitivity) and the CANDIDA TEST (which examines whether excessive yeast in your bowels is also responsible for your condition). These are disease-modifying, life-changing tests!

These tests can improve health, cure diseases, prevent medical conditions, improve quality of life, decrease the amount of medications, and help you live better. Toxicity can be overcome if you know which foods are toxic to your system.

REMEMBER: Food sensitivity can cause weight gain, obesity, weight loss resistance, food craving, food addiction, excessive hunger, binge eating, thyroid disorder, fatigue, overeating, water retention, anxiety, depression, insomnia, and slow metabolism. Food sensitivity can also cause fatigue, headache, arthritis, muscle pains, stress, and anxiety. Again, food sensitivity triggers an inflammatory process that travels *outside* the gut and invades other organs. In this case, it is wiser to think of DYSBIOSIS as "DYSBIOSITIS" ("-itis" means "inflammation").

My advice about the ELISA Food Sensitivity Test? *If you have the above symptoms and you suspect food sensitivity might be the problem, GET TESTED!*