# Introduction

Let food be thy medicine, and medicine be thy food. - Hippocrates

When Hippocrates wrote those words more than 2,000 years ago, I'm sure he could not have fathomed that we would get to a time when some food wouldn't be *real food* anymore. He likely thought that lifegiving food—all the living things that nature has bestowed on this earth to provide sustenance—would be constant and all we needed to do was find the right combination of foods on an individual basis to stay healthy. That's what I thought, too, first after experiencing the amazing power of the best foods on my own health in the early 1990s and then seeing how the right combination of real foods was the only answer for countless clients and readers of my books who had suffered from conditions ranging from diabetes to severe allergies.

In the past few decades when many of us focused on therapeutic diets to improve health, we were kept in the dark about something far more important: Many of our foods are no longer real food anymore. Multinational corporations changed our God- or nature-given foods on the *inside* in the most radical ways ever and our government allowed these food impostors known as genetically modified foods (or genetically engineered or genetically altered foods) to be secretly slipped into the food supply without our knowledge and without safety testing, starting in the mid to late 1990s. Though the U.S. Food and Drug Administration (FDA) dubbed genetically modified foods as "substantially equivalent" to regular foods, before that policy was put into place, the agency's own scientists warned that genetically modified foods were different and could lead to unexpected, hard-to-detect side effects that could adversely affect health, including new diseases, new allergens, new toxins, and nutritional problems.

In recent years growing numbers of people have learned this and more startling information that will be covered in this book, leaving them so concerned or so angry that many are now shopping defensively to avoid genetically modified foods. The changes in buying habits by individuals have built a collective and incredibly fast-growing food movement, which is changing business as usual in the food industry.

Many Americans want to learn more about genetically modified foods. Others still do not know basic facts that concern and often infuriate most who learn them. That's because the truth about genetically modified foods has been kept from the American public. It's time to shine a light on it from a consumer's point of view. That's what this book is all about.

Truth be told, I didn't originally want to write a book about genetically modified foods. I much prefer educating people about the healing power of real food. But circumstances in my journalistic and nutrition counseling work pushed me—almost forced me—to pay attention, learn much more about genetically modified food, and realize why this issue is so important for all of us to understand.

#### My Introduction into Genetically Modified Foods

I first learned about genetically modified foods in 2000 and 2001 when I was gathering information for my book *Going Against the Grain*. I turned on the news, heard about recalls of a type of genetically modified corn called StarLink corn that wasn't supposed to have entered our food supply but did, and saw reports of some people who said they had adverse reactions, including digestive trouble, skin reactions, and even anaphylactic shock, after eating corn-containing products from Taco Bell and other sources. I was concerned—horrified, really—and knew this was something I had to include in my book! I gathered up the limited information at the time to warn people about the potential dangers of genetically modified foods, explaining that StarLink corn was one of several types of pesticide-producing corn and that research in 1996 found that forcing a gene from one organism into the DNA of another can turn a nonallergenic food into an allergy-producing food.

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Even the fundamental principles of genetically modifying foods bugged me. Pesticide could be in every cell of a type of corn? How crazy, I thought! Man splicing and dicing genes, the blueprint for life, and playing God with the foods the Earth naturally provided? How crazy, I thought! As a nutritionist, I knew that every time man has decided to artificially and dramatically alter natural foods—whether it was to create refined flours and sugars or refined or partially hydrogenated oils—it has ended up being to the detriment of public health.

I hoped people would stay away from genetically modified corn and soy after reading *Going Against the Grain*, but that didn't happen. Other information I covered in that book, like the fact that it's not only possible but common for people to react to gluten without having celiac disease, gradually seeped into the public consciousness. A gluten-free frenzy spread through the nation, but instead of eating more vegetables in place of grains—a central tenet of my book—most people who went gluten free began eating more highly processed, commercial gluten-free products that contained corn and soy. Not surprisingly, those gluten-free eaters never seemed to feel well. As a nutritionist, I knew that processed food products were unhealthy for us in many ways, but the factor I was increasingly wondering about was whether it was because they contained ingredients that were, in rapidly increasing amounts, genetically modified.

In 2010, I wrote *Gluten Free Throughout the Year* as a quick guide to steer busy people to more vegetables and to fewer processed foods and, yes, to fewer genetically modified gluten-free foods as well, even though I barely mentioned it. I also started delving into newer research on genetically modified (GM) foods to understand the topic better.

The more I pieced together new evidence starting to come out with basic information that had been kept from us about GM foods, the more disturbed I became. By that point, GM foods had infiltrated our food supply and were found in an estimated three-quarters of the foods sold in supermarkets, yet animal research (the only research available) linked

GM foods to immune system problems, gastrointestinal problems, infertility, accelerated aging, and more.

I was beginning to wonder when I counseled clients whether their symptoms and illnesses stemmed from an overly high-carbohydrate diet, a reaction to gluten or another food, or because of genetically modified foods. It was becoming impossible to tease out all of the variables. Right about then, I began providing nutritional coaching to Marcia, a client who had a huge impact on my thought processes.

#### MARCIA'S STORY

When Marcia, a 50-year-old graphic artist, began a nutrition coaching program with me in late 2010, she had numerous health problems, including multiple food and environmental allergies, and several heart-disease risk factors, including excess weight, high triglycerides, and low high-density lipoprotein (HDL) cholesterol (the "good" cholesterol). She also had been diagnosed in 1990 with a systemic immune condition known as Eosinophilia Myalgia Syndrome (EMS), which doctors thought she developed after taking a tainted batch of tryptophan supplements.

Marcia had already been following a gluten-free diet for eight years before she came to see me, in large part because she had read my previous book and felt better avoiding gluten. I advised a number of dietary changes to address her other food intolerances.

I knew that laboratory created genetically modified organisms (GMOs) were implicated in allergies and that the tryptophan linked to EMS had been produced using genetically modified bacteria, so I recommended that she avoid all direct sources of GMOs in her diet to see if it made a difference. She was already avoiding wheat-based convenience foods that harbor hidden GMOs. So in her case, cutting out GMOs meant avoiding the soy-based edamame she had been eating because she thought it was "healthy," the aspartame-containing diet soda she often drank, and the corn-based ingredients that were hiding in her favorite gluten-free baked goods. I advised her to include more fresh vegetables

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(almost all of which aren't genetically modified) in her diet instead. I'm happy to say that it didn't take long for Marcia to see positive changes. Over several months, she and I were amazed at how avoiding genetically modified foods improved her health across the board.

What did avoiding GMOs do for Marcia's health? Consider these results:

- Within roughly a year, her seasonal allergies mostly disappeared.
- Working with her allergist, Marcia was able to stop all her allergy medications except for one she uses occasionally.
- Her body-wide inflammation subsided, her joints felt better, and her asthma symptoms improved so much that her lung function tests reached 98 percent—the highest they had ever been. (Now they're even higher at 105!)
- She lost 75 pounds and all of her heart-disease risk factors normalized.
- Just a few months after steering clear of GMOs, Marcia's immune cell counts (regularly tested to monitor her EMS condition) reached normal levels for the first time in almost 20 years! They have been consistent and normal ever since.
- In the first year of removing GM foods from her diet, Marcia cut her healthcare expenses by 50 percent and her dental expenses by 75 percent. She also saved \$7,000 in medical expenses.

<sup>&</sup>quot;Eliminating the GMOs has made the most impact for me," says Marcia. "The results have been amazing." Yes, I agree: the results were truly amazing!

## How My Thinking and The Non-GMO Movement Evolved

Marcia's experience had me wondering whether *any* therapeutic diet could resolve people's health problems or keep them healthy if they were having reactions like Marcia did to even a few genetically modified foods. I wished food was still good, old-fashioned *food* so I could just focus on therapeutic diets. But I had to face the fact that that was no longer the case. Genetically modified food had become the food issue of our time.

I needed to understand the topic far better, so I delved into learning everything I could about GMOs. I interviewed food safety experts; attended conferences and listened to numerous webinars, telesummits, and online conferences; and talked with farmers, sustainable food advocates, physicians, nutrition professionals, and consumers, learning the types of questions people asked over and over again. I also studied independent research—in other words, research not affiliated in any way with the biotechnology industry that develops and markets genetically modified foods.

I discovered that far more had been hidden from the American public than I realized. In a nutshell, we had never been given any upfront information about GM foods and therefore, had never had the opportunity to discuss whether or not we wanted them in our food. Instead, because of a policy the United States developed that was out of step with the majority of countries in the world, GM foods had been secretly pushed into our food supply without our knowledge, making us all uninformed participants—or guinea pigs—in a massive feeding experiment.

What's more, when I sifted through the hype and really studied the evidence, there was no good reason for consumers to eat them. I firmly believe that the genetic engineering of our foods would never have gone so far if the public had been given straight information from the start, including warnings issued by the FDA's own scientists and other people and organizations.

As a nutritionist, health journalist, and concerned citizen, I couldn't really sit on this information. I began writing about the topic on my blog and speaking about it in my community.

From 2011 to 2013, I was researching, interviewing, studying non-GMO foods on the market, writing, speaking, and counseling new clients, wrapping my mind around every aspect of the GMO issue. As I was getting up to speed on information about GM foods, more Americans were learning bits and pieces of information from friends or social media, not liking what they learned, and becoming increasingly upset as new GM foods were green-lighted into the food system despite widespread public disapproval.

Though many Americans still knew nothing about this fundamental change in their food, those who were aware of the situation were getting fed up with genetically modified foods literally being shoved down their throats without their knowledge or consent. They began taking their power back by learning where GMOs are hidden and not buying foods that contained them. In the last year especially, food companies have been taking notice of this fast-growing non-GMO movement and responding, making major business changes based on growing consumer demand. As a journalist, I saw this as a big story, but I also thought that it wasn't being covered in a way that Americans needed to hear or could understand.

When counseling clients, I saw that those who were attempting to eliminate GMOs from their diets were making nutritional mistakes, either by eating hidden sources of genetically modified foods without realizing it or eating non-GMO "junk food" that set them up for other health problems. I have counseled people on many types of diets, and no matter what diet someone eats, there's one constant: most individuals are getting large amounts of GMOs from grain- and sugar-based processed convenience foods they're eating. The easiest way to teach people to automatically cut the top GMOs out of their diets in a healthy way is to have them ditch processed foods and substitute more fresh vegetables and fruits, which generally aren't genetically modified. To go against

GMOs, individuals have to go against the grain of what most people in the United States are eating. That subject is my specialty.

#### A New Kind of Going Against the Grain

As you read this book, keep in mind that eating non-GMO and organic foods isn't a radical new diet. It isn't about people being "fussy" about their food. It simply means eating food the way nature intended.

Twenty years ago all our food was non-GMO—produced without laboratory created genetically modified organisms. Seventy-five years ago, all our food was organic—in other words, produced without synthetic fertilizers and pesticides. There's a meme circulating on the Internet, which in a few simple words summarizes this point. It says: Try organic food ... or as your grandparents called it, "Food."

When it comes to easily being able to eat organic, non-GMO food, I'm well aware that the system is stacked against us, and it's particularly stacked against the poor. Government subsidies—in other words, our taxpayer dollars—go to support "farmers," mainly large corporations that produce foods like wheat, corn and soy on a massive scale that we don't need. Then various forms of those ingredients are added to processed foods and used to unhealthfully fatten up animals. Vegetable and fruit growers, and organic food growers, which we desperately need, are offered little or no financial support.<sup>2 3</sup> It's a messed-up, unhealthy food system.

That means it's all the more important for those of us who can eat real food to do so. If enough of us do this, it will change the system and make it possible for all of us to affordably eat real food again. I certainly never thought we'd have to fight for the right to eat real food. But that's the situation we are in now. I consider it a patriotic duty to go against GMOs and fight for a better food system.

## WHAT YOU'LL LEARN IN THIS BOOK

From many different fronts, the message has been getting louder and louder about the need for a consumer-friendly guide about the fast-growing non-GMO food movement, the reasons for it, and steps for removing genetically modified foods from the diet in a healthy way. I heard the call. Just as I felt guided 12 years ago to reveal critical information that had been kept from us about grains, I now feel compelled to disclose important basics that have been kept from us about genetically modified foods and the radically different agricultural system that goes with them—information we all should have been told decades ago.

In Chapter 1, I will reveal how quickly the non-GMO movement is growing and how it is prompting large and small businesses to make changes in the foods they offer. In Chapters 2 through 4, I'll run down the compelling reasons why so many consumers now want to go against GMOs.

In Section 2, I'll put on my nutritionist hat to provide comprehensive advice about how to avoid GMOs, offering practical guidelines, tips, shopping and eating out suggestions, as well as easy recipes for people on many different diets. I end the book with Section 3, which provides additional helpful information, including appendices and resources.

Whether you have been wondering about GMOs, never heard about them before, or want to avoid them but don't know how, do yourself a favor and dig into this book. I'm confident you'll get the complete rundown on the current state of our food system and how we all can individually and collectively get back to real food to once again make it our best medicine.