Chapter 1

An extraordinary opportunity to save lives

The fields of wheat and rows of corn and soy that quilt the American heartland are a source of national pride and a feat of ingenuity and technology. We can grow enough food for the entire country and beyond, and employ hundreds of thousands of people to cultivate, process, and package it until it arrives at our supermarkets. This system allows each of us to live without having to forage for sustenance, plant our own gardens, keep our own livestock, or worry about how to feed ourselves when winter comes.

The earth, of course, is the source of this bounty. It offers itself up to us in the form of grain, fruits, and vegetables. That it produces the exact nutrients our bodies need to thrive is the unfathomable result of evolution. If we imagine the earth as a living, cognizant entity, we might think that it wants us to survive. That it cares about us. Why this is may always be a mystery, but we are in a deep

and inextricable relationship with the earth, one in which we humans should be flourishing.

Yet despite the healthy sustenance available to us, we are far from healthy. Americans are plagued by obesity, heart disease, and diabetes, and incredibly, our food has become the number one cause of these ailments. Not food in its natural, unprocessed state, but the products that emerge from the huge processing plants that also dot the heartland. The food processing industry has destroyed the inherent structure of food, transforming much of it into highly palatable, ultraprocessed carbohydrates that can be digested rapidly. We, in turn, are consuming these rapidly digestible carbs—starches and sugar, which I refer to as fast carbs—in larger and larger quantities, and they are destroying our bodies. Globally, eleven million deaths and 250 million disabilities are attributable to diet; that translates into one in five deaths.

In the pages ahead, I'll build the case for the many kinds of damage that result from consuming these foods, but the capsule view is this: fast carbs hijack appetite, interfere with feelings of fullness, make it hard to control weight, and have a toxic effect on metabolic pathways, which results in a vicious cycle of insulin resistance, obesity, and chronic disease. The American diet also increases our odds of developing heart disease.

While human biology is complex, the road to better health doesn't have to be. The goal of this book is to cut through the confusion surrounding food, diet, and health. Identifying the danger posed by fast carbs will allow us to reclaim a healthy body weight, prevent diabetes, and markedly reduce atherosclerotic heart disease. The information here is aimed at people who, like me, have engaged in a lifelong struggle with weight, but it will also be useful to anyone who is interested in eating a healthy diet.

It's important to understand that ultraprocessed foods are designed to be irresistible, and to prompt overconsumption. In addition to degrading the structure of carbohydrates, food processors increase the palatability, or sensory appeal, of these already compromised foods by adding sugar, fat, and salt. Virtually all packaged snack foods feature some combination of those ingredients, as do pizza, fries, and many baked products. Once we start eating them, it's very difficult to stop; that's because we absorb fast carbs early and quickly in our gastrointestinal tracts. As a result, our bodies don't release the hormones that trigger fullness—and we keep on eating. It's a vicious cycle.

But overeating isn't the only health hazard posed by fast carbs. They also elevate blood glucose levels, which then cause insulin levels to rise. That leads to increasing dysfunction of the metabolic pathways, which are the linked chemical reactions that occur in the body, including how we process the foods we eat and the reactions that convert them into the energy and molecules we need to live.

By continuing to eat fast carbs, we further accelerate this dysfunction. Eventually, the body becomes less sensitive to the presence of insulin, which is essential to controlling blood glucose. This can lead to metabolic syndrome, insulin resistance, prediabetes, and ultimately a diagnosis of

full-blown type 2 diabetes. The package of consequences that can occur when normal metabolism is disrupted is referred to as metabolic disease.

A related threat to our bodies is caused by blood lipids, especially low-density lipoproteins (LDL), which are toxic particles that are the leading cause of cardiovascular disease. The importance of understanding this is twofold. First, when you limit your intake of fast carbs, it is important not to replace them with saturated fat, which can increase LDL in our blood. Second, research tells us that lowering LDL levels offers us a life-altering opportunity to prevent cardiovascular disease.

There are three major recommendations in this book. They are more direct than any national dietary guidelines, and they are strongly supported by the latest science. Embrace these recommendations for the long term and you'll achieve lasting change in your weight and your health. Study after study has shown that if you lose excess weight and keep it off, you can reverse diabetes and other diseases that occur when normal metabolism is disrupted, and prevent cardiovascular disease.

Here are the three recommendations:

- Reduce consumption of fast carbs to gain control over weight and reduce the risk of metabolic disease.
- 2. Reduce your blood lipids (especially LDL) by moving to a largely plant-based diet or by taking

medications to markedly diminish the risk of cardiovascular disease.

3. Engage in daily moderate-intensity exercise to control weight, increase metabolic flexibility, and reduce the risk of metabolic and cardiovascular disease.

That's it. Simple and direct. But these recommendations emerge from a systematic, in-depth investigation that took me years to complete. During that time, I interviewed dozens of experts, attended conferences around the world, and reviewed a vast body of medical literature. I especially relied, where possible, on randomized controlled trials, which represent the most rigorous scientific method available for comparing diets.

Armed with an understanding of the dangers posed by fast carbs, and the knowledge of what you can do to avoid them, I believe we can finally break the cycle of weight loss and gain that torments so many of us. We can take control of our bodies and start on a path toward health, greatly reducing the dangers posed by obesity, diabetes, and heart disease and restoring sanity to our diets. Not since the public health campaigns against tobacco have we had such an extraordinary opportunity to save lives.