Introduction
to the Revised Edition

When *The Inflammation Syndrome* was first published early in 2003, it proposed what was then a bold and audacious idea—that many different types of inflammatory diseases were related to one another. Today, this idea is widely accepted.

Indeed, a great deal has changed over the last few years, necessitating this updated edition of the book. First, inflammation is now recognized as an undercurrent in all disease processes. Second, inflammation (not cholesterol) is now understood to be the primary determining factor in coronary heart disease, which is the leading cause of death in most developed countries, although many doctors are yet to act on this knowledge. Third, inflammatory disorders—for example, allergies, arthritis, heart disease, and inflammatory bowel disease, to name but a few—share common causes and also increase the risk of developing other inflammatory diseases.

What events have led to such dramatic changes in the perception of inflammation?

Medical thinking about the role of inflammation in disease began to broaden in the late 1990s, following the development and increased use of the high-sensitivity C-reactive protein (hsCRP) test. The test was revolutionary in that it could measure subtle, low-grade inflammation—the type of inflammation that is not always obvious but that slowly breaks

down the body and leads to chronic degenerative diseases. Researchers at Harvard Medical School showed that chronic low-grade inflammation was a major factor in the development of heart disease and, just as important, that the CRP test could identify people who were at risk of suffering a heart attack. In fact, high levels of CRP are a far better predictor of heart attack risk than is cholesterol.

It didn't take long before other researchers began to look for elevated CRP levels in other diseases. What they found was fascinating and further shifted medical thinking about the role of inflammation in disease. For example, people who are overweight or have type 2 diabetes typically have elevated CRP levels. Being overweight and having type 2 diabetes are major risk factors for heart disease, another proof of the disease linkage that forms the inflammation syndrome. Almost everyone with type 2 diabetes is overweight, and fat cells (particularly those that form around the waistline) secrete inflammation-producing compounds, including interleukin-6 (IL-6) and CRP.

The Prevalence of Some Inflammatory Diseases in North America

How has the prevalence of inflammatory diseases changed since the first edition of *The Inflammation Syndrome* was published in 2003? Compare the numbers below with those on page 2.

Allergic and nonallergic rhinitis	39 million
Asthma	22 million
Cardiovascular diseases	60 million
Arthritis (all types)	70 million
Osteoarthritis	21 million
Rheumatoid arthritis	2 million
Diabetes/prediabetes	100 million
Overweight/obesity	120 million
Cancers	3.4 million (30% of all cancers)
Rhinitis	56 million
Gingivitis	270 million
Sinusitis	40 million
Inflammation syndrome	250 million (estimated)

At the same time, there has been a surge in research on natural anti-inflammatory substances, such as certain foods, herbs and spices, and supplements, and my discussion of these substances forms the core of *The Inflammation Syndrome*. Here's the good news: you can use these natural substances to safely reduce inflammation and pain and restore your health.

What's new in this edition of *The Inflammation Syndrome*?

- I have updated much of the information throughout the book, based on recent scientific and medical research. (To save space, my references appear at www.inflammationsyndrome.com.)
- I have simplified many of my recommendations to make them more practical and easier to follow. For example, companies market dozens of anti-inflammatory supplements, but I have focused on the ones most strongly supported by scientific research. I also recommend specific brands of products (which I tended to avoid doing in the past), to make purchasing decisions easier for you.
- I discuss several natural anti-inflammatory substances produced by the body that have been discovered since I wrote the first edition of this book. These remarkable compounds include *resolvins*, *protectins*, and *lipoxins*, and the body makes them from healthy dietary fats. Their activity can be increased through both diet and supplements.
- I explain the research that demonstrates the benefits of curcumin, one of the most powerful natural anti-inflammatory compounds. Curcumin is an extract of the spice turmeric, and the latest research indicates that it blocks ninety-seven different inflammatory mechanisms in the body—more than any other natural or synthetic substance.
- I also discuss at length the anti-inflammatory properties of another natural compound, Pycnogenol. Long known for its cardiovascular effects, this extract of French maritime pine bark has impressive and scientifically documented anti-inflammatory benefits.
- In the first edition of *The Inflammation Syndrome*, I explained how gamma-linolenic acid (a plant oil) has a potent anti-inflammatory action and is synergistic with the inflammation-quenching omega-3 fish oils. Over the last few years, researchers have documented still more health benefits from gamma-linolenic acid, and I have included a discussion of these.

- Similarly, the research on the health benefits of omega-3 fish oils has amounted to a medical landslide. Almost every week, medical and scientific journals report new advantages of consuming fish oils. I have included more recent and comprehensive information on omega-3 fish oils.
- I also include information on vitamin D, which has emerged as an immune-modulating and anti-inflammatory nutrient, and on many other nutrients you may lack in your diet.
- There's much more in the updated edition of *The Inflammation Syndrome*, such as new recipes for tasty anti-inflammatory meals.

Before you read further, I would like to share three brief case histories about how *The Inflammation Syndrome* has helped people regain their health and their lives.

Susan had long suffered with frightening episodes of asthma. Like many other people, she had gone from doctor to doctor, and then a specialist (a pulmonologist) prescribed several different medications to control her asthmatic symptoms. She still had to use a steroid-containing inhaler several times a day. After she followed the advice in *The Inflammation Syndrome* for only one month, her symptoms decreased, and now she often goes an entire week without having to use the inhaler. Susan has also been able to reduce her other medications.

Deirdre had dealt with the crippling symptoms of Epstein-Barr infection and inflammatory pain for years. After reading *The Inflammation Syndrome*, she added gamma-linolenic acid supplements to her regimen—without making any changes to her diet—and nearly all of her muscle and joint pain disappeared. Her initial success motivated Deirdre to take other supplements, including vitamins C and E, and then to make important dietary changes. She has had such a dramatic recovery that she now recommends a similar program to her relatives.

When Jennifer read *The Inflammation Syndrome*, everything about her health and that of her family suddenly made sense. She weighed more than three hundred pounds and had type 2 diabetes. She and other family members had allergies, a brother and a sister had inflammatory bowel disease, and her mother had ulcers. Jennifer felt better within several days of beginning to follow my dietary recommendations and e-mailed me: "This book has changed my life!" Jennifer has a lot of health issues to deal with, but she's on the right track and was quickly able to start walking without her cane.

These are some of the many success stories I've heard from readers. These people have been successful in large part because, for the first time in their lives, they've been able to "connect the dots" in their inflammatory disorders—and then take small and big steps toward regaining their health. You can, too!