THE NEW OPTIMUM NUTRITION BIBLE



REVISED AND UPDATED

"Truly a tour de force—Patrick Holford is guiding the nutrition revolution."

—Dr. Jeffrey Bland, author of *The 20-Day Rejuvenation Diet Program*

PATRICK HOLFORD

FOUNDER OF THE INSTITUTE FOR OPTIMUM NUTRITION

THE NEW OPTIMUM NUTRITION BIBLE

PATRICK HOLFORD



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Second Edition

NEW OPTIMUM NUTRITION BIBLE

This book is dedicated to you—the promoter of your own health.

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Guide to Abbreviations, Measures, and References

Abbreviations and measures

1 gram (g) = 1,000 milligrams (mg) = 1,000,000 micrograms (mcg, also written μ g).

All vitamins are measured in milligrams or micrograms. Vitamins A, D, and E used to be measured in International Units (IUs), a measurement designed to standardize the various forms of these vitamins that have different potencies.

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100 IUs of vitamin A = 30.3 mcg

100 IUs of vitamin D = 2.5 mcg

100 IUs of vitamin E = 67 mg

1 pound (lb.) = 16 ounces (oz.)

2.2 lb = 1 kilogram (kg)

1 pint = 0.6 liters

1.76 pints = 1 liter

In this book calories means kilocalories (kcals).
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References and further sources of information

Hundreds of references from respected scientific literature have been used in the writing of this book. Details of specific studies referred to are listed on pages 542–555. Other supporting research for statements made is available from the library at the Institute for Optimum Nutrition (ION; see Resources) for members of ION. ION also offers information services, including literature search and library search facilities, for those readers who want to access scientific literature on specific subjects. On pages 529–31 you will find a list of the best books to read, linked to each chapter, to enable you to dig deeper into the topics covered. You will also find many of the topics touched on in this book covered in detail in my feature articles, available at www.patrickholford.com. If you want to stay up to date with all that is new and exciting in this field, I recommend you subscribe to my 100% Health newsletter, details of which are on the website.

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Introduction

This book, now available in thirteen languages and twenty-five countries, is the cutting edge in how to keep yourself looking good, feeling great, and living long. First written in 1998 to sum up twenty years of research at the Institute for Optimum Nutrition, an independent educational charity, this edition is completely revised, expanded, and updated.

A lot has happened to our understanding of health, disease, and nutrition in the last five years, and I wouldn't be doing my job if I didn't let you know about it. Many discoveries have been made: the secrets to successful weight loss, preventing Alzheimer's, reversing depression without drugs, and why breast and prostate cancer incidence keeps going up and how to do your best to avoid them. Many more propositions have been proven: that "optimum nutrition" dramatically increases energy, lowers cholesterol better than any drug, and halves the recovery time from infections, to name a few. Since the first edition of this book appeared, I have received over a thousand exuberant testimonials from people whose lives have literally been transformed through optimum nutrition—people like you.

That's my job—to help you be free of pain and full of health so you can enjoy your life to the full. I spend my time studying literally hundreds of pioneering science and medicine journals and speaking to the pioneers and trying out new approaches, then turning it all into easy-to-understand language that you can apply practically in your life. When you are 100 percent healthy and free from pain, discomfort, tiredness, and the need for drugs, I've done my job. But first, let me tell you how I got started.

In 1977 I met two extraordinary nutritionists, Brian and Celia Wright. They explained to me, over an enormous bowl of salad and some "soy sausages," followed by a handful of vitamin pills, how most disease was the result of suboptimum nutrition. I found this hard to swallow but, being an adventurous spirit, asked them to devise me a diet. There I was, a university student studying psychology, eating a virtually wheat-free, vegetarian diet

with masses of fruit and vegetables, and taking a handful of supplements shipped from America since they were not available in Britain at that time. It was a far cry from the usual fish-and-chips and a pint of bitter! My colleagues, friends and family thought I was crazy. But I persisted.

Within two months I lost fourteen pounds in weight, which has never returned; my skin, which had resembled a lunar landscape, cleared up; my regular migraines virtually vanished; but most noticeable of all was the extra energy I had. I no longer needed so much sleep, my mind was much sharper, and my body was full of vitality. I started to investigate this optimum nutrition. Being a psychology student, I looked up research on the greatest problem in mental health today, schizophrenia. There, in the scientific journals, was clear proof that optimum nutrition produced results better than drugs and psychotherapy combined. A pioneer in this field, Dr. Carl Pfeiffer, an American doctor and psychiatrist, was claiming an 80 percent remission rate. So too was Dr. Abram Hoffer, a director of psychiatric research in Canada—and the first man in the history of psychiatry to carry out a doubleblind study. I was fascinated and before long went to America and Canada to see for myself.

Pfeiffer, a brilliant man who spent most of his life studying the chemistry of the brain, had a massive heart attack when he was fifty. His chances of survival were very slim—ten years at the absolute most, and only if he had a pacemaker fitted. He decided not to, and spent his next thirty years pursuing and researching optimum nutrition. "It is my firmly held belief," he told me, "that with an adequate intake of micronutrients—essential substances we need to nourish us—most chronic diseases would not exist. Good nutritional therapy is the medicine of the future. We have already waited too long for it."

Dr. Abram Hoffer, who has now treated over five thousand patients and published forty-year follow-ups, told me he had an 80 percent cure rate. I asked him to define cure, and he said, "Free of symptoms, socializing with family and friends, and paying income tax!" Now eighty-seven years old, he still practices four days a week on Vancouver Island, Canada. I was deeply impressed by these two men and became their student.

The optimum nutrition approach is not new; many great visionaries have embraced it. In 390 B.C. Hippocrates said, "Let food be your medicine and medicine be your food." Edison in the early twentieth century said, "The doctor of the future will give no medicine but will interest his patients in the care of the human frame, diet and the cause and prevention of disease." In 1960 one of the geniuses of our time, Dr. Linus Pauling, coined the phrase "orthomolecular medicine." Linus Pauling was to chemistry what Einstein was to physics. Pauling, who died in 1994, has been voted the second-most-important

scientist of the twentieth century. He is the only man to have won two unshared Nobel Prizes—he also had forty-eight Ph.D.s! By giving the body the right (ortho) molecules, he asserted, most disease would be eradicated. "Optimum nutrition," he said, "is the medicine of tomorrow."

In 1984, with Linus Pauling's help and support, I founded ION in London to research and promote this idea. ION, which is an independent, nonprofit educational charity, is now the leading school for training nutritional therapists in Europe. Roughly speaking, we've been ten years ahead on most major health issues.

- · Our first campaign was to help ban lead in gasoline because we knew from the science that it was damaging children's brains.
- In 1986 we helped put zinc on the map and made people "think zinc" by extolling the virtues of Britain's most commonly deficient mineral.
- In 1987 we helped run the first trial—published in The Lancet and filmed by the BBC's Horizon—that proved vitamin supplements can boost IO.
- In the 1990s we showed that antioxidants reduce cancer and slow aging.
- In 1993—more than ten years ago—we went public against hormone replacement therapy (HRT), saying that it causes breast cancer, a fact now well proven.
- In 1995 we said there were better natural remedies for depression than drugs, and that many SSRI antidepressants increased the risk of suicide and aggression. Last year doctors were rightly advised not to prescribe them to anyone under the age of eighteen.

In recent years I've been explaining why your homocysteine level is your greatest single health statistic, why Alzheimer's disease is preventable, why milk consumption is undeniably linked to breast and prostate cancer risk, and why the "glycemic load" of a food is the best predictor of weight gain. Maybe you haven't heard about the last four, but you will. In short, we've been ten years ahead of what is destined to become public knowledgeknowledge that could add ten years to your life.

The purpose of this book is to show you how to achieve vibrant health and resistance to disease through optimum nutrition. Part 1 explains the principles of optimum nutrition, which necessitates a whole new definition of health, health care, and medicine. Part 2 defines the perfect diet—not easy to acquire overnight, but good to aspire to. Parts 3, 4, and 5 prove the benefits of optimum nutrition based on the latest breakthroughs in nutritional

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science. Part 6 shows you how to put optimum nutrition into practice with a step-by-step guide to help you improve your diet and design your own supplement program. Part 7 is an A-to-Z guide to specific health problems and how to heal them with optimum nutrition. Part 8 is an A-to-Z guide to nutrients: what they do, signs and causes of deficiency, what to eat, and what to supplement. Part 9 gives you food facts and tables to help put optimum nutrition into practice.

Twenty-five years have passed since I discovered optimum nutrition. In that time thousands of scientific papers have been published proving its potency, and virtually none that negate it. I am now completely convinced that the concept of optimum nutrition is the greatest step forward in medicine for over a century, no less important than Louis Pasteur's discovery of disease-causing "germs" or the discovery of genes, and that, if applied from an early age, it is a guarantee for a long and healthy life.

Wishing you the very best of health,

Patrick Holford

PART 1 What Is Optimum?

- 1 Health—Who Wants to Be Average?
- 2 Defining Optimum Nutrition
- 3 From Monkeys to Man—Nutrition and Evolution
- 4 You Are Unique
- 5 Synergy—The Whole Is Greater
- 6 Antinutrients—Avoiding the Vitamin Robbers

Health—Who Wants to Be Average?

This book is a means to a goal—health. And that means not just an absence of disease, but also an abundance of vitality. Positive health, sometimes called functional health, can be measured in three ways:

- Performance—how you perform physically and mentally
- · Absence of ill health—lack of disease signs and symptoms
- Longevity—healthy life span

I believe the experience of a profound sense of well-being can be achieved by everyone. It is characterized by a consistent, clear, high level of energy; emotional balance; a sharp mind; a desire to maintain physical fitness; and a direct awareness of what suits our bodies, what enhances our health, and what our needs are in any given moment. This state of health includes resilience to infectious diseases and protection from the major killer diseases such as heart disease and cancer. As a result, the aging process is slowed down and we can live a long and healthy life. At its most profound level, health is not merely the absence of pain or tension, but a joy in living, a real appreciation of what it is to have a healthy body with which to taste the many pleasures of this world.

For me, this is not just a belief but also an experience that I have had personally and have also witnessed in many other people with whom I have worked over the years since I started to pursue optimum nutrition. Health has not been a static state, but an endless journey of learning about myself from the diseases and imbalances that I have suffered and a continuing discovery of even higher and clearer levels of energy. From these experiences, and those gained through working with thousands of people suffering from all categories of disease, I am totally convinced that, by means of optimum