PREFACE

During the last century of continuous nutritional advancement, we have frequently been faced with great opportunities that were brilliantly disguised as insoluble problems. Perhaps we are biased, but in our eyes, the apparently unsolvable problems associated with nutrition are among the most exciting of those in the life sciences. How many other branches of the life sciences offer the promise of slashing the burden of human disease by one third or more?

With a scattering of brilliant exceptions, until the 1970s, few gave serious consideration to the notion that our diet plays an important role in such chronic problems as heart disease and cancer. Today, we have a vastly improved understanding of the role of diet in disease; we know, for example, how fats, fruits, and vegetables affect cancer and heart disease, how salts and calcium affect blood pressure and osteoporosis. Now, at the dawn of the 21st century, our vastly improved nutritional knowledge affords us the capability of preventing a sizable fraction of the chronic diseases that afflict the people of our world, but only if we can fully inform its populace about these discoveries.

Ironically, despite overwhelming evidence that nutrition has such enormous potential to improve human well-being, the field still fails to receive the resources it merits. Growth in funding for nutrition research and education remains stunted. By contrast, countless millions of dollars are spent on the glamour areas of biomedical research, such as genetic engineering and gene therapy. But we already know that our genes can only explain a fraction of our disease burden. Even if gene therapy reaches its full potential, it seems most improbable that it will ever achieve a quarter of what nutrition can do for us today.

In the words of Confucius: "The essence of knowledge is that, having acquired it, one must apply it." But a major barrier is that nutrition information often fails to reach the health professionals who most need to apply it. This is illustrated by a recent survey of physicians in Canada (*1*) conducted by one of us. This study revealed mixed results on the depth and breadth of nutrition knowlege. For example, barely half of those surveyed knew that potassium is protective against hypertension or that hydrogenated fats contain *trans* fatty acids.

How can our exciting discoveries in nutrition be applied when much of this information has not filtered through to the people who most need it, namely, the physicians, dietitians, and nurses who represent the frontline workers in health care? How do we bring this information to others who also need it, such as the

professors of nutrition who lack the time to read more than a tiny portion of the literature outside of their main area of interest?

Nutritional Health: Strategies for Disease Prevention endeavors to address the needs of those who would most benefit from up-to-date information on recent advances in the field. Accordingly, our book contains a series of chapters by well-established experts across a diverse range of nutritional areas. Our aim is not so much to cover all the leading edges of nutrition, as it is to discuss recent thinking and discoveries that have the greatest capacity to improve human health and nutritional implementation.

Some readers may disagree with the opinions presented, but in nutrition, differences of opinion are often unavoidable. Owing to the constant changes in our diet, nutrition is by nature in constant dynamic flow, as are our opinions of what constitutes the best nutritional habits. The views expressed in *Nutritional Health: Strategies for Disease Prevention* are in many cases particular interpretations by the authors of each chapter on their areas of specialization.

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1. Temple NJ. Survey of nutrition knowledge of Canadian physicians. J Am Coll Nutr 1999; 18:26–29.