
Preface

Nutrition and Health in Developing Countries, Second Edition, was written with the underlying conviction that global health and nutrition problems can be solved only through a firm understanding of the different levels of causality and the interactions between the various determinants. Although the book focuses on the problems in developing countries, we recognize that as a result of globalization, there is no longer a clear distinction between health and nutrition problems between the developed and the less-developed world. Emerging diseases such as HIV/AIDS, tuberculosis, and obesity show how the world is connected, and that knowledge about health and nutrition problems is also essential for professionals in developed countries. The objective of *Nutrition and Health in Developing Countries, Second Edition*, is to provide policymakers, nutritionists, students, scientists, and professionals with the most recent and up-to-date knowledge regarding major health and nutritional problems in developing countries. This specific knowledge is presented to facilitate an integrated approach to health research, programs, and policy. As such, the approach represents the tension inherent in combining diverse disciplines. This book is meant as a synthesis, and it is not meant as an exhaustive treatise of all infectious diseases or every nutrient deficiency in developing countries as such information is generally accessible in other textbooks.

We have greatly expanded the second edition to 34 chapters and have included new chapters relevant to humanitarian emergencies, including a case study of the Indian Ocean tsunami in 2004, food in humanitarian relief, food policy, the emerging role of supermarkets in developing countries, homestead food production, aging, ethics, and the adverse impact of parental tobacco use on child health in poor families. These new chapters reflect the increasing complexity and changes that are occurring in developing countries. The Millennium Development Goals of the United Nations call for major progress in eradicating extreme poverty and hunger, in reducing child mortality, and in improving maternal health; we hope that these chapters provide insight and solutions that will help to attain these goals.

Nutrition and Health in Developing Countries, Second Edition, begins with a historical overview of the idea of nutrition and development, and shows how the concepts of progress and development evolved from the Enlightenment and shaped the basic precepts underlying work in nutrition and public health for the last two centuries. Many people working in public health may be impressed by the conditions often found in developing

countries today: high infant mortality, widespread malnutrition, goiter, tuberculosis, and other health problems. However, similar conditions were faced by public health and policy makers in the early 20th century in Europe and the United States. A better understanding of nutrition and implementation of this new knowledge into policy helped to eradicate many nutritional and infectious diseases. An appreciation of these historical examples may help avoid “reinventing the wheel,” a phenomenon apparent in some nutrition and health research conducted in developing countries today.

The first section of *Nutrition and Health in Developing Countries, Second Edition*, focuses on the major health indicators in developing countries: maternal mortality, low birth weight, neonatal mortality, infant mortality, and child growth and development. The differences in mortality rates between developing countries and industrialized countries are presented in these chapters and are striking, with the disparity greatest for maternal mortality. In many circumstances, the application of known, effective interventions could reduce the large disparities in mortality between developed and developing countries.

The second section of the book deals with major infectious diseases in which nutrition plays a role: diarrheal diseases, acute lower-respiratory infections, measles, malaria, tuberculosis, and HIV infection. There is a purposeful overlap between these chapters on specific health problems and subsequent chapters on nutritional deficiencies (e.g., the role of zinc in prevention and treatment of diarrheal diseases). This approach was used to emphasize the different perspectives that may be taken either from the standpoint of infectious disease or from a specific nutrient.

In the third section of the book, the general problem of malnutrition and specific deficiencies in vitamin A, vitamin D, zinc, iron, and iodine and multiple-micronutrient deficiencies are presented. Large advances have been made in our understanding of micronutrient malnutrition in the last three decades. Vitamin A deficiency is a major cause of childhood morbidity, mortality, and blindness in developing countries, and it is apparent that many diverse approaches are needed to eliminate this problem. New research shows that zinc deficiency is widespread, and that zinc supplementation can reduce morbidity from diarrheal and respiratory diseases. Iron deficiency remains the most common micronutrient deficiency among women and children worldwide, and its reduction will be a major challenge. The elimination of iodine deficiency disorders through widespread use of iodized salt appears to be an attainable goal in the near future. As micronutrient deficiencies often occur together due to limited consumption of good dietary sources, there is a shift in focus to combating these deficiencies in combination.

The fourth section of the book deals with new emerging issues of countries in an intermediate stage of development, such as the nutrition transition in which many nutritional deficiencies decline and other health problems, such as obesity, diabetes, and cardiovascular disease, become more prominent. Life expectancy is increasing in most developing countries, which raises new concerns about nutrition in older adults. Another pressing problem in developing countries is rapid urbanization, as observed in large cities such as Mexico City, Lagos, Dhaka, and Jakarta, and there are new challenges in achieving food and nutrition security in these settings. Although tobacco control has not usually been considered a problem related to child health and survival, new findings from Bangladesh, India, and Indonesia show that, among poor families, smoking diverts precious resources from food to tobacco, with an adverse impact on quality of diet and an associated higher level of child malnutrition and mortality of infants and children

under 5 years old. In many countries, especially in Asia, the prevalence of smoking is 50% to 75%, which has serious implications for child health. Tobacco control is placed front and center as a child survival strategy.

The fifth and final section of *Nutrition and Health in Developing Countries, Second Edition*, deals with special topics such as humanitarian emergencies, the role of food in humanitarian relief, homestead food production, how supermarkets are changing agricultural economics and food security, food policy, benefits of multimicronutrient supplements in children, use of nutritional surveillance data, ethics in public health research, and the Indian Ocean tsunami of 2004 as a case example of emergency relief. The book closes with a broad view on nutrition and health policy, analytical frameworks for public policy analysis, and thoughtful insight into the development and implementation of sound public policy in public health and public nutrition.

During the preparation of this Second Edition, we were deeply saddened by the passing of our friend and colleague, François Delange, the Executive Director of the International Council for Control of Iodine Deficiency Disorders. He was strongly dedicated to the elimination of iodine deficiency disorders, and he will be greatly missed by the international nutrition community.

We wish to thank our lovely series editor, Adrienne Bendich, for the kind support and encouragement that she has been giving us over the last decade. Her enthusiasm and breadth and depth of knowledge regarding the complex field of nutrition has been an inspiration for all of us.

As editors, we are pleased to bring together this group of authors from diverse backgrounds of clinical nutrition, medicine, immunology, infectious disease, epidemiology, public health nutrition, anthropology, health policy, economics, and disaster planning. We hope that this book will stimulate further thought, comprehensive and effective policies and programs, and research across disciplines in the goal of improving health and nutrition in developing countries to reach the Millennium Development Goals by the year 2015.

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