INTRODUCTION

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Back in the 1960s the nutrition and health situation in such countries as the UK and USA was dramatically different to that in Africa. The UK and USA were (and still are) dominated by the Western diet and Western diseases. But the vast majority of Africans were still eating a traditional low-fat, high-fibre diet. Their disease pattern was also completely different from the British and American experience: instead of Western diseases, they had such problems as nutrient deficiencies and infectious diseases. Of course, there were pockets of people eating a Western diet and developing Western diseases. The white population in South Africa is one obvious example.

Fast forward to today and we see a radically changed world. Africans, whenever they have enough money, are as fond of Western food as are those in the UK and USA. And, following in the footsteps of the Western diet, they are experiencing an epidemic of Western diseases. To exemplify, the available evidence indicates that whereas undernutrition is still rife on the African continent, the prevalence of obesity now rivals that of severe stunting. We can point to countries like Mauritania and Lesotho where severe stunting in children younger than five years is estimated at 16.5% and 15.0%, respectively, while obesity in women between the ages 15 and 49 is estimated to be at 16.5% and 16.1%, respectively. But much of Africa, especially its poor rural areas, has only taken a few steps down this road. As a result people residing in those areas have a similar disease pattern as did their parents and grandparents.

This scenario repeats itself across much of the developing world. Some countries (Bangladesh, for example) resemble in many ways the poor rural areas of Africa. By contrast, more and more developing countries have adopted a pattern of diet and disease that is fast “catching up” with that of the UK and USA. This phenomenon is now commonly referred to as the nutrition transition. Typically it refers to the habitual consumption of a diet which is high in energy, total fat, saturated fat, trans fats, sodium, and added sugar. Generally, it is low in fibre, many essential micronutrients, and fruit and vegetables. It is commonly referred to as an energy-dense and low micronutrient-dense diet because it has a high caloric value with a poor intake of many essential nutrients such as vitamins A and C, iron, and calcium. This is also the typical reflection of a diet associated with the development of obesity, particularly when coupled with physical inactivity. This scenario is associated with the surge of obesity taking place in many developing countries, in both children and adults. It further explains the increasing prevalence of chronic diseases of lifestyle such as type 2 diabetes in low-income countries.

This very brief and broad overview of diet and disease around the world explains why this book is so vitally important. A nutritionist working in a small town in Africa or India needs to understand the changing dietary patterns that characterize the developing world, as well as the accompanying pattern of diseases. The book is primarily intended for community nutritionists, often referred to as public health nutritionists. We are confident that the book will serve as an invaluable resource for anyone engaged in that type of work. But the book is actually more than that: it will be of much value to people working in such areas as medicine, nursing, and public health. A government official charged in developing health-care policies, for instance, would be well advised to keep a copy close at hand.

The book starts with a chapter that examines issues of human rights in relation to community and public nutrition. This serves to remind us that food security is a fundamental human right. The chapter includes a full explanation on the Millennium Development Goals. This is followed by Chapter 2 that makes a detailed exploration of the challenge of food insecurity. Following this Chapter 3 discusses dietary patterns in different countries, especially in Africa and South Asia. Together these three chapters form a theoretical base for the tenets of nutrition in the developing world. It covers common theories and constructs to support the nutritionist who has to face the challenges of promoting a healthy diet in a developing environment. It also
reinforces what is known and common to many developing countries and equips the health professional of today with important facts.

Chapter 4 provides a detailed account of the concept of the nutrition transition. The chapter is an excellent framework for a better understanding of some of the factors and mechanisms responsible for the changing patterns of diet and disease around the world. Indeed, many readers of this book will see the nutrition transition at work in their everyday lives. The nutrition transition can today be regarded as one of the most serious nutritional health challenges which the community nutritionist or dietitian has to cope with in the twenty-first century. Since it is growing at an alarming rate across the world, the health professional will need to find innovative ways of dealing with this while at the same time still trying to cope with the outcomes of undernutrition and its legacies.

Next come four chapters on nutrition challenges across the lifecycle (Section 2). It is, of course, crucially important for community nutritionists to have a sound understanding of the nutrition challenges when managing such high-risk groups as pregnant women, children, adolescents, and the elderly. While this information forms the basis of most textbooks on nutrition, the current text focuses on the essential elements of the lifecycle in developing countries who are still dealing with poverty and inadequate health services. In a sense these chapters encapsulate the services which can be provided with few resources even under adverse conditions of health and poverty.

The book then turns to a range of critically important issues concerning the place of nutrition in both the prevention and nutritional therapy of various nutritional and health disorders (Section 3). The first of these chapters looks at the sometimes insufficiently appreciated multiple nutrient deficiencies, which are still, alas, a subject of huge importance across much of the developing world. This is followed by a chapter on the management of HIV/AIDS, TB, and other infectious diseases, which are still major causes of morbidity and mortality in low-income countries. After this comes a chapter on diarrhoea, another condition associated with poverty and poor health which is likely to remain with us until such time as good environmental health is a way of life in all countries. The rest of the section reflects the sharp contrast of dietary imbalances and excesses associated with the major nutrition-related chronic diseases, namely cardiovascular disease, type 2 diabetes, obesity, and cancer. This section perfectly illustrates why this book is destined to play a vital role in the training of tomorrow’s generation of community dietitians and nutritionists: it tells the full story and underscores the importance of nutrition in relation to health and disease as it will present itself to practitioners in developing countries. Once again the emphasis is on prevention and management under conditions of poverty and poor health resources.

A fully competent community nutritionist should not only have a broad knowledge of the issues presented in the earlier sections of the book, but such a practitioner must also be skilled at translating, simplifying, and conveying this information in the local context. The first chapter of Section 4 surveys and critically evaluates the topics of food guides, food labels, and food tables that reflect current recommendations for the intake of nutrients. This information is important for two major reasons: first, so that community nutritionists properly understand these issues and can therefore explain them to others, and, second, so that when the opportunity presents itself, readers are well informed and can play an active role in the development of policies in this area. The second chapter in Section 4 presents in-depth advice on the delivery of nutrition education. That chapter can be regarded as the weapon of defence of health professionals who operate under conditions of poverty and lack of resources. Teaching people to fish for themselves is an essential tenet underlying community nutrition principles. Often, however, this is one of the most difficult aspects of improving health, especially when people expect pills for cures and are reluctant to accept responsibility for their own health.

Section 5 addresses intervention strategies and comprises three chapters that cover the vitally important subject of community-based nutrition programmes. These chapters provide much valuable information for anyone planning such an activity in relation to successful experiences in different settings around the world. The section will no doubt help contribute to nutrition practitioners moving away from “doing something,” the Achilles tendon of many interventions, to “doing something sound,” with a high probability of making a difference. This section also emphasizes the importance of people “owning” their own health. This implies that they should be involved in all the phases of interventions if these are to be successful. The concept of sustainability is another theme that runs through all health interventions; lack of sustainability is illustrated by interventions which have failed to make a difference.

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All previous sections have aimed to improve population nutrition by extolling the benefits associated with improved nutritional practices. This is based, almost entirely, on voluntary choices. But the degree of success achieved by this approach is, typically, quite modest. For instance, if education was enough, on its own, to persuade people to adopt a healthy lifestyle, then cigarette smoking would have disappeared long ago! A major part of the reason for continued poor choices is that the environment around us is not always supportive of a healthy lifestyle. The limited degree of success of strategies based on persuading populations to voluntarily adopt healthy practices brings us to the vital and very thorny issue of government policy. In many areas – food prices, food advertising, and the amount of salt added to food, to give but three examples – government policy can potentially achieve much improvement in population health. In many such cases, this approach is considered, by some practitioners at least, to be far more cost-effective than alternative strategies, such as education or medical treatment. The two chapters dealing with issues of policy (Section 6) are therefore crucially important.

Nutritionists and dietitians of the future will need to be more aggressive in their approach to developing effective policies. This can be done by providing governments with sufficient and irrefutable evidence so that they accept the need for the development of appropriate policies. This evidence also needs to show the cost-effectiveness of policies in relation to money which governments have to spend on health care to deal with such health problems. In many instances the cost savings alone can make a difference to how governments act.

Section 7 equips the practitioner with guidelines and selected tools to measure and assess the nutritional status of individuals and populations. The equally important Section 8 provides guidelines and tools for planning meals for institutions and approaches to addressing issues of food quality and food safety. Both these chapters provide simple general information with an emphasis on low-income settings.

Section 9, a nutritional mosaic, addresses topics which can be considered to be only loosely related to community nutrition. It includes: the state of training of dietitians in Africa; nutrition misinformation (both naïve and deliberate), which is widespread across continents; the rapid pace of population growth; the very real dangers posed by climate change; biofuels (does their production do more harm than good?); the crisis in the world’s fisheries; global problems of water shortages; foods made from genetically modified (GM) plants; and globalization. The aim of this section is to make you think and to show you that as a health professional all these global issues are also of vital importance to you as a nutritionist or dietitian. These are not problems that “others” have to deal with but problems that all health professionals need to embrace in order to find solutions.

Taking the book as a whole one sees a remarkable wealth of information and ideas. Trying to translate this book into practice is clearly an ambitious undertaking. Common wisdom expressed long ago by Hippocrates (c. 460–377 B.C.) stated: “If we could give every individual the right amount of nourishment and exercise, not too little and not too much, we would have found the safest way to health.” This is the general foundation of the principles of health. Today, despite our better understanding, albeit still rudimentary, we still struggle – practitioners and the public alike – to select “the right amount of nourishment and exercise” to improve our health. The great challenge is the many and very complex determinants of health. This book will undoubtedly prove to be a significant contribution to the ever-elusive Hippocratic doctrine.